

# Urban Imaginaries

Conference Proceedings 2021







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Conference Proceedings 2021

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Venkatesh Krishnamurthy

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## Urban Imaginaries: Past, Present and Future: Concept Note

The fifth edition of Urban ARC, the Annual Research Conference of the Indian Institute for Human Settlements (IIHS) focussed on the role of 'Urban Imaginaries'.

The idea of imaginaries holds a pivotal place in inquiry. Central to the very nature of knowledge production is the imagination of a better world. This central imperative has led to innovative work across disciplines, sectors and scales, pushing the boundaries of our understanding of, and engagements with, the 'urban'. The idea(s) of urban imaginaries have been manifested in multiple ways and forms – from utopian visions of the Garden City and the City Beautiful movement to the dystopic fictional urban futures of science fiction. They have been invoked as propellers of economic growth (Anand et al., 2014; Glaeser, 2011; Sankhe et al., 2010), as the locus of both environmental destruction and of sustainable futures (Revi and Rosenzweig, 2013; Revi, 2012; Stone Jr., 2012), as sites of opportunity and hope and as places with deep inequality and strife. The role of urban imaginations has been critical to how our cities have taken shape, both past and present – the vision of an Indian city “unfettered by tradition” (Kalia, 2006: 134) was fundamental to how new capital cities were planned in post-independence India. The fascination, rooted in older histories, with imaging new urban futures and planning new, greenfield settlements is one that endures in contemporary policy as well – mega-infrastructure projects in Asia and Africa use new urban settlements as nodes around which economic development is being driven (Ballard et al., 2017; Watson, 2015; Department of Industrial Policy and Promotion, 2007).

While they are linkages to past, present and futures, urban imaginaries are also products of particular moments, contexts and socio-cultural zeitgeists. They hold the collective aspirations for the future as well as the remnants of past aspirations. Cities also bring together a vast range of spatial practices from architecture and planning, employment and labour, to economic growth and environmental sustainability, politics and culture (Huyssen, 2008). Understanding imaginaries, and their deployment in research is then “critical to develop sustainable practices and environments for our collective tomorrow” (Dunn, 2018: 375).

This is particularly critical in the context of a rapidly urbanising Global South. In 'New Urban Worlds', Simone and Pieterse (2018) write that the city is continually something to be remade according to new models, new possibilities of generating value, spectacular

visions of the built environment but also constantly draw on everyday lived experiences, histories and encounters, remaining powerful objects of imagination, sociality and governance (ibid). They call for a new way of imagining cities, especially those in the South, using new ways of understanding and studying them.

The notion of studying urban futures, then, is as much a methodological challenge as it is a conceptual one. Increasingly, there have been calls for a 'new urban science' bringing together not only academics from a range of disciplines, but also practitioners, emphasising that a transdisciplinary, multi-stakeholder approach is essential to the future of our cities (Acuto et al., 2018; McPhearson et al., 2016). Methodologically, there is also a movement towards increasingly sophisticated predictive modelling approaches that draw on big data as well as a simultaneous call to look at the everyday lived experiences within urban settlements to produce visions of what urban futures can look like (Keith et al., 2020; Simone and Pieterse, 2018).

Research has in some senses grappled with the ways we imagine the space of inquiry itself – the city, and the multiple threads of inquiry that are woven into the cityscape. The idea of urban imaginaries is also interpreted and used in different ways – through the lenses of media and cyberspace, through social movements around land rights and housing, and local embeddedness and global economic networks (Huyssen, 2008). They invoke the idea of utopian visions enshrined in the earliest urban plans (Brenner and Keil, 2006; Lin and Mele, 2005) to more contemporary urban fantasies played out especially in the cities of the global South (Watson, 2015; Watson, 2014; Bunnell and Das, 2010). These imaginaries offer opportunities to interact with other cultures and diasporas, often mediated through cinema, media, and the Internet but also through migration, and movement of labour, travel and tourism. They also find a place in the idea of the spectacle whether in the form of the erstwhile World Fairs, or the more contemporary cultural events like the Olympics that constantly reshape and reimagine our urban spaces (Huyssen, 2008), or indeed through spectacular architecture (King, 2004).

As Lidner and Meissner (2019) suggest, urban imaginaries play an important role in the city space. They “meaningfully interlink the different structures and signs, minds and bodies, facts and subjectivities, actualities and virtualities, economies and ecologies of urban social space” (Meissner and Lindner, 2018: 6). It is in the intersections of these, and multiple other dualities, that the space of the innovative research around the Urban emerges. Urban Imaginaries can help in reconfiguring the socio-spatial politics of cities, intervening in the interconnected fields of urban class politics, gender politics, geopolitics, and eco-politics (ibid).

The contemporary moment in the light of COVID-19 has also thrown up a range of questions regarding the future of cities, the imaginations of what urban areas could and should look like, how they can be made more resilient while continuing to support vibrant spaces for sustainable development. The pandemic has presented challenges to governments, both local and national and highlighted and amplified inequalities in access to health care, social protection services, housing and employment, among others. We recognize that the implications of COVID-19 are not limited to public health, but rather apply to complex inter-connected urban systems. Indeed, research on this needs to speak to questions of inequality, unemployment, social protection, access to services, and engage with questions of not just development, but development embedded with economic, social and environmental justice — questions that are now more relevant than ever.

Debates have also centred around decongestion and reducing density, on the role of digital technology, on the future of work, and on how architecture and design can evolve to envision the 'new normal'. This has also thrown up questions around reimagining the nature of urban research itself, and the kinds of methodological innovations that may now be needed. For example, Bhan, Caldiera, Gillespie and Simone (2020), call for a re-examination of the 'monumental' as a way of thinking about and responding to the pandemic, as doing so tends to obfuscate the everyday ordinary responses to extraordinary times. Instead, they offer the idea of the 'collective life' as an analytical category that allows for a reading that looks beyond "...formal actors and institutions, legible landscapes, neatly tabulated data, and linear economic rationalities" (para 13). The current crisis calls for such reimaginings, and keeping this in mind, Urban ARC 2021 will be organising a special track focusing on post-COVID urban futures.

Dunn (2018) suggests that the role of imagination is fundamental to processes of conceptualisation, envisioning and performing urban futures. Further, "the importance of such creativity extends in other ways to their questioning of reality, reshaping our spatial conceptions or providing expressions of alternatives" (pg. 375). It is in keeping with this centrality of imaginations in both the lived experiences of cities and its peoples, as well as in the research that seeks to understand, define and predict its futures, that Urban ARC 2021 invites papers and panels engaged with relevant questions of the Urban. We encourage submissions from a wide range of disciplinary spaces, and situated in theoretical, methodological or practice-based approaches to the urban. We aim to provide a critical and fruitful space for engagement across themes (ecology, equality etc.), sectors (land, housing, transport, sanitation, ICT etc.), methodologies (textual analysis, engagement with data, in-depth qualitative work etc.) and disciplines (economics, history, technology, politics, media, anthropology, cultural

studies, among others) in order to enable an understanding, and harness the potential, of Urban Imaginaries.

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## SCHEDULE

### DAY 1 | 14 January 2021

9:00am – 10:00am	<b>Opening Plenary by Aromar Revi, Director, IIHS</b>
10:30am – 12:10pm	<b>Narratives on the Urban Environment</b> Chair: Krishnachandran Balakrishnan
	The Ecological Imagination of Emerging Cities in the 21st Century ( <i>Ernesto Valero Thomas, Independent Scholar</i> )
	Contested Imaginations and Negotiating-with the City-scape: A case study of Bovines in Delhi ( <i>Shruti Ragavan, National Institute of Advanced Studies; The University of Trans-Disciplinary Health Sciences and Technology</i> )
	Reimagining Peripheral Geographies: A Dual Lens Approach to Examine Peri-Urban Dynamics in India ( <i>Lakshmi Priya Rajendran, Anglia Ruskin University; Christopher Maidment, Reading University; Arindam Biswas, Indian Institute of Technology Roorkee; Sheeba Chander, Hindustan Institute of Science and Technology; Sudhan Srinivas, Hindustan Institute of Science and Technology; Maria Rinya Roy, Hindustan Institute of Science and Technology; Koushikaa Shree, Hindustan Institute of Science and Technology</i> )
	'Ghats' and Everyday Hydrosocial Relations: Production of Urban Spaces along Kolkata's Riverfront ( <i>Raina Ghosh, Jawaharlal Nehru University</i> )
	Of Environment and Environmental Practices in New Town, West Bengal ( <i>Debarun Sarkar, University of Mumbai</i> )

12:40pm – 2:00pm	<p><b>The Work that ‘Urban Observatories’ do: Institutionalizing Urban Imagination between Trust, Advocacy and Expertise</b></p> <p>Discussant: Susan Parnell, <i>University of Bristol, PEAK Urban GCRF program</i></p> <p>Discussant: Alexandre Apsan Frediani, <i>International Institute for Environment and Development, KNOW GCRF program</i></p> <hr/> <p>Anchor Report: Urban Observatories: A Comparative Review (Michele Acuto and Ariana Dickey, <i>University of Melbourne</i>; Carla Washbourne, <i>University College London</i>)</p> <hr/> <p>Case Study: The Experience of the Beirut Urban Lab (Mona Fawaz, <i>Beirut Urban Lab</i>)</p> <hr/> <p>Case Study: The Experience of the Bangalore Urban Observatory (Shriya Anand, <i>Indian Institute for Human Settlements</i>)</p>
2:30pm – 3:50pm	<p><b>Navigating the City: Urban Mobilities</b></p> <p>Chair: Pooja Rao</p> <hr/> <p>Urban Imaginaries: Fisherwomen in the Past, Present and Future of Mumbai: An Exploratory Research on the Use of Public Transport by Fisherwomen in Mumbai (Kshiti Shobha Vikas, <i>St Xavier’s College (Autonomous) Mumbai</i>)</p> <hr/> <p>Algorithmic Mobilities: The Uber View of Calcutta (Neha Gupta, <i>National Institute of Technology, Silchar</i>)</p> <hr/> <p>Transport Disadvantage: Understanding Ageing and Mobility in Bengaluru (Prajwal Nagesh, <i>Utrecht University</i>; Ajay Bailey, <i>Utrecht University</i>; Sobin George, <i>Institute for Social and Economic Change</i>; Lekha Subaiya, <i>Institute for Social and Economic Change</i>; Dick Ettema, <i>Utrecht University</i>)</p>

	<p>'Free' at what Cost? Free-bus-rides-for-women Scheme in Delhi  <i>(Saakshi Joshi, Manipal Academy of Higher Education; Anindita Datta, University of Delhi; Ajay Bailey, Utrecht University; Leena Sushant, Nirmala Singh and Jyoti Rawat, Breakthrough Trust)</i></p>
4:20pm – 6:20pm	<p><b>Constructing the City</b>  Chair: Sudeshna Mitra</p> <hr/> <p>Construction of Mumbai's Land Market: Fictional Imagination and the Search for Commodified Land  <i>(Anitra Baliga, London School of Economics and Political Science)</i></p> <hr/> <p>Bhadrals and their 'Others': Locating Real Estate Development and Image of the City in North Kolkata  <i>(Riona Basu, Jawaharlal Nehru University)</i></p> <hr/> <p>Covid-19 in Peripheral Cape Town: Infrastructural Experiences and Re-imaginings  <i>(Suraya Scheba, University of Cape Town; Andreas Scheba, Human Sciences Research Council &amp; University of the Free State)</i></p> <hr/> <p>The Persistence of Peenya: Examining Industrial Space in 'Global' Bangalore  <i>(Aman Banerji, Cornell University)</i></p> <hr/> <p>Women in Smart Cities: Imagined or Imaginary?  <i>(Uttara Purandare, Indian Institute of Technology Bombay – Monash Research Academy)</i></p> <hr/> <p>Data in the Developing City  <i>(Khaliq Parkar, CESSMA, University of Paris)</i></p>

## DAY 2 | 15 January 2021

9:30am – 11:30am	<b>Communities and Urban Spaces</b> Chair: Divya Ravindranath
	Infrastructure of Romance: Pre-marital Relationship in Urban Spaces in Contemporary India <i>(Sristi Mondal, Indian Institute of Technology Delhi)</i>
	Re-Imagining Urban Spaces and Reconfiguring Human Ecology Street-Based Sex Workers as Urban Pseudo-Invisibles in Bangalore City <i>(Anant Kamath, National Institute of Advanced Studies; Neethi P, Indian Institute for Human Settlements)</i>
	'The Second Sex' and Recreational Culture: A Socio-spatial Urbanscape to Re-define the Urban Peripheries, Case of Kolkata <i>(Ankita Karmakar and Arunima Saha, School of Planning and Architecture, Delhi)</i>
	I (Don't) Walk a Lonely Road: A Study of Women Seeking Leisure in a Public Park <i>(Mallika Gupta, CEPT University)</i>
	Fantasy visions, Informal Urbanization and Local conflict: Contradictions of Smart City imaginaries in India <i>(Debadutta Parida, University of Alberta)</i>
	Urban Property in Kolkata: Narratives of Everyday Experiences and Imaginaries <i>(Sreya Sen, Jawaharlal Nehru University)</i>
1:00pm – 2:20pm	<b>Transversals: Materiality and Method for the Southern Urban Question</b> Chair: Gautam Bhan

	<p>Teresa Caldeira <i>(University of California, Berkeley)</i></p>
	<p>Kelly Gillespie <i>(University of the Western Cape, South Africa)</i></p>
	<p>Gautam Bhan <i>(Indian Institute for Human Settlements)</i></p>
	<p>Abdoumalik Simone <i>(University of Sheffield, UK)</i></p>
2:50pm – 4:10pm	<p><b>Growing Cities: Urban and Peri-Urban Agriculture in the Global South Through a Lens of Sustainability and Wellbeing</b></p> <p>Chair: Nitya Rao, University of East Anglia Discussants: Chandni Singh and Prathigna Poonacha, Indian Institute for Human Settlements</p>
	<p>Cities' Food Synergies: Case of Urban and Peri-Urban Agriculture Production and Supply Between Morogoro and Dar es Salaam, Tanzania <i>(Betty Mntambo, Open University of Tanzania; Swai Ombeni, Ardhi University, Tanzania)</i></p>
	<p>Contextualising Urban and Peri-Urban Agriculture in the Wake of Climate Change: The Case of Dar es Salaam, Tanzania <i>(Aldo Lupala, Ardhi University, Tanzania)</i></p>
	<p>Understanding the Impacts of Urban and Peri-Urban Agriculture on Human Wellbeing and Urban Sustainability: Case of Bangalore and Pune <i>(Chandni Singh, Indian Institute for Human Settlements; Sheetal Patil, Azim Premji University; Prathigna Poonacha, Indian Institute for Human Settlements; Parama Roy, Indian Institute of Technology Madras; Teja Malladi, Indian Institute for Human Settlements; Ashwin Mahalingam, Indian Institute of Technology Madras; Maitreyi Koduganti, Indian Institute</i></p>

	<p><i>for Human Settlements; Swarnika Sharma, Indian Institute for Human Settlements)</i></p>
	<p>Urban Against Urbanisation: Farming in Delhi and its Significance as a Systemic Alternative (<i>Nishant, Radheshyam Mangolpuri and Rajendra Ravi, People's Resource Centre, Delhi</i>)</p>
4:40pm – 6:20pm	<p><b>Media Imaginaries</b> Chair: Vikas John</p>
	<p>Speculating the City: The Urban Imaginaries of Contemporary Indian Science Fiction (<i>Annika Taneja, Independent Researcher</i>)</p>
	<p>Infrastructural Imaginaries and Urban Futures: Cell Antenna Radiation Controversies in Indian Cities (<i>Rahul Mukherjee, University of Pennsylvania</i>)</p>
	<p>Urban Imaginaries, Home and (Un/be) longing in the Jesus Trilogy of J.M. Coetzee (<i>Debasish Mishra, National Institute of Science Education and Research, HBNI, Bhubaneswar</i>)</p>
	<p>Space Making by Women in the Neoliberal City: The Cinema of Alankrita Shrivastava (<i>Isha Tyagi, Tata Institute of Social Sciences, Mumbai</i>)</p>
	<p>Provoked to Perpetuate: Planning Visualizations as a Question of Spatio-Visual Injustice, Case of Cairo (<i>Mennatullah Hendawy, TU Berlin and Orient Institute Beirut</i>)</p>

## DAY 3 | 16 January 2021

9:30am – 11:10am	<p><b>Fair Work: Employment in the City</b> Chair: Neethi P</p>
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	<p>Beyond Security: An Urban Policy for Migrant Workers  <i>(Divya Varma, Maansi Parpiani and Kavya Bharadkar, Aajeevika Bureau- Centre for Migration and Labour Solutions)</i></p>
	<p>Role of Land Rights in Improving the Quality of Life in the Slums of Delhi  <i>(Anil Kumar Roy and Pragya Sharma, CEPT University)</i></p>
	<p>Morphology of Narasimharajapura post COVID-19: People, Perceptions, Spatial Manifestations and Representations  <i>(Priyadarshini Mohanty, Sona Alex and Vaseem Anjum Sheriff, BMS College of Architecture)</i></p>
	<p>All is not well on the Yamuna Front: Skills and Livelihood Aspirations of Yamuna Pushta's Working Homeless Men  <i>(Ashwin Parulkar, Centre for Policy Research; Anhad Imaan, Aajeevika Bureau- Centre for Migration and Labour Solutions)</i></p>
	<p>Synergizing Shared Spaces in a Divided City: Case of Shillong, India  <i>(Jagriti Jhunjunwala, School of Planning and Architecture, Bhopal)</i></p>
11:40am – 1:20pm	<p><b>Re-imagining Urban Services</b>  Chair: Amir Bazaz</p>
	<p>Domestic Water Supply Scenario of Small Indian City: Reforms, Service delivery and Futuristic solution  <i>(Harshita Mishra, Independent Architect and Environmental Planner)</i></p>
	<p>Politics of Hygiene : Through Infrastructure Disconnected from Governance  <i>(Ganga Dileep C, Meenakshi M, Sanjana Jismon and Rohit Bagai, Recyclebin Studio )</i></p>



	<p>What Affects Urban Households' Energy Consumption Patterns? Technological Innovation and Behavioural Interventions (<i>Chandra Sekhar Bahinipati, Rahul A. Sirohi and Sagarika S. Rao, Indian Institute of Technology, Tirupati</i>)</p>
	<p>Urban Water Management: Reviewing the Changing Paradigms (<i>Siddh Doshi and Rutool Sharma, CEPT University</i>)</p>
	<p>Ownership Status and Housing Quality in Urban India (<i>Kiran Limaye, VikasAvnesh Foundation; Shreya Biswas, BITS Pilani, Hyderabad</i>)</p>
2:00pm – 3:20pm	<p><b>Planning and Urban Imaginations</b> Chair: Namrata Kapoor</p>
	<p>Role of Urban Green Spaces in Health and Well-being in Jaipur: Implications for Urban Planning (<i>Anil Kumar Roy and Kristi Verma, CEPT University</i>)</p>
	<p>The Spatial Distribution of Public and Common Mobility Resources in Mexico Valley Metropolitan Zone (<i>David López García, The New School</i>)</p>
	<p>Ecological Perspectives in Spatial Planning: Critical Review of Master Plans for Delhi (<i>Gargi Mishra and Rutul Joshi, CEPT University</i>)</p>
	<p>Missing in Action: In Search of an Integrated and Pragmatic Planning Information Framework in India (<i>Amish Sarpotdar, University of Manchester</i>)</p>
3:50pm – 5:30pm	<p><b>Perceptions of Difference: Identities in the City</b> Chair: Aditi Surie</p>
	<p>The Geography of Love: "Indigenous Urbanity" and the Practice of Lesbianism in Medieval Lucknow (<i>Puja Basu, Center for Studies in Social Sciences, Kolkata</i>)</p>

	<p>Between Heterotopia and Utopia: Indian Queer Urbanism in the Tranquebar Book of Erotic Stories <i>(Swati Palanivelu Vijaya, Ohio State University)</i></p>
	<p>A Muslim Feminist City: From Girls at Dhabas to Shaheen Bagh <i>(Tara Atluri, University of Toronto)</i></p>
	<p>Dalit Settlements during Early-Twentieth Century Delhi: Pandemic and its Variegated Impact <i>(Jatin, Jawaharlal Nehru University)</i></p>
	<p>Fractured Geographies, Cornered Communities: Shaping and Reshaping the Urban <i>(Anshu Saluja, Jawaharlal Nehru University)</i></p>
6:30pm – 8:00pm	<p><b>Looking Forward: The Agenda for a New Urban Science</b> Chair and discussant: Aromar Revi</p>
	<p>Michael Keith <i>(Professor at the Centre on Migration, Policy and Society (COMPAS), University of Oxford)</i></p>
	<p>Jose Lobo <i>(Clinical Associate Professor, School of Sustainability, College of Global Futures, Arizona State University)</i></p>
	<p>Luis Bettencourt <i>(Professor of Ecology and Evolution, University of Chicago)</i></p>
	<p>Debra Roberts <i>(Co-Chair, Working Group II, IPCC)</i></p>
	<p>Aromar Revi <i>(Director, IIHS)</i></p>

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Panel 1

# Narratives on the Urban Environment



# The Ecological Imagination of Emerging Cities in the 21st Century

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The aspiration of establishing environmental justice in cities of the world involves the construction of storytelling instruments – ecological narratives that outline the language of urban sustainability.<sup>1</sup> Since the 1970s, the world has experienced a persistent environmental deficit, which occurs when the ecological footprint of a population exceeds the biocapacity of the area available to that population.<sup>2,3</sup> In over the past 50 years, we have exhausted more resources and natural services than we can produce on our lands and water bodies. In thousands of cities across the world this environmental debt puzzles the capability of architects, urban designers, and civil society to create comprehensive ecological narratives that register interactively and simultaneously the local and global forces that influence the development of cities.

Who is singing the song of the city? Who is listening? Suketu Mehta raises these questions in the text *Being Interlocal*, in which he concludes that architects and urban planners all over the world are experiencing a storytelling deficit.<sup>4</sup> While luxury real-estate business and extraction-based policies are fully aware of the power of stories for their own agendas, sustainable development narratives are enclosed in weak and shallow discourses that only offer reaction and resistance towards power structures. Environmental science and urban studies contain their own specialised vocabulary, acronyms, lingo, and jargon. Thus, as a means of communication to the broader public, it can create separation and distance. We need to bridge the climate communication gap by the words we use, the analogies we avoid, and the metaphors we employ. As Suketu Mehta writes:

The conversation around urbanism these days is like the Latin Mass, laden with jargon, reinforcing the barriers around a professional guild. As a result, people don't listen to good and professional planners in Mumbai or Mexico City, because planners don't speak in a language that people can understand. Or they speak only international languages like English and Mandarin, and not local languages like Marathi or Fujianese (...) Meanwhile, the real-estate developers invest in professional storytellers to sell their sugared dreams of swimming pools and towers in the park to an uninformed populace. (...) If philosophers or literary theorists write incomprehensible jargon, it might hinder the rest of the populace's ability to comprehend philosophy or literature – but it's not going to affect their daily lives. But when it comes to urban planners, their dreams could become our nightmares. The rest of us have to walk in them, sleep in them, live in them. We need to understand the story they're selling us.<sup>5</sup>

What to do in order to disrupt this lack of ecological narratives? Where to start? This paper explores the ability of certain urban infrastructures that carry resources such as water, food, oil, and electricity to define the ecological imagination of cities; to nurture



sustainable urban futures. Those are places and buildings where urban designers, architects, and policymakers could infiltrate a storyline of environmental justice in cities.

### **Emerging Cities in the 21st Century**

Human settlements can be classified by their historical centres, the commuting patterns of their workers, their population thresholds, or their geographical coverage.<sup>6</sup> They can also be identified by their local newspapers or by their local sports teams.<sup>7</sup> Broad surveys that study urban expansions at a global scale tell us that the world hosts around 4,231 cities, with 100,000 or more people living on them.<sup>8</sup> Each city is particularly influenced by cultural values, political orders, and physical locations – symbolic, ideological, and geographical positions, respectively, which we can identify in the realms of culture, power, and science.<sup>9</sup>

One of the properties of the ecological imagination of cities that we will discuss in this paper is the ability to visualise atemporal, non-existent, non-tectonic environments; a world that is not yet; ideas for the sustainable, just city. Marius de Geus has coined the term ‘ecological utopias’ to describe the capacity of politics, literature, and art to create fictional, sustainable habitats. His analysis considers classic and modern utopias that have influenced contemporary ideas for the just city. Among the authors that have dedicated their time to envision utopias of sufficiency are Thomas More, Peter Kropotkin, William Morris, and Henry Thoreau. While observing the shortcomings in the utopian works of a dozen of writers and activists, De Geus highlights the inspiration that a critical reading of their works may produce.<sup>10</sup> Utopia is also depicted by counterimages of an alternative society, one that has achieved stability in all the spheres of human reality, including one that protects and respects nature. Utopian thinkers philosophise, and their minds attempt to distance themselves from the present reality, and go where they can discover untried, unprecedented and better possibilities for the future.<sup>11</sup>

On the other hand, we can understand ecological dystopias as the allegorical metaphor of cities and villages that deplete natural resources due to ecological mismanagement of their habitats. Territories where cultural circumstances, political orders, and scientific communities fail to anticipate and eventually repair the collapse of their cities. This vision assumes that a lack of comprehensive ecological ideologies and sustainable practices are the roots to cultural, political, and biological destabilisations of urban worlds.<sup>12</sup>

How can we construct anticipatory tales of our actions on Earth? We can start by crafting ecological utopias and dystopias as ‘film-make’ environments. Ideas of sustainable and non-sustainable atmospheres could be transferred by sequences of narratives (text, sounds, images, objects). These representations could be extremely critical in regard to the present society, and at least in images and words, could contain ‘the blueprints’ for a completely new environment. This paper proposes focusing on urban infrastructures where environmental justice is sought by architects, urban designers, and engaged citizens as well as exploring urban territories in the quest for ecological action in thousands of cities of the world.

## Notes

<sup>1</sup> See Ernesto Valero Thomas, Sustainable orientalism: Hegemonic discourses of environmental sustainability and their transmission to non-Western urban habitats. *Critical Planning*, volume 22 (UCLA Department of Urban Planning, 2015): 135–151.

<sup>2</sup> According to the Global Footprint Network Organization, the term ‘ecological footprint’ is a measure of the biologically productive land and water area an individual, population, or activity requires to produce all the resources it consumes, to accommodate its occupied urban infrastructure, and to absorb the waste it generates. The term ‘biocapacity’ serves as a lens, showing the capacity of the biosphere to regenerate and provide natural resources and services for life. It allows us to add up the competing human demands, which include natural resources, waste absorption, water renewal, and productive areas dedicated to urban uses. As an aggregate, biocapacity allows us to determine how large the material metabolism of human economies is compared to what nature can renew. The ecological footprint can be measured in global hectares per person, or in ‘number of Earths’, which represents how many planet Earths it would take if everybody had this footprint.

<sup>3</sup> Global Footprint Network. n.d. Open data platform. Retrieved from [http://data.footprintnetwork.org/?\\_ga=2.54881448.2042678639.1605203270---1761841547.1602785452#/](http://data.footprintnetwork.org/?_ga=2.54881448.2042678639.1605203270---1761841547.1602785452#/) (accessed 1 November 2020).

<sup>4</sup> Suketu Mehta (2018). Being interlocal. In Ricky Burdett and Philipp Rode (Eds.), *Shaping cities in an urban age*. Phaidon Press.

<sup>5</sup> Ibid. 82.

<sup>6</sup> John B. Parr (2007). Spatial definitions of the city: four perspectives. *Urban Studies*, 44(2), 381–392 (JSTOR).

<sup>7</sup> Angel et al. (2016). *Atlas of urban expansion—2016 edition, Volume 1: Areas and densities*. New York: New York University; Nairobi: UN Habitat; and Cambridge, MA: Lincoln Institute of Land Policy.

<sup>8</sup> Ibid. 9.

<sup>9</sup> See Bruno Latour. (1993). *We have never been modern*. Cambridge, MA: Harvard University Press.

<sup>10</sup> Marius de Geus (1999). *Ecological utopias: Envisioning the sustainable society* (Paul Schwartzman, Trans.). Utrecht: International Books.

<sup>11</sup> Ibid. 30.

<sup>12</sup> See Jared Diamond (2005). *Collapse: How societies choose to fail or survive*. London: Penguin Books.

# Contested Imaginations and Negotiating with the Cityscape: A Case Study of Bovines in Delhi

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## Introduction

The city of Delhi, as we are aware, has a rich history which has been and continues to be written through various lenses. Like all cities, Delhi as a city-space too cannot be written as a single urban settlement. Neither can it be written solely based on the seven cities from the medieval period, nor just the eighth city that emerged with the construction of New Delhi in 1911. This is because the environs of Delhi, or as it was previously referred to, *Dhilli* or *Dhillika*, have witnessed constant migrations, expansions, and settlements. This resulted not only in locational shifts of urban settlements but also of numerous 'old' and 'new' Delhis surfacing from time to time (Narain, 1986, p. 3). The political status and title of the city too, particularly since the 17th century, have witnessed frequent changes, more than any other Indian city or town. In this regard, one can argue that there is no single profile of the city per se, but that it is composed of multiple and varied profiles, constituting what Narain (1986, p. 3) calls a 'conglomerate city'.

Like most cities of the world, Delhi too has been planned, envisioned, and designed with certain underlying logics. When the British empire transferred the capital from Calcutta to Delhi in 1911, New Delhi particularly was envisioned and thus landscaped to represent the imagination of an 'imperial capital'. Unlike French landscaping techniques which are designed to appear more natural and organic in character, British, or for that matter, Mughal landscaping techniques are characteristic of being designed, controlled, shaped, and artificial even. It is the latter which was deployed in the formation of New Delhi by architect Edwin Lutyens—where the city was imagined as branching out of a central vista or axis into hexagonal shaped streets, uniform grids, and rows. While New Delhi was designed specifically for colonial buildings, bungalows, and for the parliament complex, this design aspect was also extended to unplanned and un-manicured landscapes such as agricultural and grazing lands. It is not only such lands which do not fit into this 'imaginary' of a capital city but other spaces including ghettos, slums, underdeveloped areas that have conventionally been the antithesis to the idea of Delhi as a planned city. One such 'nuisance' I elaborate upon, specific to the context of Delhi from the late 19th century and up until the present, is cattle.

Predominantly composed of villages and agricultural land, Delhi was inhabited by farmers and cattle rearers, among other communities. Pastoral communities, such as the *Ahirs* of Uttar Pradesh and Rajasthan, and *Gujjars* of Haryana have, for instance, migrated and settled in and around the walled city of Shahjahanabad for more than a century, bringing with them their herds of cows, buffaloes, goats, and sheep (Brayne, 1908). This influx of migrants—both human and non-human— not only from bordering states but from across the country, saw a marked increase in post-independent Delhi. As the city expanded, these erstwhile villages were enveloped by the city, to be initially categorised as '*lal doras*'<sup>2</sup> in the early 20th century, and later as 'urban villages'<sup>3</sup> in the

1960s. Despite the changing land structures and relations, cattle-rearing communities have continued to flourish and proliferate and, as a consequence, post-colonial Delhi to this date is dotted with *tabelas* (cow sheds) and small- to medium-scale dairy farms across the length and breadth of the city's urban form. This is why a common sight to observe on the streets of Delhi is the presence of bovines—particularly cows, buffaloes, and bulls—who negotiate and create their own spaces across the city's landscape.

Returning to the aspect of design, it is well known that cities are planned and designed to facilitate the lives of certain classes of humans and their companion animals such as pet dogs. In contrast, migrants, the poor, the disabled, livestock animals, and wild animals are relegated to the city's margins, peripheries, to certain pockets or 'ghettos' even. This 'othering' of certain bodies finds its basis in the exclusionary logic of the State and is implemented through a series of governmental, juridical, and policing apparatuses – at both the level of the state and the local. As Linder and Meissner (2018, p. 8) state, urban imaginaries in that sense are highly political in nature. It is against this backdrop that I consider the place of the more-than-human, and specifically, the 'bovines' in the city of Delhi as a case study to explore the contested imaginations, which will be narrated through three tracts in the paper.

### **Infrastructural Imagination of the City**

According to anthropologist Caroline Humphrey (2005), ideology finds its presence not only in 'texts and speeches' but also in 'material structures' (p. 39). While Humphrey makes this argument based on the early Soviet state project of creating a 'Socialist Man and Socialist Woman' through the construction of the 'House Commune' buildings, the point she essentially makes is that ideology and politics can be found not only in city plans and documents but also very much embedded in the construction of built forms and city infrastructures. In that sense, one can argue that it is through infrastructures that the state's vision of the city is transformed 'from a rationality to a practice' (Larkin, 2013, p. 20), resulting in the distribution of resources, creation of networks and flows, as well as in the segregation of spaces, bodies, and relations, thereby ensuing an *infrastructural* imagination of the city. Infrastructures, according to Mrázek (2002, as cited in Larkin, 2013), enable feelings of modernity and progressiveness through "...sensorial and political experiences" (p. 337). Keeping this in mind, the first tract of this paper analyses the infrastructural imagination of the capital city during both colonial and post-colonial periods, by looking at where bovine bodies feature, if at all, within this larger imagination of 'what it means to be modern'.

As much as cattle have been construed as crucial for the supply of milk in the city, their corporeal presence, however, has been relegated to the outskirts, the borders, and at times outside the city, in the rural. These 'pushing-out' regimes formulated by the state and municipal corporations on grounds of hygiene, sanitation, and public health, and cattle being constituted as a 'nuisance', find their presence not only in archival records, in the segregation and zoning policies of the city's masterplan, and policy documents but is also manifest on the ground through multiple dictums and jurisdictions including milch tax, in the creation of "animal spaces" (Philo & Wilbert, 2000) such as dairy colonies, cattle pounds, and *gaushalas* (cow shelters), among others, the objective being to drive 'Ghosis' and their cattle to the outskirts, thereby restoring sanitary standards within the city limits.

### **Middle-class and Neighbourhood Imaginaries**

Continuing in this trajectory of sensorial and political experiences, the second tract involves examining the growing and powerful middle-class in Delhi, who to a large extent shadow the state's vision. Here, bourgeois notions of the environment and green spaces (Baviskar, 2016, 2019), 'clean' cities, aesthetically pleasing neighbourhoods, and urban smellscape, play a significant role in the everyday lives of dairy farmers and cattle. Similar to the state's vision, 'bourgeois environmentalism', as coined by Baviskar (2016), refers to the aspirations of the middle-class for an ordered, hygienic, environmentally, and ecologically conscious global city. Therefore, those elements that do not fit into the imagination of this modern pursuit mentioned above—at least within the immediate neighbourhood and locality—are through the "discourse of 'public interest' and 'citizenship'" (p. 392) evicted and displaced, or treated as bodies who do not belong to the urban.

This social structuring of the neighbourhood based on aesthetics is closely entangled with the question of property. According to Hardt and Negri (2009), property is deeply embedded in the intertwining of power, law, and capital. The intersection of these three aspects, which they refer to as the 'republic of property', "determine and dictate the conditions of possibility of social life in all its facets and phases" (p. 8). The individual, in this regard, "...is defined by not being but having..." (p. 7). Therefore, it is not only the possession of property which is crucial but the value associated with the land and the surrounding ecology, which is dependent to a large extent on city infrastructures. In that sense, any element or force which has the potential to undermine the real state value is deemed unworthy. Through citizen campaigns, and by working in tandem with municipal bodies, this has typically been extended to un-manicured landscapes such as open tracts of land or grazing lands, roadside garbage dumps; to certain informal means of livelihood such as hawking and cycle-rickshaws; as well as to the homeless, the labouring classes, and stray animals (such as the Common Cause petition in 2001) among others.

What we gather from this is that it is not only the state's imagination of the city at large but the imagination of the middle-class—particularly of their immediate neighbourhood, which plays a significant role in the politics of who belongs and where. In this manner, the urban middle-class not only lobby the state's vision towards bovines in the city but in effect further their own local/neighbourhood imaginaries through them.

### **Everyday Contestations and Negotiations**

The question which remains, however, is that despite stringent policies and measures in place, together with an influential middle class, how do cattle and thereby dairy farmers subsist within the 'urban limits' of the city? In the case of majority of the dairy farmers, it is seen that they have been living in the same location within the city for more than 50 to 60 years. There is an ecology that they are a part of and an ecology which they have created surrounding their dairy farming practices—from where the cattle is housed, the feed provided, to whom they sell milk to, and so on, all taking place within that geography. Despite this, there are everyday contestations and negotiations dairy farmers have to make in order to persist within the cityscape.

The final tract of this paper, through ethnographic narratives of individuals implicated in the natures-cultures of cattle, explores the various measures employed by dairy farmers to contest these statist imaginations, in a sense, by negotiating with the cityscape. This takes shape in numerous ways including maintaining cordial relations with the immediate neighbourhood by ensuring the regular cleaning up of cattle dung from the streets, through the creation of informal networks with members of municipal bodies, by supporting and even participating in the event of an inspection by cattle catchers, by making invisible any physical and sensorial traces of their livelihood including the cow herself, and in some instances having to give up one member of the herd as a means to negotiate with state bodies as well as to protect the rest of the herd and their livelihood.

Additionally, one can argue that stray cows by traversing and inhabiting various public space infrastructures or 'civic commons' (Gidwani & Baviskar, 2011) such as footpaths and traffic signal islands, are also in some sense contesting these very imaginations by creating their own 'bovine geographies' within the urban. By bovine geographies, I not only refer to the 'beastly spaces' (Philo & Wilbert, 2000) inhabited and occupied by cattle when left astray but also the cultivation of certain everyday practices and interactions with human-others, which typically revolve around feeding and religious practices.

## Conclusion

Urban life brings about a paradigm shift in social, economic, cultural, and ecological spaces. As evasive spaces, where life flourishes at the interface of precarity, metabolism, and materiality, *who* or *what* constitutes the urban becomes a critical question to examine. As spaces primarily meant for the habitation of certain classes of humans, the presence of nonhumans is restricted to pets, zoo animals, rodents, and some stray animals. Parallel to this, much of urban studies literature focuses on the human in an urban space or city and does not consider other possible non-human actors such as animals and their presence in the shaping of the cityscape.

Through the intersections of these three tracts, the aim of the paper is to analyse how these discernible yet interconnected logics, produce exclusionary measures for bovine bodies and their human counterparts, who while are present in the infrastructural imagination of the post-colonial capital city, are relegated to the peripheries and margins, thereby having to engage in everyday contestations and negotiations as a means to a precarious subsistence.

## Notes

<sup>1</sup> This research forms part of the ongoing *Urban Ecologies: governing nonhuman life in global cities* (uEcologies) project funded by the European Research Council (ERC) Horizon 2020 Research and Innovation Programme [Grant No. 759239].

<sup>2</sup> The concept of *Lal Dora* was introduced by the British colonials in 1908, by drawing a red line around villages on the map. *Abadi* villages, or the part of the village for habitation purposes and not for agricultural use, had a red thread tied around the boundary. This was carried out by the Land Revenue Department to identify agricultural



land. Under the 1957 Delhi Municipal Corporation (DMC) Act, *lal dora* villages were exempt from building and construction bye-laws which exist for the rest of the city.

<sup>3</sup> 'Urban village' is a formal category that emerged in the 1960s referring to the habitation around/adjacent to agricultural lands. Areas demarcated as urban villages continue to be immune from construction bye-laws and have up until now been excluded from the city's masterplans. This however is set to change with the Master Plan of Delhi 2021.

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# Reimagining Peripheral Geographies: A Dual Lens Approach to Examine Peri-Urban Dynamics in India

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With rapid urbanisation, urban sprawl has become a common phenomenon, particularly in the Global South, creating peri-urban spaces where rural-urban interfaces occur. Peri-urban spaces are generally transformed rural spaces, because of the growth of cities, relying on the resources of their surroundings (Heinkel & Butsch, 2020). Lack of planning and policy attention to peri-urban areas has exacerbated social, environmental, economic, and health inequities. The dynamic and constant interaction of social, economic, and environmental systems that occurs in the peri-urban areas can offer critical insights for pursuing resilient urban growth but currently remains an under-explored area of research. This can be particularly attributed to the lack of a holistic methodological approach that effectively captures the complementarities and contestations embedded in the dynamics of peri-urban areas.

Peri-urban areas are largely framed and examined as ‘in-between spaces’, occurring at the interface of urban and rural zones; ‘transitional spaces’, undergoing a change from rural to urban, manifested in changing types of development; and as ‘spaces of flows’ of goods, people, knowledge, capital, and resources (Abramovay & Sachs, 1996; Douglass, 1998; Firman, 1996; Friedmann, 1996; Sit & Yang, 1997). Most of the existing research on peri-urban development is grounded in examining flows (e.g. people, production, commodities, capital, and information) and linkages (e.g. economic, social, and political) that are physical and measurable; there is limited in-depth analysis of peri-urban processes (Rakodi, 1998).

We argue that the problematics of the existing framings lie essentially in characterising the peri-urban areas as an ‘amorphous and mobile *site*’ (Allen, 2010) for the interaction of various social, economic, and cultural processes and interlinkages between the rural and the urban. While the flow-based conceptualisation captures the economic, environmental, and infrastructural issues and sectoral interactions (for example, urban agriculture, rural manufacturing, and services) (Tacoli, 1998), such framings fail to take into account the everyday life and place narratives of the people who live in peri-urban areas. These narratives can provide critical insights for building micro-level social, political, cultural, and economic institutions through which human agency is exercised



in cities, and through which, we suggest, resilience is built. Hence it becomes important to understand peri-urban areas as an emerging *settlement* typology with all the social, material, organisational, spiritual, and cultural elements that sustain it (Živković, 2019). Such revisioning of peri-urban geographies can potentially play a vital role in decentralising the urban core and enabling inclusive and integrated development of urban and rural areas.

In this paper, we will address the existing gap in methodological approach to study peri-urban regions and hence will facilitate the revisioning of peri-urban development in India. We propose a multidimensional approach to examine peri-urban spaces using a dual lens methodology, one that draws together 'flow-based' and 'place-based' network conceptualisations (see Figure 1). Flow-based conceptualisations will focus on interactions and connections, on networks and the concomitant processes that define various flows between places and spaces (Batty & Cheshire, 2011). Our aim here is to capture the dynamics of integrations or summations of flows that take place between various origins and destinations, connecting/disconnecting peri-urban areas to the urban core and rural hinterland, and vice-versa. Furthermore, the inflow of people of different age groups, culture, and ethnicity cosmopolitanise the place narrative too quickly before the incoming population can adopt with the cultural affinity of the concerned peri-urban region. Consequently, the social network and friendly neighbourhood turns into individual space confined within family and friends. We hypothesise that the social and community resiliency is affected due to such rapid physical transformation. Hence complementary to the flow-based conceptualisation, incorporation of a place-based conceptualisation allows peri-urban areas to be explored as a dynamic matrix providing the necessary ground for everyday life, sense of identity and belonging, and interactions and lived experiences for the people and communities. Here, we consider two 'simultaneous realities': *the quotidian*, which characterises the repetitive practices and behaviour of people, and *the modern*, which comprises the new and constantly changing habits shaped by technology (Levebvre, 1999). Utilising a place-based conceptualisation lens will allow the examination of how these two realities influence people's place relationships and perception, socio-spatial networks, and lived experiences in the peri-urban area.

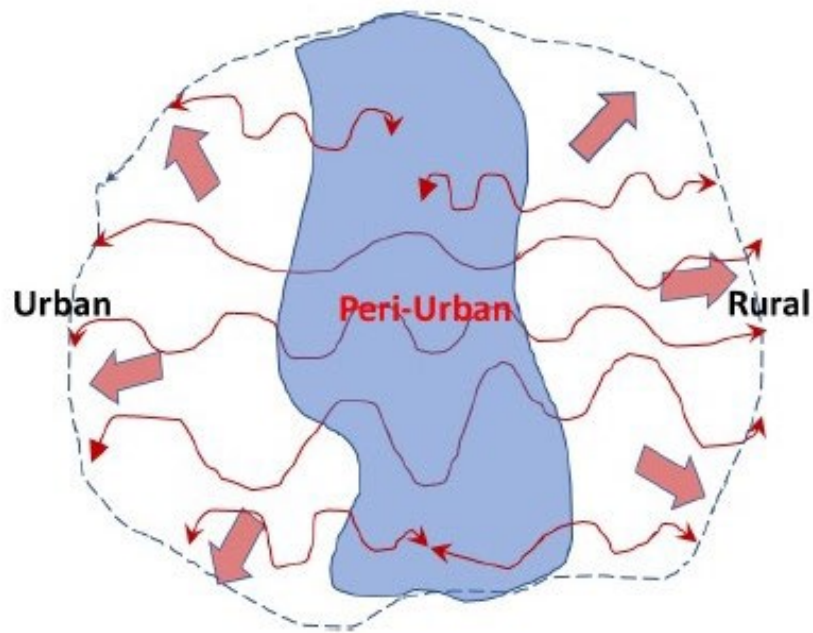


Figure 1: Conceptualising peri-urban as a 'place' and 'space of flows'

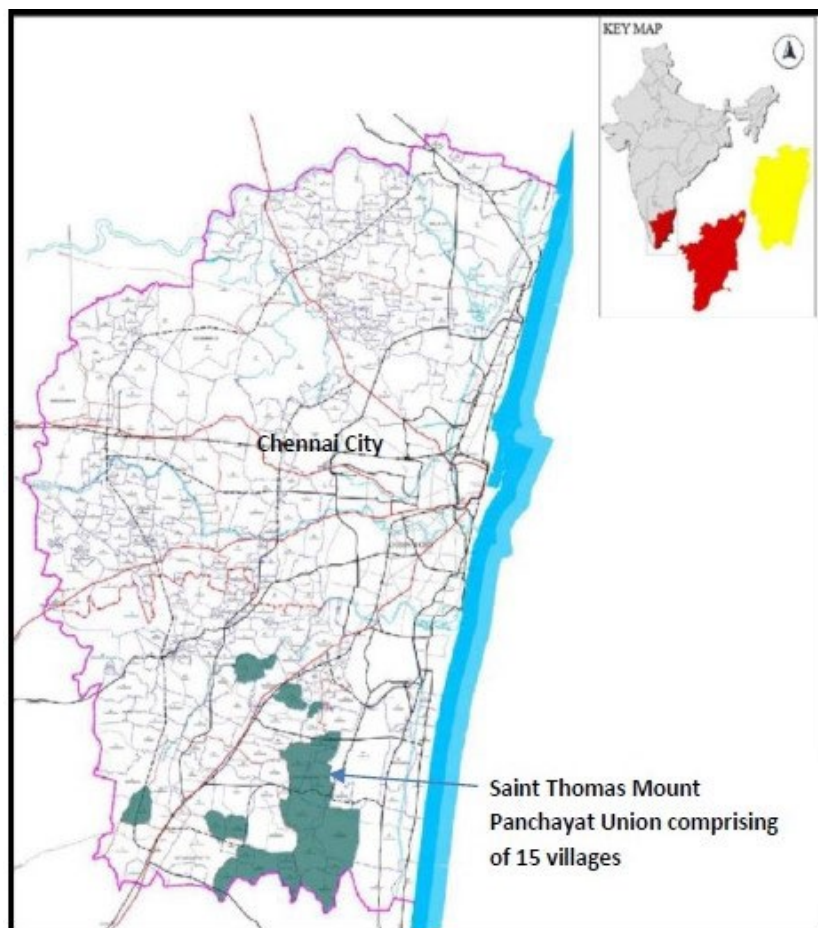


Figure 2: Case study area: St. Thomas Mount Panchayat Union, Chennai City, India

Using a case study in the metropolitan city of Chennai, capital of the state of Tamil Nadu in India, we discuss how the dual lens method can facilitate in building a socio-spatial

network model of the complex interaction. We argue that the proposed model can facilitate the identification of key drivers for an inclusive and multi-centred urban planning and development of Chennai city. The model will be transferable to different cities in India and other comparable Global South cities. By delineating the various multidimensional parameters and sectoral interactions, our proposed network model will provide critical insights for both reactive (development management) and proactive (plan-making and public investment) approaches to peri-urban planning and the operation of urban planning process at a range of scales (from the individual and neighbourhood scales up to the wider city region). Furthermore, the dual lens method that underpins the model's development not only provides a new methodological approach for studying peri-urban areas but also offers a paradigm shift in the conceptualisation of the *peri-urban* in urban planning, design, and development in the Global South.

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# 'Ghats' and Everyday Hydrosocial Relations: Production of Urban Spaces along Kolkata's Riverfront

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The history of riverfront of Kolkata and particularly '*ghats*'<sup>1</sup> on '*Gangar-dhaar*'<sup>2</sup> (as called locally) has been quintessentially a montage of histories of a riparian village's transition to a megacity, its labour, livelihoods, and political ecologies around a long, muddy, aqueous terrain. Thus, place-making took place under the purview of colonial hydrological projects backed by the 'state hydraulic paradigm' (D'Souza, 2006; Gandy, 2004; Kaika, 2006) as well as postcolonial placemaking schemes. In an era of the rule of aesthetics (Ghertner, 2015), where cityscapes are produced as perfect visual artefacts, sites for best practices to build upon the image of the cities (Lynch, 1960), one critical element of enquiry which often goes missing is that of 'embodied place-making' (Sen & Silverman, 2014; Tiwari, 2010). This study aims to unravel the nuances of production of urban spaces along the River Hooghly in Kolkata through various historically rooted, place-making processes—operating as a function of and in tandem with a gamut of characteristic social relations binding the city and its river. Therefore, *ghats* here provide us with a new optic to look into the water–society interfaces and the making and remaking of certain everyday waterscapes (Appadurai, 1996; Baviskar, 2007; Follmann, 2016; Stefanovic, 2019; Swyngedouw, 1999; Watson, 2019). An everydayness—that talks of the production of distinct relational spaces that are pretty much organic, performative, ritualistic, mundane yet socioculturally politicised; pivoted around both subtle and blatant, material, and symbolic contestations around power, inequality, meanings, and values. Something that echoes the Lefebvrian triad of production of space (1991) working in a milieu of perceived, conceived, and lived spaces.

The port city of Calcutta was once one of the pillars of long-distance imperial trade, for commodities such as opium, indigo, textiles, saltpetre (Sinha, 2014, p. 12) as well as jute bales from the Calcutta manufacturing hub. The riverfronts remained busy with the riverfront workforce engaged in loading and unloading of cargos under the aegis of the 'agency houses' of the British and other mercantile communities that shaped the nature of "informal bazaar economies" (Bose, 2018) along these ghats. In the postcolonial times, with the port losing its significance for reasons galore and the urban restructuring due to deindustrialisation across the Bengal belt, the commerce on the riverfront changed its character and the actors involved. The thriving economy occupying the space around these ghats is currently marked by a distinct urban "informality" (Laguerre, 2016; Roy, 2009), a work regime that is predominantly unregulated, casual in nature and operates in sync with a diverse array of social relations pivoting around this specific waterscape. Thus the waterfront has remained a 'working-class space' (Bear, 2011, p. 50) with its boatmen, workers in jetties, docks,

warehouses, and support activities for transportation, small-scale traders making their living out of recreational economy around ghat pavilions, cut-flower sellers, petty businesses formed around the sale of Hindu ritualistic commodities like '*Gangajal*' (holy water from the river sold in bottles) and '*Gangamati*' (the riverine clay) at temple complexes near the river, for cremation practices, and so on.

The discursive hegemony of citationary practices across policy domains have so far dwelt on the designs, schematics, and experiences of the Global North to be sincerely emulated in the making of "world-class cities" (Roy & Ong, 2011; Srivastava, 2014) in the "chaotic, unplanned universe" of the Global South. Under the neoliberal urban restructuring paradigm (Banerjee-Guha, 2009; Theodore, Peck, & Brenner, 2011), cities and their riverbanks have been glorified as ideal spaces for speculative capital (Harvey, 1989) and attempts have been made to use culture as an appropriating tool to decide the "look and feel of cities" (Zukin, 1995), establishing its integrity to post-modern urban spatiality (Dear & Flusty, 1998; Jameson, 1991). At the same time, 'visionary' urban redevelopment projects of the West have reduced them into sanitised strands of spectacle and beauty, into 'fronts', 'lines', and 'divides' replacing the vernacular rhythms evident in *ghats*. Thereafter, the corporeal engagements with the cities' rivers have not only taken up a new character but have redefined the specificities of "hydrosocial relations" (Linton & Budds, 2014) that are experientially made and remade by the people in negotiation with the urban materialities, state, and its governmentalities.

Contextualising the everyday against the backdrop of Southern urban practices (Sheppard, Leitner, & Maringanti, 2013; Robinson & Roy, 2016; Bhan, 2019) promises not only an exploration of the situatedness of experiences of the cities in South Asia or Global South at large, but to underscore the ordinariness of 'marginal' spaces within cities, like *ghats* in contributing to the extraordinary symphonies of 'urban' in the making. Such rubrics posit 'ghats' as potential sites for ethnographic enquiries into the new categories of urban place-making that produces cityspaces, beyond "the one-dimensional cartographic register" (Benjamin, 2015; Bhattacharya, 2018, p. 7) and beyond discourses around riverfront development or beautification initiatives. A case study of transects connecting consequent ghats (selected cases) reveal diverse performative, interactive, and land-use patterns on a comparative ground. Constructing an everyday canvas of spatial practices or 'rhythms', ghats stand as representations of ritualistic stories around life's beginnings and melancholies of death, as spaces of discard, and a wretched backyard for the thriving city, as spaces for metaphors of transient flows around the Circular Railways and ferry waterways, as squatters for the city's urban poor making a living out of commerce in ghat areas and for occasional environmentalism around the river's arts and aesthetics.



Acknowledging the vital insights and theoretical foundations contributed by the academic scholarship pertaining to debates on the nature of the urban futures, this paper brings up the everyday tussles around urban imaginaries that shape the place-making process in the city of Kolkata around its riverfront. It tries to draw attention to hitherto less-explored field of studying 'everyday hydrosocial relations' in urban spaces as ordinary as that of ghats, with a question to explore the logic as to what drives capital to venture into certain 'everyday spaces' and de-valorise others in its endless quest for newer avenues for accumulation. The primacy of studying 'space' through a lens of hydrosocial etches out the relevance of this work in the realm of urban studies with a special focus on cities with colonial pasts and sites like 'ghats' that geographically feature at the margins of cities. What makes ghats of Kolkata potential sites for exploration through the selected framework is its relevance in the city's development trajectory as a microcosm of generic and specific urban processes with materialities deeply rooted in histories and the mediations that they encounter from the unique cultural politics around hydrosocial engagements with River Hooghly. The central line of enquiry that this work intends to follow through is a hypothesis that production of urban space along a riverfront is a function of everyday hydrosocial relations prevalent in between the physical space, institutions, planning legislations, practices, hierarchies of power, and mediated by the lived experiences of people. Establishing this pushes us further to argue that change in the hydrosocial relations due to the impact of transformation of the 'everyday' leads to change in the nature of urban spaces produced, thereby facilitating a process of superimposition of new spaces on the older ones.

The present study becomes imperative against the backdrop of recent policy advancements made at the national and state levels that pose questions on the nature of transformation that spaces of river–water interfaces might have to undergo in future as well as the concern about what it entails in terms of changing nature of hydrosocial relations within them. Besides a series of Ganga clean-up initiatives taken up under the aegis of different political regimes that have conveniently focussed and averted on environmental concerns regarding the health of rivers, pollution on its banks, and threat to livelihoods, a lot of hype has been generated both by the central government and media regarding the Namami Gange Programme (2014) under the National Ganga Council (2016) since 2014. The rhetoric of the need to revive our "National River" (declared in 2008 by the former Prime Minister of India as a part of Ganga Action Plan) and its tributaries have been pushed in front of the public as a means to connect with nationalistic sentiments, given its reverence in the Hindu culture and religion. As a result, ghats have come under special attention under the riverfront redevelopment and beautification drives by National Mission for Clean Ganga and the National Ganga River Basin Authority initiatives. This has led to policy mobility across scales and compelled states to come up with specific state-level schemes like Hooghly Riverfront

Development Scheme or worlding projects like making Kolkata the “London of the East” (expressed as a visionary dream project for West Bengal Chief Minister, Ms. Mamata Banerjee, after assuming power in 2011) in a city-level race to refine image and branding to attract better investment opportunities in the neoliberal era. Additionally, there has been a declaration of ‘Jal Marg Vikas’ Project (2014–15, Central Budget) for National Waterways-1, implying the stretch of Ganga–Bhagirathi–Hooghly river system (between Varanasi and Haldia) as a part of Inland Waterways Project spanning 111 rivers of the country [as per the National Waterways Act, 2016] and visions for boosting waterways economy through the Eastern Transport Corridor (EDFC & NH-2). The ‘Inland Waterways Transport Programme’ along with the ‘Arth-Ganga Scheme’ (2019–20 Budget Speech) and its state counterparts like ‘Jaldhara’ by the West Bengal government intends to promote river economy by both logistical and aesthetic upgradation of riverfront spaces. On top of it, the latest notification of the Draft Environmental Impact Assessment (EIA), 2020, does not explicitly talk about its implications on urban development projects, although incorporating new projects like ‘waterways’ under its purview, thereby allowing scope to exist for monetising urban lands around rivers at the expense of city’s ecologies and marginalised sections occupying them. Listing the ‘Inland waterways programme’ under the B-2 category exempts them to be subjected to any EIA (as per clause 13, sub-clause 11; *The Hindu*, 2 August 2020) or any public consultation, accentuating the process of spatial transformation on one hand and weakening of environmental protections on the other. With such problematics in place, the study of everyday spaces becomes meaningful so as to see how urban spaces around riverfronts really get produced negotiating with the governmentalities at work.

## Notes

<sup>1</sup> Flight of steps leading down to the river.

<sup>2</sup> ‘Dhaar’ referring to ‘edge of the river’ or riverfront. Here Hooghly being a tributary of the Ganga, riverfronts are often locally addressed as ‘Gangar-dhaar’.

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## Of Environment and Environmental Practices in New Town, West Bengal

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New Town, a planned, developing satellite city east of Salt Lake City and Kolkata in West Bengal has amassed a burgeoning literature over the past few years (Bhattacharya & Sanyal, 2011; Dey et al., 2016; Kanngieser, 2016; Kundu, 2016; Mallik, 2018; Mitra, 2013; Roy, 2011). Despite the range of concerns that the existing literature traverses, an initial moment, the justification of New Town's planning and development couched under an 'environmental' register is not explicitly noted. The paper demonstrates through various instances of planning interventions and architectural developments how the 'environmental' has come to play a visible role in the New Town planning assemblage, which provides an insight into the contemporary temporality and relationalities of the state.

The paper begins from the instance of the entry of the environmental logic in the New Town planning assemblage and then explores various developments that engender new relationalities of bodily practices. The paper argues that the environmental is constructed and produced through discursive as well as material practices which value certain relationalities over others (Luke, 1995) while engendering new ones. The paper's intent is hence to map the engendering of particular environmental relationalities, i.e., environmental ethics that the New Town planning assemblage is opening up to the terrain of planning.

The paper makes three distinct strands of analytic contributions to argue that, (1) the inauguratory moves of the planning assemblage grounded itself on an environmental justification wherein a certain future was posited and then averted from, in the process valuating certain configurations as environmental while others not so, (2) the modality of economic environmentalism has emerged as a site of experimentation in engendering new mobile relationalities, and lastly, (3) the reconfigurations in the visual field by differentially designating 'luminous value' to bodies and by intervening in the visual field to signal and publicise environmental practices has emerged as a distinct site for environmentalisation of the city.

Section 2 marks out the initial environmental justificatory ground on which New Town's planning was inaugurated. This inauguratory move environmentalised the whole zone of land under consideration in an undifferentiated manner. Section 3 begins with an ethnographic scene, which allows the paper to segue into a discussion on environment and contemporary governmental strategies that engage in 'environmental behaviour control'. Sections 4 and 5 mark out interventions in the public and private sector wherein economic experiments have been pursued to environmentalise mobility. Sections 6 and 7 present the emergence of differential luminous value assigned to

mobile bodies opening up the visual field to environmental concerns and it notes how the environmental facades of buildings open up the visual field to publicise environmental practices. Through the above cases, the paper argues that the environment has emerged in West Bengal as a distinct domain of intervention, as one more domain to enact 'public purpose' (Roy, 2009).

The paper argues that, New Town from its moment of inception was grounded in an imagination which was sustained through environmental governance. New Town's ad-hoc, yet visible environmental practices, offer us crucial insight into contemporary reigning modalities in which environmentalities manifest themselves.

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Panel 2

The Work that 'Urban  
Observatories' Do:  
Institutionalising Urban  
Imagination between Trust,  
Advocacy, and Expertise



## Panel outline

Anchor Paper: The Work that 'Urban Observatories' Do

Michele Acuto; University of Melbourne

Ariana Dickey; University of Melbourne

Carla Washbourne; University College London

Case Study: The Experience of the Beirut Urban Lab

Mona Fawaz; Beirut Urban Lab

Case study: The Experience of the Bangalore Urban Observatory

Shriya Anand; Indian Institute for Human Settlements (IIHS).

Discussants

Susan Parnell; University of Bristol

Alexandre Apsan Frediani; International Institute for Environment and Development

## Panel Abstract

Urban imaginaries, the "symbolic sphere in which space and places are contested" (Bloomfield, 2006), are formed variously by history, identity, and memory but also often the field of complex politics. Central to the way cities are thought about, the urban imagination is increasingly deployed to depict, recast, and debate the future of cities (Meissner and Lindner, 2018). In some cases, the urban imagination is the *raison d'être* of specific institutions and the animator of the politics of urban knowledge mobilisation. This panel investigates the work that a particular type of institution does in shaping these politics and driving the narratives about, discussions around, and imagination of the city: 'urban observatories'. These are boundary-spanning institutions focused on producing and mobilising urban knowledge between research and decision-making, with an explicit analytical role about one or more cities (Washbourne et al., 2019). They exist across both Global North and South cities, with many long-standing cases playing an active role in shaping the representation of urban environments the world over. These realities are not free from urban politics but rather often at the very heart of urban governance. At the same time, the evolution of observatories is also one that have to do with the governance of urban imagination and its deployment to shape the trajectory of urban development the world over—often in service of giving voice to histories, identities, and memories lacking from the dominant urban futures discourse. Their role in producing and translating knowledge about place has been informing the urban imaginations of scholars, communities, and elites alike and presents an interesting "translation zone" (Apter, 2006) where to investigate how different urban

knowledges connect, converge, and clash. Yet little is still discussed about the positioning of urban observatories or urban research institutions performing observatory-like functions both in practice and scholarship. Seeking to drive this conversation through Southern voices and experiences, the panel couples a first-of-a-kind international review of this type of institutions with the on-site experiences of the Beirut Urban Lab and the Bangalore Urban Observatory and discusses these in relation to two major international research programmes oriented towards urban knowledge mobilisation, the PEAK Urban and KNOW initiatives of the UK Grand Challenge Research Fund. In doing so, the panel seeks to speak to the politics of governing urban imaginations, the boundary relations that play out in the mobilisation of urban imaginaries and chart a growing debate between observatory-like institutions emerging in many Southern and Northern realities to give voice to a more progressive way to depict the 'future' of cities.

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# The Work that 'Urban Observatories' Do: Institutionalising Urban Imagination between Trust, Advocacy, and Expertise

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Ariana Dickey; University of Melbourne

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## **Anchor Paper: Extended Abstract**

The ways in which urban knowledge mobilisation has been institutionalised in cities around the planet are vast and varied. We have sought here to take a peek at this complexity and its characteristics through the microcosm of 'urban observatories', which have been developed specifically to mobilise the various kinds of knowledge that exists in and about cities. Acting as the anchoring paper for the Urban ARC panel, this paper seeks to unpack the politics of institutionalising, through the creation and operation of urban observatories, relations (and politics) of urban imagination. It does so by relying on a comparative review of 32 observatory cases from the Global North and South, aiming to capture their voices and on-the-ground experiences as to how they have been mobilising particular urban imaginations about the places they engage with.

Unpacking how the dynamics of mobilising particular urban imaginations about place are institutionalised into the boundary-spanning role of observatories, and observatory-like urban research centres, this comparative study underlines the importance of attending to the information-based dynamics that emerge from different knowledge systems embedded in and across the cities. It testifies to the importance of the institutional role and brokering engagements of these entities (Lomas, 2007), not just of their outputs, and stresses how these positions have become even more critical in a time of sizeable disruption like that ushered in by COVID-19 (Acuto et al., 2020). In particular, the paper outlines the complex balancing act that several city-based observatories have played between fostering trust, advocating for inclusion and social justice, and providing expertise to decision-makers.

We have highlighted how observatories serve as intermediaries between research and decision-making but, significantly, also between communities and decision-makers. Their advocacy work often elevates voices that have been historically marginalised or even all together excluded from urban governance. These activities demonstrate the intrinsic value of observatories not just in what they produce, quantitatively or qualitatively, but in their nature as institutions that bridge multiple types of knowledge, very often also with a normative underpinning aimed at promoting more nuanced and inclusive understandings of cities. This particular role became abundantly clear in the



wake of the COVID-19 crisis as observatories called attention to the vulnerabilities to the virus, and its disastrous political-economic consequences, that marginalised urban communities have witnessed. These vulnerabilities were not new but rather came to the fore in the context of the crisis and as a result, the observatories, such as Sierra Leone Urban Research Centre (SLURC) in Freetown or the Karachi Urban Lab, were able to intervene to raise awareness that cities are only as resilient to disasters as their most vulnerable communities. Similarly, and once again as no novelty but rather as a heightened role throughout the 2020 crisis, observatories have also stepped into urban governance conversations as drivers of evidence-based conversations on the state of our cities, whether during COVID-19 or more ‘normally’ before the outbreak, stressing the need for tangible urban data and information to drive decisions as to how cities should evolve, be managed, and change. Examples like the Newcastle Urban Observatory, Gauteng City Region Observatory, or the WRI Ross Centre have made tangible (and differently put) cases for the value of information as the driver of urban discussions—and for the importance of balancing qualitative and quantitative points of view. Realities like Mistra Urban Futures or the Metropolis Urban Observatory also stressed, at least to us, the value and pitfalls of international circuits of urban knowledge (Cociña et al., 2020). Yet, as many of the other cases we have witnessed also stressed, they have also pointed at the need for these networks to ‘localise’ and draw in a reciprocal way connections between grounded experiences and more-than-local mobility of urban knowledge. Likewise, experiences like those of the Indian Institute of Human Settlements (IIHS), LSE Cities, and the ETH Future Cities Lab stress the importance of taking the ‘urban observatory’ point of view beyond realities explicitly named as such and seeing observatory-like functions embedded in wider institutional contexts like universities, training centres, and think tanks.

Thus, observatories stand out to us as playing a key role in bringing other forms of knowledge into conversations with decision-makers as opposed to relying solely on the traditional ‘expert’ advice that has historically been used to inform city-level decisions. Looking towards the future, our preliminary investigation also points to a clear need to account for the explicit urban governance functions played by observatories and institutions with observatory-like functions. This means, in our view, appreciating more directly how observatories have been taking up important advocacy and capacity-building functions, often crucial to lend a hand in the strive against urban inequality in rapidly urbanising regions of the world but also in many well-established Northern and Southern ‘global’ cities that are facing deepening inequalities.

Although variant in their form and function, this study demonstrates that observatories play an important role in urban governance—a role for which need will only increase as the world continues to urbanise. By nature of being a comparative, landscape review, this research leaves many avenues open for further study, including, for example, further investigation into how observatories relationship build; the role observatories

play in situating non-expert knowledges in urban development processes and how observatories use data to focus the attention of decision-makers on the needs of the vulnerable.

Notable in this urban governance perspective is the apparently equal importance of the relationships of trust that observatories have been building with stakeholders (Ward et al., 2009). Observatories have emerged as reliable sources of evidence for decision-making through the quality of their data and analytical capabilities and simultaneously have fostered personal connections with decision-makers such that the observatories are in tune with decision-maker needs and can therefore tailor their activities accordingly, as in the case of Gauteng City-Region Observatory (GCRO) and Newcastle Urban Observatory (NUO). This is not to say that observatories shape their findings to be in line with what decision-makers hope to hear but rather that they are in tune with the specificities of the challenges that decision-makers seek to resolve. And by having a critical distance as institutions separate from decision-makers, observatories can offer complementary external perspectives. In addition to building relationships with decision-makers, observatories have also fostered trust with individuals and communities who inform observatories' research, often in a co-production more than collaborative capacity (Watson, 2014), as in the case of IIHS, KUL, and SLURC. Doing so has introduced invaluable insights into the multiple and diverse experiences of a single locality, tying directly back to the first learning described. Through these trust relationships and the informal knowledge produced by them (van Merkeek & Edelenbos, 2014), observatories play an important role in bringing complex urban realities into the evidence base used by decision-makers.

Another significant finding of the study is the observatories' role in providing strong and continuous data that in some cases supplements state data, or in other cases is the only source of data where the state lacks capacity. The significance of this finding is that without the combination of historical data that can be used for comparison and robust present-day data, decisions cannot be made based on substantial evidence. This function will only grow in importance as cities seek to track their progress against targets, such as for improving environmental sustainability and health and well-being or reducing urban inequality. This function is also important in contexts where state-gathered data, or a lack thereof, is used against its citizens. Data politics is, and will continue to be, a central topic in the discussions of urban governance, and observatories play an important role in mediating data depth, accuracy, and analysis as both constructive critics and in strategic support of government (Parnell, 2020).

Yet this consideration also ushers in a dimension of the story (or perhaps more accurately 'stories') we recounted here. Understanding the place of observatories in urban governance calls upon tricky considerations as to their relationships of funding, philanthropy, investment, and the wider power relations embedded in government,

scientific advice, or urban research more generally (Swilling, 2014). We argue this is a critical area not only for further inquiry but also for conversation and exchange between observatories themselves. It is already apparent from the interviews and case studies that we conducted for this paper that navigating this dimension of urban governance is no easy matter for observatories but also a possible prolific area where to strengthen their positioning locally, nationally, and internationally.

Overall, then, the preliminary investigation we present here gestures towards important dynamics not just of knowledge mobilisation but of urban governance that observatories are steeped into through a variety of very diverse contexts. Capturing their voices and experiences, and even gathering some of them for reciprocal exchanges in a time of crisis, has also underlined very clearly to us the potential for capacity-building inherent in what is perhaps a uniquely varied community of practice adept to urban knowledge mobilisation and centred onto a careful attention for the ways our cities and most pressing urban challenges are unfolding around the world. It is our hope this spirit further extends in the years to come, and that these initial thoughts are but the start of a larger conversation.

Of course, the examples captured in this paper provide but a snapshot of the ways in which observatories contribute to and shape understandings of the city. They monitor and collect data in such a way that contributes to the history and memory of a place. Meanwhile, their boundary-spanning and knowledge translation activities bridge divergent imaginings of the city and produce innovative approaches to the future of the city that incorporate the diversity of its residents.

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Panel 3

# Navigating the City Urban Mobilities



## Urban Imaginaries: Fisherwomen in the Past, Present, and Future of Mumbai, India: An Exploratory Research on the Use of Public Transport by Fisherwomen in Mumbai

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Mumbai, the island city, is known for its natural waterfronts and its generous exposure to the Arabian Sea. A whiff of sea salt along the Mithi river, although adulterated at present, is a firm resident in my urban imaginary of the city and the sea. In the lauded hustle of Mumbai, one thing that can never lose its place from my memory of the cityscape is the literal hustle of fisherfolk at Chhatrapati Shivaji Terminus (CST) in the early morning hours. Their rush in barely but assuringly carrying the huge fish baskets on their heads, ensuring that the fish water does not drip on fellow commuters on the bridges of CST, and their hiss of negotiating their place on the station are key markers of their presence in my imagination of Mumbai. As a new local train passenger, I was always advised to keep my distance from the fisherfolk because their ways of avenging conflict would ensure I carry their smell with me through the day: “They slyly drip their fish water on you if you pick a bone with them. Don’t say anything to them, they always pick a fight.” Interestingly, the same people devoured the fish they bought from the fisherfolk every Sunday afternoon. Along with fisherfolk across railway stations and other streets carefully carrying their baskets or slicing their products for their constantly bargaining customers, another set of people have dominated my imagination of Mumbai and its trains—the dabbawalas. Mumbai’s dabbawalas have a history, theory, and service productivity that is well recognised by various agencies. Their theory of management and delivery along the supply chain are used as case studies in several business management courses (Thomke, 2012). Their impeccable service delivery is so commendable that several provisions have been made for supporting their innovation, consequently giving impetus to their services.

Recently, they were also provided with special trains along the suburbs for ease of conducting business (*Mid-Day*, 2012). It would be important to recall that prior to this development, the luggage compartment (2 at either end of the train) was usually used by dabbawalas to carry their huge (and long) lot of dabbas for the entire city. To believe that the development of assigning special trains was simply due to the State becoming cognisant of dabbawalas’ business would be an inadequate judgement. Mumbai, in all its cosmopolitan dominance, has attracted several communities of people from various walks of life. The concentration of these communities and their ways of expression and negotiation of city space leads to the development and perpetuation of several classes in the city. As diverse people with a diverse array of vested interests negotiate their claims to the city, political parties and local development agencies are alerted with their ears taut so that they can exercise their own right to the city. We have instances of ways

in which political patronage plays an instrumental role in entrenching small businesses without any deterrents (Mhaskar, 2018). Political patronage is strategic in many ways, one of which is to support key communities that aid in the creation of reliable vote banks. Other reasons would include offshoots of nativist agendas that some dominant political agencies lead by. Political patronage may have been one of the few key reasons that dabbawalas got their demands fulfilled and their stake in the city raised. If we employ a similar lens of observation, fisherfolk are among the key commuters of Mumbai local trains. Although their business does not take place in the trains, public transport is fundamental for them to reach potential customers.

This study aims to discuss the trajectory of growth of Mumbai's dabbawalas and fisherfolk who commute through public transport throughout the city in order to conduct business. In the supply chain of the fisheries (and even traditionally), the activity of setting up shop and selling fish has been largely conferred upon women of the community, making them dominant stakeholders who ensure sales happen. The gendered nature of selling fish has been made evident by several studies (Parikh, 2020; Sridevi, 1989; Thara, 2016), which then point to the fact the Koli community (historical occupants of the fish business in Mumbai) stresses on alternative occupations for their men folk, while the women, by extension of their household responsibilities, take care of the sale of fish as well. That the Koli community has engaged with this business for their subsistence and a livelihood since time immemorial (Thatra, 2020) is evident through the development of various Koliwadas all over the city. Hence, fisherwomen dominate the urban imaginary of Mumbai with several spaces earmarked by their presence either for sales, various processes before the sale, or commute besides their places of residence. This study aims to explore their negotiations with earmarked as well as unconventional spaces in the city, primarily by means of their public transport usage. Local trains serve to be the most desired mode of transport due to their ease of accessibility and increased frequency across time and locations. Thus, the Mumbai local is an important aspect of this study in observing, interpreting, and analysing the experiences of fisherwomen in the city and their negotiations of the cityscape. Further, it would also explore the presence of fisherwomen in the past and present of the author's urban imaginary with recommendations for what the foreseeable future might hold for them.

The paper would have three sections which aim to explore the variety of ways in which urban space and public transport are negotiated by fisherwomen in Mumbai by taking into account the particular commonalities that they share, which continue to be unique to an 'outsider'. The first section discusses their negotiations of space in the urban imaginary by examining the unique "political strategies" (Thara, 2016). There are different ways in which Koli fisherwomen have adopted and continue to practice in order to make their space and remain relevant in the larger public and political



consciousness (Thara, 2016). Negotiating public space for fisherwomen include some indispensable components among others—using pavements and streets to make sales if stopped by customers, using space across railway stations for sales, spaces occupied by collectives of fisherfolk (where women dominate) for sales, and public transport for commuting the produce from the docks to the shops. This negotiation is often dotted by conflicts and rifts with various others occupying the same space as them and requires the use of political strategies on the fisherwomen's end to claim their rights to that space. I argue for one potent political strategy employed by many fisherwomen in Mumbai is by using local trains. If carrying bulk orders, they make use of the luggage compartment with their head loader but use the ladies' compartments for commuting themselves. This has several implications: first, performance of their business identity and using the compartment by virtue of their gender to make their presence felt among other women from that compartment. Some even carry their fish baskets with them, causing several noses to twitch and handkerchiefs to reach noses. However, this presence-making is not only a political strategy but also a way of communicating with customers.

A related study (Thara, 2016) found the interstices of caste, class, and political status to be enablers of political support for the Mogaveera community of Udupi, Karnataka. However, the same may not hold true in Mumbai, as fisherwomen's collectives lack a strong political presence apart from their well-respected Koliwada and market space presences. In other spaces, Koli fisherwomen are often a distinct minoritised group and there is no better place to observe this distinction than in a local train. Class membership and expression influence their mobility in local trains; we often observe low tolerance to their 'unhygienic' movement accrued to their carrying baskets of fish in the same compartments as other ladies. These everyday unwelcome gestures seem to be part of the lived experiences of fisherwomen in local trains. As the proximity between classes increases due to local train travel, micro-transgressions against the 'other' seem to increase as well. On the other hand, Kusters (2019) argues for an appreciation of intersectionality in aiding the mobility and sociality of certain groups of people. In alignment with this argument, I believe groups of fisherwomen, although in direct competition with each other, operate by a sociality united by their identities and struggles in negotiating the urban space and various agencies—customers, the State, and their patriarchal families. The study would explore the intersectional feminist urban ecology and the position of fisherwomen in staking their claims to it, with the perspectives explained above.

The brief second section of this article would be devoted to tracking the trajectory of fisherwomen and the Koli community in accessing and laying claims to certain parts of the city despite the onslaught of various development projects, which would be later reiterated in the latter part of the paper. It would also focus on the ways in which



fisherwomen in Mumbai have constructed themselves in the urban imaginary. Codes of conduct, behaviours, and movement accepted in public spaces for the expression of fisherwomen's identity as businesswomen has evolved over time in the city, as different generations continued to engage in business in the same places as their previous generations, especially by virtue of limited choices to enter the economy (Mhaskar, 2018) owing to patriarchal dictation of norms (Parikh, 2020). This is not to say that fisherwomen are passive recipients of societal treatment and 'permissions' but an exploration of their role and agency in constructing their images and contributing to the urban imaginary of their assertions to the city.

The final section of this study would engage in a comparative analysis of the growth and presence of dabbawalas in the urban imaginary of Mumbai with that of Koli fisherwomen of the city. As the public-private binary of workspaces is blurred for fisherwomen because of their business demands, their use of multiple spaces leads to negotiations with multiple agencies, which is further compounded by their intersectional identities. The comparison would help in understanding the need for special trains/compartments for fisherwomen, especially at the time of loading and unloading of their produce. It would also help identify the challenges fisherwomen must mitigate in their experiences of commuting by any local public transport. As access to local transport services is essential in reaching the right place at the right time to attract potential customers, it is important to provide for safe, adequate, and comfortable transport alternatives to encourage the small businesses of fisherwomen in the city. In order to substantiate this argument, the analysis would be guided by the following hypothesis:

*H<sub>01</sub>: Special trains for fisherwomen are necessary. If this hypothesis is proven, recommendations to include these trains as part of welfare schemes would be strategised for. Key insights from similar provisions offered to the dabbawalas would be sought and key differences would be highlighted so as to cater to the unique experiences of fisherwomen.*

Finally, the study would provide a commentary on the ongoing and upcoming threats to the livelihood opportunities of fisherwomen that are impacted by and will inform their negotiations with urban space. Some of these include 'development' projects and land encroachment, which act as a long-term threat with potent immediate consequences and therefore face active but unheard resistance by the city's Koli community. Other factors include upcoming enterprises that provide instant and more processed service, which is gaining even more support in recent times due to its pronounced packaging and underlying sentiment of increased 'hygienic' responsibility. A foreseeable solution in this regard would be to direct neoliberal policies to engage with micro, small and medium enterprises (MSMEs), further enabling them to take their business to scale and at par with more capital-intensive techniques without compromising on present labour.

These insights and explorations would help in making future policy and business decisions so as to foster social justice for fisherwomen in Mumbai.

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## 'Free' at What Cost? The Pink Tickets in Delhi's Buses a Year Later

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As autumn came calling in 2019, the Delhi government's free ride initiative through pink tickets for women in Delhi Transport Corporation (DTC) buses began. The initiative started from 29 October 2019. It was the same day as *Bhai Dooj*, a Hindu festival focusing on sister–brother relations, was celebrated. The political significance of Delhi's bus fleet and women's safety while travelling has been palpable in them being part of party manifestos during the Delhi State Assembly elections. In his message before the launch, Chief Minister Arvind Kejriwal had addressed women's importance in diverse roles, including as sisters, and that the scheme was a gift from a 'brother' rather than an initiative for women citizens. This familial bracketing of the initiative as a gift from a brother to his sisters was how the headlines ran in several news pieces announcing the launch ('Brother' Arvind Kejriwal', 2019; 'On Bhai Dooj', 2019).

The initiative was introduced with a focus on women's safety while commuting. It envisioned that such a measure would encourage women to step out, thus increasing their visibility in the city through a greater access to education and livelihood opportunities (Lalwani, 2019). The initiative became a familial gift, emphasising the importance of women to be in public spaces for 'purposeful' reasons such as education and employment. Right from the outset, it took recourse in existing ideas about women's presence out and about in the city—restricted, for specific purposes only. This current study is part of a larger, ongoing research project exploring access to urban mobility infrastructures across four South Asian cities, including Delhi. It has been over a year since the pink ticket initiative was launched in the DTC buses. How has it unfolded for women who travel by buses in this city for diverse purposes? The study draws upon in-depth interviews of women aged 19–60 years living in an unplanned settlement near the Delhi–Haryana border. It explores their perceptions about the initiative and its part in their lived experiences of travelling by buses. The study highlights how the initiative did increase the visibility of women inside the buses. But rather than contributing to a feeling of safety, it added a feeling of hostility and backlash from their male co-passengers to their travel experiences. The study borrows from the concept of 'genderscape'—multilayered, imagined spaces where everyday violence against women occurs (Datta, 2016). This is essentially rooted in the resistance to women's presence in public spaces

because their social value is derived primarily from reproductive tasks (Datta, 2011). This emphasis on a specific kind of gender role limiting women's mobility gets continued in public spaces where women feel unwelcome and make do with whatever is available. It is within this context that the paper explores how the pink ticket initiative is experienced.

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# Transport Disadvantage: Understanding Ageing and Mobility in Bengaluru

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## Short abstract

Cities of the Global South are witnessing rapidly ageing population. But the mobility needs of an ageing population is often unmet by its inaccessible transport system. Transport disadvantages emerge from multilayered socio-economic inequities and exclusionary infrastructure. This paper uses a mixed-method approach to combine geospatial mapping of physical infrastructure and ethnographic detailing of user experience. The knowledge emerging from this synthesis is used to build stronger evidence of transport barriers experienced by older adults. The study's findings show that older adults' mobility suffers due to the unaffordability of intermediary transport, inaccessibility of public transport, and inability to own and use private transport. The lack of a support system and poor implementation of universal design has denied them of safe and accessible transport. The paper provides context-specific research-based evidence for streamlining urban transport planning and eventuating into an inclusive city.

*Keywords:* Mobility, Urban transport, Ageing, Transport disadvantage, India

## 1. Introduction

The cities of developing countries are rapidly growing in population and area (Mahendra & Seto, 2019). These dense cities are hypermobile and have witnessed increased travel demand to access essential services such as employment, healthcare, and social activities (Bhalla and Mohan, 2016; Mahendra and Seto, 2019). The transport planning has homogeneously focused on catering to the needs of the young able-bodied population (Munshi, Sankar, & Kothari, 2018). Meanwhile, the cities of developing countries such as India have witnessed increased population ageing predominantly due to low mortality rates (Subaiya & Dhananjay, 2014). In India, there has been a consistent increase in the proportion of the population aged 60 years and older living in urban areas. In 1961, 15 per cent of the elderly were living in Indian cities, which doubled to 30 per cent in 2011 (Census of India, 2011). The absolute numbers of older adults living in Indian cities are large. Aligning transport planning to the needs of older adults is crucial for the active ageing of millions in Indian cities in the coming

decades. Despite an increase in mobility, older adults still endure constraints in accessing transport (Munshi et al., 2018). Transport planning in India has largely been devoid of discussion of inequities faced by vulnerable populations such as older adults (Bhalla and Mohan, 2016; Mahendra and Seto, 2019). Case studies on such contexts are scarce. There exists a knowledge gap in understanding the mobility of older adults in dense Indian cities. Particularly the social, physical, and economic barriers and their coping mechanisms require immediate scholarly attention.

Bengaluru is one of the fastest-growing metropolises of India. Despite its success in manufacturing and service-based industries, the city is grappling with a lack of equitable transport infrastructure (Gopakumar, 2020). This paper, set in the backdrop of a peripheral ward in Bengaluru, aims to explore the lifeworld of older adults, their mobility needs, and interaction with the city's transport infrastructure. The primary objective of the paper centres on understanding the needs, barriers, and coping mechanisms of older adults in accessing urban transport. An intersectional approach is used to explain the interacting categories like age, gender, geography, education, and class in determining transport (in)accessibility.

## **2. Conceptual Framework**

Transport disadvantage is multidimensional, and there is a tendency to miss the vantage point for research and subsequently for intervention (Lucas, 2012). Hence, the different phases of mobility, positions of disadvantage, actors involved, and specific processes of an individual's (older adult) transport journey should be delineated. The concepts are thus interlinked in three sequences—point of origin, transport, and point of destination. The framework draws from the conceptual designs and processes discussed in transport literature (Carruthers, Dick, & Saurkar, 2005; Harvey, 2012; Kaufmann, Bergman, & Joye, 2017; Lucas, 2012; Srichuae, Nitivattananon, & Perera, 2016). The contour of origin disadvantage involves a combination of interacting factors like disability or lowering physical ability (physical), poverty (economic), marginalised community (social), deteriorating skills in terms of driving or processing the travel information (cognitive), and isolated housing (spatial). These factors inhibit an individual's potential to be mobile in an urban network. The transport disadvantage emerges from the 4As framework of availability, affordability, accessibility, and acceptability. The infrastructural barriers, the operational and service deficiencies, and the interaction of older adults with the mobility infrastructure are covered here. Lastly, the combination of origin disadvantage and transport disadvantage not only leads to transport poverty (Lucas, 2012), but it can also further inhibit the overall quality of life for an older adult.

### **3. Materials and Methods**

#### **3.1 Research Methods**

This study uses a mixed-method approach. The core motivation for the mixed-method approach is to present stronger explanations of transport disadvantage by integrating multiple forms of spatial and ethnographic data. Knigge and Cope's (2005) grounded visualisation is used as a technique to integrate the spatial and ethnographic data, which can provide us with a more comprehensive understanding that involves both infrastructure and the user experience. The spatial data used in this study is collected from visual surveys (behavioural mapping), which can help us understand the use of mobility infrastructure by older adults in their natural setting. The visual surveys result from observations of the utilisation of spaces, barriers, transport choices, conflicts, and enablers for the mobility of older adults. For this study, 12 sessions of visual surveys were carried out in two key transport hubs of the ward. Detailed maps, photographs, field notes, sketches, and interview transcripts emerged from the survey. The assembling of the spatial dataset provided a rich geographical context to base the qualitative data. The ethnographic interview was collected through 14 in-depth semi-structured interviews with older adults. Key informant interviews of community leaders and organisation members were also conducted. After translating (from Kannada to English) and transcribing the interviews, they were coded (both inductive and deductive) using the Nvivo software. The grounded visualisation provided us with a thick description of the transport barriers. It helped us understand transport disadvantage by integrating the spatiality from the visual surveys and the intricacies from the ethnographic interviews.

#### **3.2 Field site**

Anjanapura was notified as a ward in 2006 and is in the southern periphery of Bengaluru. The ward, an erstwhile village, has undergone rapid urbanisation in the last two decades, primarily due to redrawing of Bengaluru's municipal boundary. This also meant the gradual introduction of infrastructure like the drainage system, streetlights, road connectivity, and bus connectivity. Visual surveys and in-depth interviews were conducted among older adults in the ward to understand the transport infrastructure changes and mobility behaviour in the periphery.

### **4. Results and Discussion**

The analysis of the visual survey data and the interview data are still in the early stages. The preliminary findings are explained below using the conceptual framework. The origin setting of the older adults presented complex socio-economic barriers. Unemployment, insufficient income, irregular pension, and the precarity of informal



work formed the economic situation of the participants. Understandably, there were lower levels of private vehicle ownership. The impact of economic class and the capability (Kaufmann et al., 2017) to access multiple modes of transport were evident from the transcripts. The ability to travel distances without pain or the ability to drive with manageable physical conditions is low among older adults from low-income families. Since low-income households are usually away from transport hubs, the first and last mile connectivity is often expensive, unaffordable, and inaccessible.

Inaccessibility in the new forms of transport systems emerged as a major issue. The participants perceived that the metro system is for the 'officials' and not for them. The unfamiliarity with the mechanised form of the train system as a deterrent. Most of the older adults expressed fear of going in an escalator, missing a stop, and the confusion over using the new token tickets. The lack of concessions in fares also discouraged older adults from using the metro railway and made them reliant on the traditional bus system, which provided fare-based concessions. The complex matrix of class, age, education, and location form many of these origin barriers. Visual surveys shown in Figure 1 help connect these user experiences with the concurrent transport infrastructure.

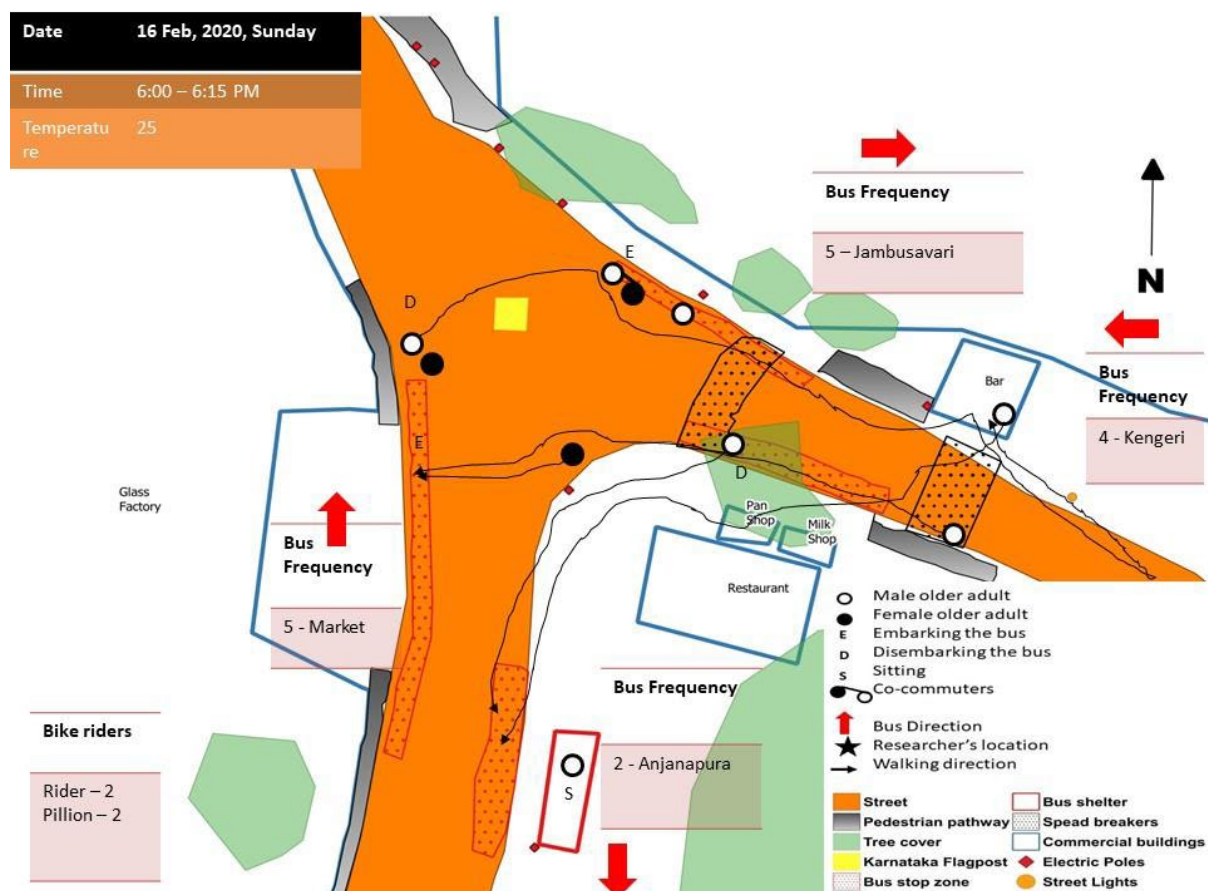


Figure 1 Visual survey mapping of a transport hub from the field. *Source: Author*



As regards physical infrastructure, the neighbourhoods in Anjanapura have narrow concrete roads connecting to main roads. Older adults often walked in these narrow roads in front of their houses. They avoid the main roads owing to the fear of vehicles and potholes. The two primary junctions were busy, congested, and were often avoided by older adults. Despite being prime junctions, these junctions lacked bus shelters. The entire ward does not have a single overhead bridge for pedestrian crossing nor has an underpass. The ward possesses an insufficient number of streetlights per kilometre and lacks enough lighting in the main junctions. All of these acts as barriers for non-motorised transport, a major mode of transport for older adults after driving cessation.

The well-being of the older adults was affected by the lack of access to healthcare. For primary healthcare, the participants usually preferred to walk to nearby clinics (private and government) in the neighbourhood. Only for chronic illness or emergencies, they visited major hospitals. Due to lack of awareness of the bus schedules, they suffered from long waiting times. Absence of caretakers and affordable intermediary transport added to the further withdrawal from hospital visits and eventually medical attention. Socially, the older adults were isolated from their extended family situated in different parts of the city and villages. Since they had to rely on immediate family for transport, which was unreliable, they lacked agency to be mobile. Except for the nearby narrow street or the closest temple, older adults expressed limited or non-existent social networks. Overall, there was an evident lack of transport infrastructure, caretaker network, and motility to access transport for older adults. The study aims to integrate further the geospatial data from the surveys and ethnographic dataset for a more substantial explanation of transport barriers.

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# Algorithmic Mobilities: The Uber View of Calcutta<sup>1</sup>

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Continuities of displacements and dislocations produce the urban experience. The city multiplies mobilities and in so doing diminishes the definite. To be mobile is to lack a definite place. It is an in-between moment between nowhere(s). The commute is the sole anchorage in a space that is characterised by the permanence of transience; one must always 'pass by' in the city. Mobilities create differentiated geographies, organised as heterogeneous clusters, connected via a network of roads. Thus, the city traditionally had a rhizomatic structure.

We primarily interact with our cities through our mobilities, which bear the overtone of pursuit, purpose, and other conditions of the money economy. Transportation networks are therefore central to modern urban life. They are important instruments of place-making in the urban environment and are deeply vested in the realpolitik of the city. Transportation systems replicate relations of exclusion and marginalisation and are interlinked with the notion of admissibility and accessibility. The process of commuting between point A and point B in the urban landscape is a marker of the socio-economic position of the commuter. Mobilities are functions of social practices and reflect imbrications of injustices and inequities that inform the management of movement in cities. The metropolitan urban mass transit system—The Metro Rail—for around two decades of its existence was delimited to the urban core of the city of Calcutta, creating a virtual boundary—immobilities—in the circulation of people and resources. This is indexical of the conventional dialectical positioning of the urban and the suburb.

New practices of mobilities that are organised through network(s) produce a different imagination of the urban space. As geographic information is mediated by digital monopolies, the city manifests as an algorithmic construction, the architecture of which is organised using the data available about its spaces. When digital conglomerates monopolise urban information, they create divides that (re)orient the city—the 'right to the city', both informational and political, and its mobilities. In this paper, I am investigating the representation of the city-space via the digital image—the Uber Map—identifying the consequences of this imaging, and establishing that, in creating powerful narratives about the referent, these images overwhelm the 'real' (Baudrillard, 1994). Using Uber's projection of two sites—Mani Square mall<sup>2</sup> on the Eastern Metropolitan Bypass and City Centre 2 on Biswa Bangla Sarani—I will argue that data density modulates legibility. This model does not prove causality because the Uber Map is a complex data set, and I cannot isolate the lack of data as the sole cause of the variation in legibility. However, using a multimodal approach, which looks at Uber Maps, the algorithm in use, the transportational history of the city, and setting it within the theoretical framework furnished by existing scholarship, I can cautiously hint at a

correlation between (in)visibility and concentrated data environments. Uber is the grid of legibility with which I demonstrate the abstraction of the city of Calcutta as a data set, and use this to unpack the algorithmic imagination of the urban space and its impact on mobilities within the city. I seek to understand the intervention of Uber in the production of the abstract space of grids and lines. In this context, the code and content relating to the buildings and spaces of our cities become as important as their bricks and mortar. My inquiry then is how Uber functions as an actor intervening and acting upon this material space, thus transforming it.

For a more representational geography, a good image at the metropolitan scale should act as a stimulus for various iterations of the city, and identify the discontinuities, the blind spots and the obfuscations. As this image becomes a recreation of an algorithm, the topography becomes a geography of information. Presence on the map then depends upon the information that exists about the place and circulates in the network (Shaw & Graham, 2017). The better algorithmic image should create a just information geography by enhancing the representation of the informational periphery. What was the marginal may become inviting through a clear presentation and strategically assembled identifying elements. This will help mitigate locational exclusions within the city.

Uber, using its data-dependent models, is fashioning an image, which does not mimic a city that is external but is an abstraction of the data that was fed into it, recreating the referent in a non-mimetic object. This is not a representation—the algorithm does not re-present through a process of mimesis. We do not look at the city through an intervening instrument. It essentially, through the deployment of an algorithm-based process, recreates the city. The data rich “monumental core” (Chiou, Ng, Ulloa, & Reardon, 2017) is more “legible”. Landmarks that are identified on the maps—entertainment centres, malls, hospitals, etc.—are all designed for the exclusive use of the upper sections of society. This signals the exclusionary practice of data-dependent imaging. Algorithmic erasures can render spaces obsolete. When, for example, the algorithm because of gaps in data point does not represent public facilities in the image, it, by conditions of the movement of this image in the data environment, can cause a mnemonic rupture, an occlusion. These data-based discontinuities and peripheralisation form the chief concern of this paper.

## Notes

<sup>1</sup> The name of the city was changed to Kolkata in 2001 as a manoeuvre of post-colonial anxiety, to wrest the name of the city from its anglicised moorings. However, I have alluded to the city as Calcutta throughout the text, to avoid confusion.

<sup>2</sup> Mani Square and City Centre 2 (CC2) are major malls located outside the urban core of Calcutta. Mani Square is located on Bypass, which now forms the eastern boundary of

the metropolis, was developed to service the satellite township of Salt Lake City and extends to the south-western extremities of the city. CC2 sits on Biswa Bangla Sarani the major access road of New Town. These malls are locationally similar, and therefore the variation in accessibility can be adduced to the availability of data

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Panel 4

# Constructing the City



# Construction of Mumbai's Land Market: Fictional Imagination and the Search for Commodified Land

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Although there are few examples of the use of 'future imaginaries' for theorising land markets, the 2008 financial crisis triggered by the bursting of the US housing bubble, brought to the fore important insights into how imaginaries perpetuate precarity in land markets (Beckert, 2013; Langley, 2008; Pellandini-Simányi & Vargha, 2018). Rachel Weber's (2020) study of redevelopment projects in Chicago demonstrates how techniques to estimate future values of land and the assumptions underpinning land value capture strategies intensify development and create a reinforcing spiral of asset appreciation. While Weber describes protests among community residents, particularly renters and owners who fear higher rents or property tax bills, in her discussion of future oriented tax models, Llerena Serale (2018), in her work on speculative real-estate development in India, draws on future imaginaries, not to preempt social pushback but rather to explain the loss of confidence in valuation convention among financial investors and the crisis it spurs at that very moment.

This paper seeks to build on the scholarly project of situating theoretical conceptions of the land market within the 'future imaginaries' framework. Drawing on Mumbai's urban land market as a case study, the paper first demonstrates how the market for land and real-estate development is organised around the fictitious promise of commodified land (Polanyi, 2001) to then discuss why upholding such a promise is just as difficult as it is necessary, especially in contexts like Mumbai, where land has not been subject to a cadastral process, that is, measured, demarcated, and protected so it can exist in parcels as private property. Since stripping land off of its social ties can hardly be an institutionalised practice, that is, land commodification cannot be bought as a service with guaranteed success, local developers, I argue, instead operationalise the imagination of commodified land through narratives of the 'developmental hero', by describing their work as acts of heroism in a context where development would otherwise be impossible. Mobilising finance, negotiating with slum residents, overcoming bureaucratic red tape—all the standard activities of an Indian developer—therefore serve as props to the hero narrative, which concertises the imagination of land as a commodity.

The importance conferred on developers by the fore-fronting of land commodification has had tangible impacts on Mumbai's real-estate industry, including on inter-firm dynamics. Findings from an exhaustive database of real-estate indicators and an 18-month ethnographic study shows that over the past 15 years, a new professional class of developers who strive to commodify land against all odds, as opposed to effectively



producing and selling new real estate, has emerged dominant against incumbent and/or financially responsible development firms in Mumbai. These developers took up over 50% of the industry's market share in a short time and were recipients of much of the new sources of financing available for real-estate development at the time. Their struggle to follow through with the execution of projects has, however, resulted in several abandoned projects in the city and driven away financial investors from participating in further real-estate production. The reason for their failure is the splitting of agendas between land commodification and real-estate development, which I argue, is characteristic of land markets, and perpetuated by the valorisation of real-estate developers. The paper therefore proposes that the social work of commodifying land paradoxically obstructs the treatment of land as a commodity and creates obstacles in the marketisation of real-estate development.

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## *Bhadralok* Image of the City: A Study of Real-Estate Development in North Kolkata

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The concept of urban imaginaries when referred to at once sounds abstract and extravagant—abstract, probably because it hints at imagination, and extravagant because it seems somewhat impossible to imagine any future in the densely cluttered cities of the Global South. Yet, by delving into the concept, it becomes evident that such urban imaginaries are perhaps possible in a piecemeal manner in the Global South, and instead of thinking of change as revolutionary and bursting asunder everything old, it probably would result in new dynamic relations between old and new.

I intend to look at such a process in the context of North Kolkata, the oldest part of the city. In the present-day context of North Kolkata, there is immense space crunch and exorbitant expense in maintaining old houses. Real-estate joint venture development or promoting property in common parlance is seen as a viable alternative to an outright sale of land. Such a process becomes a fertile ground to understand the interstices of old and new, past and present as well as the imagination of place in the future. Real-estate development in such old neighbourhood has impacted the sense of place-making among the different residents in the neighbourhood. Such neighbourly relations are complicated by the changing social relations of property among different classes of residents in the neighbourhood. North Kolkata has been historically inhabited and dominated by *bhadraloks* who have differential relations with those they mark as others in the class-heterogeneous neighbourhood (Donner, 2012). This becomes important because as Massey (1995) argues, the identity of places is shaped by how histories are told and which histories turn out to be dominant. The dominance of *bhadraloks* is also tied to their control of property (Ray & Qayum, 2009). The hegemony of *bhadraloks* mean that both culturally and socially they occupy a large part of Bengal landscape since the colonial rule.

The category of *bhadraloks* becomes important here because among the Bengalis perhaps, *bhadraloks* or being 'civilised' signify an aspirational category. Either people identify themselves as *bhadraloks* or aspire to be such. In a certain sense, *bhadraloks* and middle class overlap, with many *bhadraloks* identifying themselves as middle class. This becomes more interesting in the post-liberalisation scenario, where the middle class itself became an aspirational category. What *bhadralok* means in such a scenario also changes. *Bhadralok* and middle class thus often signify two different kinds of aspirations—*bhadralok* or being 'civilised' in terms of a certain taste, education, and social holding assume the aspiration of the older generation, the traditional people, while middle class become the realm of the newer and younger generation. However,

both the terms are used paradoxically in a juxtaposed manner in everyday conversations.

With real-estate development of the old houses of North Kolkata, this aspiration of *bhadralok* and middle class come into direct contact with each other. The new flats come to signify the aspirations of the middle class, having amenities which perhaps aspirational middle class all over the country covet. Yet, it also brings about a change in the relationship between neighbours in a scenario where most of the residents of the flats are the people who previously stayed in the neighbourhood. Further, it also results in a change of the property relations, with many previous tenants becoming flat owners, entry of a few new residents, and the presence of non-Bengali residents in the neighbourhood.

Therefore, by interviewing different classes of residents—the *bhadralok* house owners and the people they designate as ‘others’—people of the slum, many of whom work as domestic help in the flats as well as old houses in the neighbourhood, the new residents, the tenants, and the non-Bengalis, who have come to own flats and houses in the neighbourhood—in a North Kolkata neighbourhood, Raja Naba Krishna Street, an attempt would be made to look at their differential sense of meaning-making about a place in a process of change: real-estate development of old houses. Such different meaning-making become visible in everyday interactions in a neighbourhood. In terms of their interaction, what can be seen is how even in a mixed neighbourhood, where there might not be an open declaration of not letting the ‘other’ live, such living in proximity should not be the only indices of its inclusion, but the way in which they interact with each other becomes the point of contention. Thus, the specific history of the neighbourhood determines the experience of place and its consequent meaning-making. Jackson and Butler (2014) observed in their study of two Brixton neighbourhoods that even when people reside in class and ethnically mixed neighbourhoods, their interactions are like social tectonics; they brush past each other with only little contact. However, those marked ‘others’ by the dominant middle-class groups in such neighbourhoods play an important role in the self-construction of their identity. Here, of course, there cannot be simple social tectonics, in a neighbourhood where the neighbours are often tied to each other in relations of property and economy.

This paper will therefore try to argue how property and identity relations in such interaction of old and new complicates the meanings which residents attach to place. Real-estate development may result in owning of flats for many residents of the neighbourhood; yet ownership of flats with modern amenities, which may attest to a modern standard of living that many middle-class Indians aspire to, has different meanings for the West Bengali *Ghoti* house-owning *bhadraloks* in the neighbourhood.

For them, it often signifies a fall from the position, of having to give away their old houses because of their inability to maintain them. Such houses are demolished to give way to flats, where they have to become one of the owners of a smaller place and live beside their tenants, who have now become the new owner of flats. It also means that there is an entry of new residents who may not attest to the dominance of the ex-house owner *bhadraloks'* hegemony in the neighbourhood. This results in a particular imagination of places, as well as attempts to maintain the *bhadralok* hegemony, especially visible in their relations with the class and regional others in the neighbourhood.

The *bhadralok* imagery of the present, while at once hegemonic, is often susceptible to challenge both by what they mark as the 'other' as well as processes such as real-estate development. Yet, in many ways, they attempt to hold on to their image of the past as the image of the present and possible image of the future. *Bhadralok* house owners complain that they are losing their hegemony by accusing the 'other' of not respecting them enough, of changing the character of the neighbourhood.

This notion of the North Kolkata neighbourhood, as responsible for upholding the traditional aspect of the city, a city attempting to globalise itself and become world class, has far-reaching repercussions, not simply on the urban imagery but on the meaning-making of its different classes of residents as well. The city in its kinetic form interacts with the static physical architecture to produce different meanings for its various inhabitants (Mehrotra, 2013). So, not simply the architectural forms change, but the meanings attached to the same places also change, as seen in the renovation of old homes into boutique hotels in Kolkata. Cities in such senses become fiction as the meanings which are attributed to different places in the city constantly alter. However, the mental image of the city, for the elite and the outsiders, continue to remain static, even when the city itself is changing. Thus, meanings of places in the city change, while the 'image of the city' remains a static political trope.

North Kolkata in that sense would be the realm of tradition, at least in terms of thinking of the place. In material reality perhaps, the houses are either dilapidated or have undergone real-estate development. Of course, there is micro-level image management as well when many of these newly developed real-estate complexes have names which borrow from the past or some element of architecture representing the same. There are few heritage boutique hotels which cater to the non-resident Indians (NRIs) and foreign tourists, giving them the 'authentic' taste of Bengali *bhadralok* living. What is North Kolkata placially is expanding with new real-estate projects coming up in the northern periphery of the city. Yet, North Kolkata in the realm of the image should remind people of red and green old houses with Venetian windows, hand-pulled rickshaws, and *para adda* over evening tea and snacks. It contributes to the idea of the

traditional city, while other parts of the city, like Sector V of Salt Lake with its bustling information technology (IT) industry, will take care of the globalising aspects. This paper would attempt to look at how a resolution between the traditional *bhadralok* aspirations and neoliberal middle-class aspirations become possible at local, neighbourhood levels in tandem with the image of the city, inhabited not simply by Bengali *bhadraloks* but different class and regional others. Making of such images is a public process (Çinar & Bender, 2007); and neighbourhood here is the informal place where via interactions such imaginations are expressed. By doing so, some of the broader questions this paper will attempt to address are: How is the image of place related to identities of people in a city? How does place figure in such questions of an image?

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# COVID-19 in Peripheral Cape Town: Infrastructural Experiences and Reimaginings

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The COVID-19 pandemic and the associated lockdown in South Africa, one of the hardest in the world, impacted cities and urban neighbourhoods in geographically uneven ways. Unsurprisingly, it exposed and intensified pre-existing socio-spatial inequalities, impacting residents of the urban peripheries most severely due to the restrictions in movement, economic fallout, and state violence layered upon an unfolding health crisis. At the same time, residents responded by mobilising old and new social infrastructures to compensate for the inadequate or failing physical and economic infrastructure in their settlements. This paper draws on research conducted between March and May 2020 with 20 residents from five low-income settlements in Cape Town, South Africa. The research was conducted through the WhatsApp platform, with participants sharing daily experiences of the pandemic and lockdown with the researchers and other group members, using text, voice notes, and photos. In addition, a Zoom meeting with all the participants was held at the end of May. We drew on previous networks to identify the 20 participants from five peripheral neighbourhoods, namely, Beacon Valley (Mitchells Plain), Delft, Hillview, Parkwood, and Khayelitsha (Harare, Site B). These are all low-income areas of Cape Town, but the living, economic, and infrastructural conditions of households varied across the sites. Participants' living circumstances ranged from informal shacks to backyard dwellings to government-sponsored houses with significant differences in basic service access. Using an infrastructural lens, our paper brings an ethnographic attentiveness to the everyday struggle of those experiencing COVID-19 in the urban fringes. Looking both at the home and neighbourhood, we examine the role of private and public infrastructures and how they mitigated or increased the impact of the crisis. Our data reveals the significance of old and new social infrastructures—family/friends, soup kitchens, community support groups, intra-city aid initiatives—in providing temporary relief in the context of inadequate and/or delayed government support and relief measures. While these bottom-up energies played a critical role in mitigating the impacts of the crisis, they are increasingly difficult to sustain within the post-COVID-19 period. We therefore argue for the importance of leveraging this moment to build upon the observed prefigurative practices witnessed during the COVID moment, including progressive community mutual aid practices and marginal shifts in state actions, to reimagine infrastructure in peripheral spaces. Taking this point further, we contend that investing in the social, material, and economic infrastructures in urban peripheries should be centralised if the goal is to move towards urban futures that are more just and equitable.

# The Persistence of Peenya: Examining Industrial Space in 'Global' Bangalore

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Over the past three decades, an active effort to transform Bangalore into a neoliberal urban, or global city, has been enacted through a booming information technology (IT) industry, international finance capital, real-estate developers, and local parastatal agencies. Goldman (2011) coins Bangalore's urban governance model that draws on 'world-city' infrastructural projects and an exploding land market as 'speculative urbanism'. While speculative urbanism and its associated processes have been a critical element of Bangalore's 21st century, what processes, practices, spaces, and peoples become invisible to us by accepting its premises and assuming its inevitable course? I argue in this paper that there remains a critical gap between the neoliberal urban project of transforming Bangalore into a world city and the process of enacting this project that has been contingent, uneven, and incomplete from its outset.

Bangalore is, in fact, characterised by many more frictions and alternatives than the seamless coherent world city portrait seems to suggest. It is the informal economy that continues to employ much of the city's population generating 55–75% of the city's gross domestic product (GDP) (Goldman, p. 567). I focus in this paper on urban industrial space and practices as a critical example of that made invisible by neoliberal urbanist discourses. Bangalore's manufacturing sector, for instance, had an annual growth rate of 8.07% in Bangalore between 1993–94 to 2004–05 and represented 27.65% of Bangalore's gross district income and 21% of urban employment in 2004–05 (Narayana, 2010). Through a historicised qualitative analysis of the Peenya Industrial Area, I argue, that Peenya is not just a formerly industrial space awaiting urban real-estate redevelopment through neoliberal urbanism, it is a presently industrial space and an active ingredient of contemporary Bangalore, albeit one that sits rather uneasily in its world city aspirations and practices. The vibrancy of industrial activity in Peenya compels me to focus on the forms, networks, processes, and obstacles that the project of neoliberal urbanism encounters in its path to produce deindustrialisation and viable spaces for urban regeneration.

Yet, my argument is not to entirely disavow the powerful force exerted by the neoliberal urban project nor the broader current of deindustrialisation within Bangalore. As Schindler et al. (2020) suggest, the estimated industrial land use declined from 58.80 to 41.13 km<sup>2</sup> between Bangalore's 2004 and 2015 master plans as nearly 2500 hectares of industrial land has been converted primarily into residential use. Peenya itself is a product of Bangalore's world-city making processes. The expulsion of vast industrial land within Bangalore to its hinterlands coupled with the visible signs of decay in



Peenya articulate the force of neoliberal urbanism in its attempts to evict formerly industrial space from Bangalore's core. Yet, the persistence and vibrancy of industrial activity in Peenya reminds us that world city formation is active, negotiated, and partial rather than inevitable. Recognising both the persistence of Peenya and the power of forces working towards its expulsion from the city, I ask how does one explain the endurance of a gargantuan industrial area within the core of a neoliberal 'global' city like Bangalore? Beyond simply acknowledging uneven urban development, I probe why particular urban spaces emerge as enclaves of redevelopment and not others.

### **Section 1: The Spectre of the Industrial in World/Global Cities**

The global/world cities literature that began flourishing in the 1980s and 1990s focused on the emergence of a new phase of urban development and the emergence of "a new type of city" (Sassen, 2001, p. 4). Sassen (2001) argued that what drove a city forward in the global urban hierarchy was its ability to produce commercial and financial services for these were the drivers of the new global economy. Similarly, Harvey (1989) suggested that the growth of such command functions has made the city of the future appear as a "an informational city, a post-industrial city in which the export of services (financial, informational, knowledge-producing) becomes the economic basis for urban survival" (p. 10). Smith (2002) too suggested that the centre of the emerging "global urban strategy" (p. 437) was the "generalization of gentrification in the urban landscape" (p. 439). Through this literature, the global project of neoliberal urban transformation was shown to be characterised by the generalisation of gentrification, the development of post-industrial landscapes, and the transformation of the built environment into an outlet for global financial capital, all key aspects of contemporary Bangalore.

Yet, as Robinson (2002) has argued that the global/world city approaches "focus on a small range of economic and political activities" (p. 545), those deemed 'global', thus serving to "associate entire cities with the success and power of a small area within them" (p. 547). Sassen's approach captures a central tendency in the global cities literature for whom the combination of Northern deindustrialisation, the turn towards flexible/financialised accumulation, and vast information/communications technology advancements seemed consistently to centre the analytical lens on emerging post-industrial consumer and financial services while leaving urban industrial spaces often as the under-theorised backdrop to such writings. The industrial in these writings is present only in its negation—it exists only as the 'de-industrial' rather than the 'industrial'. Thus, it is only a symbol of that which is no longer, not itself taken seriously as an object of analysis. The referent 'post-industrial' within these discourses performs a critical work in foreclosing the industrial question. Meanwhile, as Schindler et al. (2020) argue, the field of deindustrialisation studies has "remained steadfastly rooted in the industrial heartlands of the North Atlantic" (p. 5) while deindustrialisation in the Global



South often appears in scholarship as a “background context for other processes.... rather than a phenomenon worth researching in its own right” (p. 5).

The absence of the continued, albeit limited, persistence of industrial space within this theoretical conception of a global city in this literature hinders our ability to recognise an element of Bangalore’s partial and negotiated neoliberal urban turn. Bangalore’s particular industrial history (and present) through spaces like Peenya comes to shape this transformation in critical ways. These small-scale manufacturing economies are not wiped clean by global capital in the act of undermining; their persistence is vital to the nature of urban space and the everyday lives of Bangalore’s inhabitants.

## **Section 2: Peenya**

Contemporary narratives of Bangalore as a global, speculative, or an IT city often tend to leave out the deep industrial history of the area dating back to its pre-colonial textile and silk weaving past. The combined effects of princely state of Mysore’s long tradition of state-sponsored industrialisation, the presence of a host of technical and engineering colleges (most notably the Indian Institute of Science), and cheap electric power led Bangalore to emerge as the ‘capital’ of the public sector in India in the post-colonial period (Hetizman, 2004; Pani, 2009). In addition to their role as employment generators, the public sector enterprises (PSEs) helped facilitate a milieu of new industries by to ‘outsourc[ing] the manufacture of several components to small-scale industries’ (Pani, 2009, p. 117), producing both a budding small-scale industry sector in the 1970s and a large and unorganised labour force as its support mechanism. By March 1989, Kamath (1990) reports there were a staggering 10,566 registered small-scale industrial units (beyond the large number of unregistered units) employing over 216,000 people and manufacturing food/beverages, leather, textiles, chemicals, and engineering and allied items and (p. 308). By 1989, the Karnataka Industrial Areas Development Board (KIADB) had developed and allotted to industrialists 3679 acres of land across eight industrial estates in Bangalore district, including Peenya (ibid.).

The emergence of neoliberal Bangalore was driven as much by new IT and finance-centric global economic forces as by the systemic dismantlement of the public sector (Carlson, 2018, p. 739). Within Bangalore, PSE land sales have been crucial to the development of the burgeoning IT–real estate–finance nexus as vast industrial land is “increasingly being converted to high-end residential and/or commercial uses” (Schindler et al., 2020, p. 8). Yet the experience of the small-scale sector cannot be read simply through PSE deindustrialisation. Within the garment sector, for instance, even in 2003, 729 of the 788 garment manufacturing units in the state continued to be located in Bangalore, especially Bommasandra, Peenya, and Mysore Road, employing over 146,000 workers in the city (Roopa 2003 in Roychowdhury, 2005, p. 2251).

Building on my fieldwork, I argue that the Peenya Industrial Area is not just a formerly industrial space awaiting world-city making, it is a presently industrial space actively produced by the spatial practices, discourses, and imaginaries within contemporary Bangalore. Today, this predominantly industrial area occupies approximately 40 sq. km (CSIR, p. 1) in the heart of Bangalore, producing an annual turnover of approximately INR 110 billion and employing as many as 720,000 persons within 4000 to 10,000 medium and small-scale enterprises. While the total number of industries in the area is highly contested, Krishna (2012) estimates it at 7500 (p. 135) while my interviewees claim the number is closer to 10,000—the predominance of small-scale industry in the area today is beyond contestation. While the area has strong historical connections to the garment industry, today it is better known for “engineering, electrical goods such as CNC Machine tools transformers, motors and generators, textile (silk), hydraulics and machine tool industries” (Krishna, p. 135). The Bangalore Development Authority (BDA) estimates that industrial activities here accounted for 481.1 acres (or 37.3%) of the planning district, residential use accounts for 21.1%, and commercial use stands at 5.2% (BDA, p. 98).

While contemporary Peenya continues to reflect this industrial history, the broader space within which it is situated has witnessed deep transformations through a series of political, economic, and spatial transformations including the Namma Metro Project of 2011. Peenya, an area that once stood on the ‘outskirts’ of the city, is accessible today both by metro and by national and state highways along with important city roads (BDA, 2007, p. 95). The global real-estate consultant, Knight Frank, argues that “micro markets along the metro line [like Peenya] witness steep rise in real-estate values, coupled with hectic new developments in the adjacent vacant land parcels” (Knight Frank, p. 35). A number of Bangalore’s real-estate firms—Arvind, Sobha, Prestige, and Vaishnavi—have indeed established residential developments along the metro line in the two bordering neighbourhoods of Jalahalli and Yeshwanthpur in the last decade. Yet, even as the viability of industrial reproduction in Peenya declines, the area’s spatial practices and landscape continue to be reflective of an industrial character. Drawing on a global cities approach, how does one explain the endurance of a gargantuan industrial area within the core of a neoliberal ‘global’ city like Bangalore today?

### **Section 3: Representational Spaces**

To explain this puzzle, I draw on Lefebvre’s (1992) conception of representational spaces, namely the “lived space of sensations, the imaginations, emotions, and meanings incorporated into how we live day by day” (Harvey, 2006, p. 130). Landscapes are a “socially constructed outcome of human imagination and human activity” (Fields, 2012, p. 8). Understanding the linkages between representational space—space as a product of one’s affective responses and imaginaries—and spatial practices is key to understanding Peenya today.

During interviews with real-estate developers, industrialists, and government officials, Peenya was consistently framed with a common set of verbal and nonverbal symbols or, a particular imagined geography, namely as a 'purely' or 'totally' industrial space, a 'KIADB area', an old area, and one that is 'completely filled up'. This imagined geography seems an especially imperceptible barrier in the minds of real-estate developers for both commercial and residential developments. Developers display deep anxieties about migrating into this region due to the seeming lack of social infrastructure and the notion that people are unwilling to work or live here. The history of the space, coupled with the affective industrial impulses it generates, appeared for many to vastly limit the scope of possibility for such a space to be anything other than industry. Yet, ironically, the very business of being a real-estate developer, and the political economic history of gentrification, entails reconstructing the *material and imagined* geographies of space in such a way as to make it desirable for potential residents. Peenya's spatial stories, it appears, are so powerful that even developers find themselves trapped within their ambit and unable to conceive new narratives of the space, arguably the precursor to material spatial transformation. In this sense, Peenya highlights the manner in which stories, narratives, and representational spaces are double edged, not solely productive for capital or neoliberal urbanism, but equally, bearing the potential to be obstructive of real-estate-led urban redevelopment.

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## Women in Smart Cities: Imagined or Imaginary?

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Proponents of the smart city claim that the concept reimagines the urban—and reconfigures it. The smart city was conceived among technology firms like IBM and Cisco seeking to expand their role in the public sector (Townsend, 2015). In its marketing material on smart cities, IBM (2009) claims that cities can be transformed and optimised by using technology. The report goes on to say that the first step to building smart cities “requires a shift in thinking and a break from the past” (IBM, 2009, p.11) and encourages cities to “think revolution, not evolution” (ibid, p.12). In response to this language and approach, Shelton, Zook, & Wiig (2015) argue that the smart city concept is not a new one, rather it follows the patterns of so-called scientific urban planning that has existed for more than a century—albeit with newer, more expansive, and invasive technologies. The authors go on to note, “That many expect smart city approaches to inevitably yield demonstrably superior results demonstrates, at best, their failure to understand the historical precursors to the smart city model” (Shelton et al., 2015, pp. 14–15).

The concept of the smart city has spread across the world. Different smart cities might focus on different aspects of urban development and might imagine different urban futures. But what makes a city ‘smart’ is its extensive use of technology—often ubiquitous technologies that are embedded in a variety of infrastructure (Galloway, 2004; Greenfield, 2006)—and its ability to collect and analyse vast amounts of data in real time (Kitchen, 2014). This includes data about the city like traffic, weather, and air pollution as well as citizen data, which might include surveillance footage, movement patterns, and access to public services. Smart city proponents argue that smart cities are more efficient, sustainable, and equitable primarily because of their deployment of technologies and their governing through code and algorithms. As the smart city concept gains popularity, it is increasingly being presented as the only viable urban future.

In this vein, India launched an ambitious smart city policy, the Smart Cities Mission (SCM), in 2015. This policy aimed to transform 100 cities across the country into ‘smart’ cities. The Mission attempts to reimagine the Indian urban landscape by building a model of “sustainable and inclusive development” (MOUD, 2015, p. 5), which can be replicated by other cities. While the Mission began with a substantial focus on more traditional urban infrastructure, subsequent documents reflect its expanding focus on technology and digital governance (Purandare, 2019). Under such an approach, the smart city is imagined as a system of systems that can be managed by, improved upon, and governed by data and technology.

The Smart Cities Mission is largely top-down. This does not only mean that policies are designed at the central government level but also that diverse cities are treated similar to one another and are encouraged to adopt similar interventions. This implies that urban populations are treated similarly and imagined as a homogenous collective. This research aims to challenge this notion and understand whether different groups are impacted in different ways by the smart city approach. More specifically, this research will look at women in smart cities.

The Smart Cities Mission guidelines specifically mention that citizen safety, especially the safety of “women, children and the elderly” (MOUD, 2015, p. 6), is an integral aspect of smart cities in India. While women are not directly mentioned elsewhere, a number of the other proposed smart city infrastructure—like improved public transport and adequate water supply—directly and positively impact women living in cities. On the other hand, the guidelines fail to acknowledge the fact that women, and other marginalised communities, interact with cities differently and are therefore impacted by urban policies differently. For example, when aspects like e-governance, citizen participation, health, and education do not specifically design gender-sensitive policies, they tend to be discriminatory and exclusionary.

An argument made in favour of data-informed policymaking and technological urban design is the presumed unbiasedness of these systems. However, multiple studies have shown that data and technology often reproduce and deepen existing biases (Eubanks, 2017; Green, 2019). While there has been some research on the inequity reproduced in smart cities, including certain papers and reports focusing specifically on India (see Datta, 2015; HLRN, 2018), there has been very little discussion on how women are impacted by smart city policies. Nesti (2019, p. 291) writes, “gender equality is a topic not fully developed in the academic literature on smart cities”. The research that does exist tends to focus on the role technology can play in making cities safer for women. Examples include Shwayri’s (2019) research on the ‘Making Seoul Safer for Women’ project, or Mitra and Bardhan’s (2017) work, which posits that focusing on women’s safety makes the urban policymaking process more inclusive not only for women but for other marginalised groups as well.

This focus on women’s safety is a fairly narrow one and needs a more in-depth understanding. The idea that cities are unsafe due to a lack of surveillance cameras or apps that can send SOS signals is a problematic one. Such an approach fails to consider the myriad ways in which urban policies are gender blind and cities discriminate against women. Furthermore, a technology-led approach that is the mainstay of smart city projects also fails to consider how technology itself is rarely gender neutral and can often exclude women’s experiences if not exploit them. In her book *Automating Inequality*, Virginia Eubanks (2017) recounts a conversation she had in 2000 with a young



woman who accessed certain services through an electronic benefits transfer scheme. The woman informed Eubanks that case workers often kept tabs on the purchases being made by the beneficiaries. She went on to tell Eubanks, “poor women are the test subjects for surveillance technology... ‘You should pay attention to what happens to us. You’re next.’” This is an important aspect that remains understudied in the context of increasingly pervasive urban technologies and smart city policies.

This paper will first provide a brief literature review of women’s experiences in and with Indian cities, focusing on how previous urban policies have considered women or whether they have largely been gender blind. Next, the paper will briefly describe what a smart city is, emphasising the concept’s preoccupation with the use of data and technology, and the claim that increased collection of data and deployment of digital technologies can build less biased, more equal cities. This will lead into a discussion on India’s Smart Cities Mission and its approach to gender, analysing the language used by various Mission documents. Using examples from different smart cities in India, this paper will attempt to understand how an increased use of data and technology might impact female urban residents. Combining feminist geography and a feminist critique of big data and digital technologies, this paper will raise questions about the extent to which women have been consulted in the designing of Indian smart cities, how the digital divide between men and women skews digital governance and access to services, the outcomes of increased legibility of citizens in smart cities and how this might uniquely impact women, and the collapsing of safety and surveillance. This collapse is a dangerous trend that will have adverse impacts on urban residents, especially disadvantaged groups, including women. The paper will study whether as surveillance becomes more expansive, and is conducted in the absence of an appropriate legal framework in India, women are in fact safer from state and societal violence. The paper will also explore gender-specific impacts of digital governance like the use of apps and algorithms in smart cities.

This paper will begin to fill in the significant lacuna in smart city research and offer critical insights into the relationship between digital governance and gender in cities. It will also provide an analysis of how the smart city concept is playing out in a developing country like India, which continues to grapple with severe gender inequalities and gender-based violence.

Closely studying various policy documents and smart city projects, this paper aims to provide an analysis of the smart city policy language as well as the policy in action. Such an analysis will be grounded in feminist readings of the city and urban policy, as well as critical studies of the smart city, digital governance, and data-driven policy.

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# Data in the Developing City: The Digital Geography of India's Smart Urbanism

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India's Smart Cities Mission (SCM) was launched in 2015 as a new centralised urban revival policy. Like similar interventions in the South, the SCM considers digital technology and data as the panacea for the future of urban governance, service delivery, and citizens' participation through technocratic imaginations and help from private data corporations. The SCM further imagines cities as developing a 'data culture', where it can collect and utilise data for better governance strategies. The technological turn in governance strategies around the world can be understood as a permanent shift, and India is no exception; it has witnessed widespread use of information and communication technologies, globally networked information technology (IT) firms, and dense mobile phone dissemination. Despite some laws, it has never had a cohesive policy related to data and its governance. This paper attempts to unravel a 'digital geography' (Ash, Kitchin, & Leszczynski, 2018) of data laws and policy under the 'DataSmart' strategy of the SCM. It argues that the process of *datafication* in urban governance requires a comprehensive scrutiny of digital policies that shape this digital turn. It further suggests we need to incorporate conceptions of data justice in order to ensure substantial democratisation in this phase of urban governance before future technological interventions in governance.

The *DataSmart Cities Strategy* (DSCS) imagines connecting "people, policy, process, technology, outcomes" with "data availability, data usage, data shareability, and data management" (MoHUA, 2018) through its Data Maturity Assessment Framework (DMAF). The DMAF wants cities to embrace a 'data culture' and as such seeks to be the central regulatory mechanism that shapes how technology and data are used in the SCM. Its guidelines recommend tools, how sensors are deployed, guidelines on app development, data creation, processing, and storage. For instance, it makes recommendations for hackathons and 'data events' in different cities as a measure for identifying solutions. It also creates a dashboard to document collected data and, in some instances also includes geospatial mapping of this data such as forests, mobility, or crime. The DMAF also evaluates how data-ready cities are based on its guidelines and has conducted two cycles of assessment, the methods for which are available, but the results are not.

In addition to the DMAF, there exist two other platforms for the SCM under the DSCS, namely the Smart Cities Open Data Portal (SCODP) (<https://smartcities.data.gov.in/>) and the India Urban Data Exchange (IUDX) (<https://www.iudx.org.in/>). The SCODP tries to 'empower cities through data' and becomes a portal for housing open data and open government data. Many SCM cities upload data sets here. There is also a blogs and

discussion section that attempts to increase public engagement with the data that is available. The IUDX seems to be similar to the former but wants to proactively share data “across heterogenous departments and organizations” (ibid, n.d.). It further wants to use the collected data for Artificial Intelligence and Machine Learning (AI and ML) for “providing new solutions and services” across cities, which would require big data processing. The IUDX furthermore suggests a ‘data custodian’ who would share data across organisations. An example on the IUDX website suggests combining data from streetlights, e-governance, police, traffic, and geographic information system (GIS) to create applications for ‘women’s safety’.

Considering the centrality of data creation, collection, processing, storage, and sharing in the above SCM strategies, this can be seen in the light of “datafication” (Heeks & Shekhar, 2019) or the “algorithmic turn” (Gurumurthy & Bharthur, 2018). While DMAF does have some regulatory guidelines, it suggests that cities have their own data-based strategies. Since the Personal Data Protection Bill (PDPB) is still under consideration, there is no significant legislation or policy regulating this technocratisation apart from the guidelines of the DMAF, the dated National Data Sharing and Accessibility Policy (NDSAP, 2012), or the Information Technology Act (2000).

While the IUDX, SCODP, or DMAF all intend to empower cities, data processing and implementation may be out of the scope of conventional municipalities and governance networks. If the IUDX intends to share data ‘across organisations’, it would entail sharing it with agencies within Special Purpose Vehicles (SPVs), many of whom would involve private entities. This would suggest that public and open government data would be aggregated and shared with technocratic firms to enable SCM project implementations. It is not surprising that the DSCS and allied policy documents like DMAF and repository infrastructure like the IUDX have been created by the ‘Data Driven Governance’ group of the Tatas (Arora, 2019).

The SCM can be therefore be seen as a site of digital geography (Ash, Kitchin, & Leszczynski, 2018). The authors suggest that digital technologies are changing the way that geography engages with the digital world. Digital platforms, information and communication technology (ICT) tools, and computing technologies are reshaping what is understood as the ‘field’. A digital geographic approach would try to approach “the digital as object and subject of inquiry...[and] how the digital reshapes many geographies, mediates the production of geographic knowledge, reconfigures research relationships, and itself has many geographies” (ibid., p. 5). This, however, requires retaining other methods and axes of inquiry within the discipline (and interdisciplinarity) as the base within which the digital turn occurs, and not as a distinct one. This base can be identified through five themes they identify— “space\spatiality, geographical methods and methodologies, and cultural, economic and political geographies” (ibid, p. 6). This paper tries to understand the development of the SCM strategies through these axes.

While there have been studies on the SCM, the DSCS is completely ignored in the literature. Using an empirical analysis of policy, institutions, and data collected under the SCM, this paper will argue that the *DataSmart* strategy in the SCM creates a contingent imagination of 'datafication' and the 'algorithmic turn' in the future of urban governance. The hasty regulations of data creation, collection, processing, storage, and sharing in the SCM strategies also need to be understood alongside core concerns of data literacy, privacy, and surveillance.

This paper uses a mixed method based on the digital geographies approach. Content and discourse analysis of the DMAF guidelines and documentation could help assess the conceived data framework. This would focus on policy guidelines related to data creation, storage, and sharing. Interviews with 'data custodians' of DMAF, IUDX, and SCODP will be conducted to enhance the analysis. Considering the intent of data sharing under IUDX, it will be necessary to understand the network of data sharing between the government, parastatal agencies, and private entities. The role of private entities specifically has been noted as consultancies or hand-holding agencies for proposals but their attitudes towards democratisation and participation are not studied. Institutional ethnographies (Campbell et al., 2006) of these agencies (public and private) to understand how these data sets are used to further participation, or information sharing with citizens will be conducted and how they perceive participation. The attitude of these agencies towards data transparency or 'data-openness' (Courmont, 2017) will also need to be evaluated, considering it is citizen-sourced data. If these tools have decision-making capacities, the determination for algorithms needs to be identified either through policy, or through the agencies and its personnel. This will be helpful to understand the 'digital ecosystem' (Batty et al., 2012; Neirotti et al., 2014) or data 'regimes' (Thatcher, Eckert, & Shears, 2018) created in the SCM and its implications for participation.

The paper also suggests that while technological interventions are necessary shifts in countries of the South, they require more comprehensive, permanent, and evolved national data policies and laws. We need to recognise the SCM as a temporary intervention that will be succeeded by newer urban renewal policies and digital strategies. Finally, I argue that we need to implement frameworks of "data justice" (Heeks & Shekhar, 2019) to create democratic paradigms towards data in developing economies to further citizens' rights in future technological interventions.

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Panel 5

# Communities and Urban Spaces



## Infrastructure of Romance: Premarital Relationship in Urban Spaces in Contemporary India

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The term 'infrastructure of romance' has been borrowed from Ara Wilson's pioneering work *The Intimate Economies of Bangkok: Tomboys, Tycoons and Avon Ladies in the Global City* (2004), which explores how retail revolution and the subsequent growth of shopping malls have provided spaces for leisure. It not only enables newer patterns of consumption but also encourages the expression of diverse sexual identities. Thus, the retail revolution substantiates how expanding capitalist markets are affecting and in turn are affected by the intimate lives of people.

Urban imaginations proved to be pivotal to the transformation of cities. This was significant in envisioning a modern city, "unfettered by tradition" (Kalia, 2006, p. 134). In contemporary matrimonial matchmaking, the modes of intermediation are contingent on an array of contextually embedded interdependent factors. In this regard, the idea of 'space' as quasi-public seems paramount. Premarital relationships occur in spaces that are away from the home, mostly in leisure spaces that are removed from the immediate surveillance of the respective families. These leisure spaces have been fostered by the transforming urban landscape that often has its foundation in economic liberalisation that enables the urban youth to meet in less regulated ways. However, we need to distinguish between physical surveillance of families and surveillance via moralities specific to diverse families. This could be substantiated by the differential attitude towards visiting pubs or meeting in family restaurants. Thus, spaces assume the role of a mirror, reflecting the moralities that make up the habitus of specific individuals. Moreover, as Donner and Santos point out, premarital romantic encounters and affective individualism does not separate individuals from the family or collective (2016, p. 1130).

The socio-spatial dynamics of urban areas reflect new forms of social intermingling, practices, as well as changing ideas of marriage, romance, and sex. These individuals are aware that their premarital relationships may not materialise into marriage. But romantic encounters in these socially less regulated urban spaces of leisure like shopping malls, bars, clubs, restaurants, and so on provide spaces of freedom, independence, and confidence to individuals with disposable income. Thus, these spaces host myriad expressions of identity, which might otherwise remain unnoticed. Space has become conducive in the making of 'modern' middle-class identities (Brosius, 2010; Dupont, 2011; Shrivastava, 2007), where one can choose to write their own biographies (Beck, 1994; Giddens, 1991).

New urban spaces are nodes of economic development (Ballard et al., 2017; Watson, 2015). Christiane Brosius (2010) went further to assert that urban 'spaces' of leisure like shopping malls are an indicator of both economic prosperity as well as conspicuous consumption. Conspicuous consumption characterises the performativity of the new Indian middle-class identity and acts as a marker of public self-affirmation. Moreover, these cultures of leisure and spaces away from home become markers of neoliberal identity since the transformation to open market economy from planned economy also indicates a shift towards consumption as an indicator of progress (Brosius, 2013: 266–267). Marital practices that involve premarital intimacy and courtship are increasingly becoming conspicuous in India (Bhandari, 2020). With specific reference to Valentine's Day celebration, Brosius (2013) explains that premarital love might not be intended to evolve into marriage but depicts the public display of affection via transforming urban structures, especially spaces of urban leisure. This study attempts to explore how these dynamics are shaped by envisioning a world-class city that could compete with other cities on a global scale.

We live in an era of 'new cosmopolitanism', anchored in the process of globalisation. In addition to socio-spatial dynamics, the role of peer pressure seems crucial in initiating romantic encounters in these transformed urban spaces. This study explores how urban space and its transforming geography influences one's marital preferences, forms of communication, and agency of individuals. It draws special attention to matrimonial processes during the recent COVID-19 pandemic situation whereby the idea of physical space has been replaced to a large extent by digital platforms due to challenges posed to face-to-face interaction. During these online interactions, the architecture of the physical background 'speaks' of the 'tastes' of persons concerned. In these few months of the pandemic, the idea of urban imageries has altered to envision the urban in a way that physically distances individuals and communities but socially brings them to a proximity. The expanding capitalist infrastructures affect the infrastructure of interpersonal relationship in ways that provokes me to assert 'the personal is commercial'. In this regard, the relationship between urban spaces and wedding as conspicuous consumption is an important arena which requires critical enquiry. The idea of 'aspirational weddings' and weddings as a means to create a 'spectacle' highlight how big industries have been capitalising on Indian customs and traditions. This study also involves textual analysis of literature on premarital relationship, which states how such premarital courtship process involves complex negotiation regarding the selection of urban spaces for weddings, which in turn would affirm a specific class identity.

As Doreen Massey (2005) argues, the idea of space needs to be rooted in concepts or practices like relationality, heterogeneity, and coevalness. Thus, space is a contingent phenomenon or process that is always in the making. For instance, the choice of

cuisine, restaurants, shopping malls, or any meeting place defines not only the 'taste', cultural, or economic capital of the person concerned, but it also engages respective parties into a complex negotiation of mutual compatibility. Many a time, relationships face tension when compatibility is solely based on these external criteria that is assumed to represent one's 'class'. Thus, urban spaces define forms of sociability since the conception of space is rooted in human perception. Ingold (2008) suggests that the environment is not something external to us. Rather, it is a "zone of entanglement" (2008. p. 1797). Moreover, the diffusion of global standards ensures that the 'local' is constituted, entangled, or interwoven with the 'global'.

An analysis of urban imageries of the future could explicate the multiple hierarchies which structures our everyday lives. This provides a good starting point to explore the interactions between the reconfigured urban landscape, forms of sociality, and the dynamic expression of individual identities. The social requirement for the would-be couples to meet and interact necessitates the selection of spaces. Thus, urban spaces become cultural constructs with varied representations. It also embodies 'taste' (Bourdieu, 1984) via the consumption of meanings attached to these spaces (Baudrillard, 1998). Moreover, the replication of cross-border urban localities or culture play a somewhat significant role in the selection of urban spaces where would-be couples could meet. These spaces could be reimaged through the politics of acoustics as well as olfaction, which creates new spaces of urban exclusion and socio-spatial fragmentation. As Meissner and Lindner (2018: 6) suggest, urban imaginaries meaningfully interweave different elements of the urban social space, thus playing an important role in the reconfiguration of socio-spatial politics of urban spaces. These link together class politics, geo-politics, gender politics, and eco-politics.

However, one must be significantly aware of the routinised cultural complexity and specificity of affective relationships between urban spaces and their consumer base with divergent biographies (Shrivastava, 2015). While scholars have focused much on how cities have brought together an array of spatial practices from labour and employment, architecture and planning, to environmental sustainability, economic growth, culture, and politics (Huyssen, 2008), I intend to trace the impact of these changes on the affective dimension of interpersonal relationships during matrimonial matchmaking.

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## Reimagining Urban Spaces and Reconfiguring Human Ecology: Street-based Sex Workers as Urban Pseudo-Invisibles in Bangalore City

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In this study, we examine the experience of neoliberal urban transition among street-based sex workers in Bangalore, India, in its impact on the urban space they operate within and on the reconfiguration of the human ecology around them.

Contemporary urban transition in Bangalore has not only redefined the meaning and purpose of urban public space (the principal areas of operation for these workers) but has also changed the disposition of other actors in those spaces (who for long were accomplices) to street-based sex work. Modulations in spaces and among actors that have for long been the lifeline of street-based sex work in this city (which has no significant red-light area as the entire city is one) have pushed these workers into a deeper marginalisation.

The social, economic, political, architectural, and commercial components become subject to gentrification. Bangalore has transitioned from being a collage of urban commons to a collection of parcels of urban commerce. For the last three decades, the meaning of 'public space' has undergone a dramatic change, alongside the very definition of who ought to constitute the 'public' in this city. Public spaces have been recast as accessible only to those legitimate individuals and social groups who fit into the imagined city and do not pollute its image. Dominant urban imaginaries, defined by city masterplans and high-level policy documents, deny the very existence of alternative spatial cartographies and human landscapes in the city. Subaltern imaginaries are effortlessly neglected or are forcefully denied altogether within the discourses that visualise a city and define urban modernity. Ideas of modernity in visualising a metropolis imply getting rid of those who disfigure the city's human composition and contaminate urban spaces with their presence. In the revanchist construction of the Bangalore vista, these immoral blots are to be pushed away and their existence denied altogether. Street-based sex workers in Bangalore city, who have for long been an integral part of its human tapestry as a subaltern informal workforce, have been consistently denied their place in the city's humanscape and have been systematically losing their tracts of life and livelihood due to the spectre of gentrification and urban transition that has haunted and sprawled through Bangalore's public spaces. Street-based sex workers are proactively excluded, sinking into invisibility when imaginaries are manufactured but suddenly becoming visible undesirables when gentrification operations are at play. Multilayered and perpetually tormenting vulnerabilities in their

operations, even threatening their very existence, have not only dispossessed them of their positions in the city landscape they have dotted for decades but also have disregarded even the *existence* of a narrative of urban transition experience from their viewpoint.

Hence, this study has two objectives. First, to construct those alternative spatial cartographies as defined by female, male, and transgender street-based sex workers in Bangalore and to construct the menagerie of actors who constitute their human landscape in the city. That is, to chart out the spatial and social contours of Bangalore's 'sexscape'. Second, to bring out the ordeals of Bangalore's overwhelming transition through the textured narrative accounts of these workers. Through these two objectives, we lay out in full view the urban sexscape of Bangalore and reveal the depth to which there has been its wholesale denial. We reinforce sex work as a theme in Indian urban studies and urban space as a theme in Indian sex work scholarship. We identify unconventional elements in the cityscape and lay out the supporting actors to street-based sex work, through workers' own narratives, and consequently draw from these oral histories to sketch out the loci of urban transition in their experience. Ultimately, through our two objectives, we bring out the dismal intersections that undergrid their life and work, and threats to their very existence in the process of envisioning and unravelling the realisation of a city. It becomes pressing to reveal these experiences from *their* eyes and feet and to draw out the sexual counter-geographies of this glittering city.

Accordingly, we collected oral historical narratives from five dozen street-based sex workers in Bangalore city, spending 18 months visiting and revising them, with the invaluable support of institutions, individuals, and civil society organisations who have been in solidarity with their cause for decades. We restricted to (economically) low-end sex workers who solicit in open urban space and in the institutional setting of the street economy. overwhelmingly hailing from Dalit caste or lower caste. Their narratives provided a more pixelated picture of the alternative imaginary of the city by weaving the wefts and warps of the unheard and the unseen. We assembled, aggregated, collated, and reconstructed recollections and personal commentaries—about experiences, people, artefacts, spaces, and other entities in their spatial and social cartography. Equally important were our interactions with ancillary actors and adversaries of sex work. We chose locations in Bangalore that were geographically and historically focal for street-based sex work, such as the KR Market area (the central wholesale market), the Majestic area (the central bus terminus), and the MG Road area (the central upmarket commercial area), with also a brief foray into Peenya and Yeshwantpur (two major industrial areas).

Our findings, based on their narratives, were very vivid. Sex work is an integral commerce within urban space ecologies with its dedicated elements, artefacts, and spaces. Bangalore's topography includes a 'sexscape' as much as other sleek and modern 'scapes'. The sheer sweep of ancillary actors orbiting street-based sex work in Bangalore, prior to its grand transition, was staggering. This support network generally included lodge managers and staff, autorickshaw drivers, bus staff, street vendors, small shops, public toilet watchmen, park watchmen, cinema theatre staff, security guards, staff of restaurants and eateries, health workers, and social workers. In the past, these ancillaries generally straddled a grey area warming up and cooling down but were generally tolerant, while some were even benefactors of sex work. Lodge rooms, groves, parks, religious sites, bus stands, cinema theatres, thickets and large trees, pavements, public toilets, wholesale market yards, trucks, and shopping complexes constituted the spatial sexscape of the city.

But, for the younger workers, there was barely any mention of these spaces, and they spoke more about negotiating the city now not in its open urban spaces and convivial places but rather as a trapeze act where one had to leap and swing from one disappearing patch, or one hide-and-seek spot, to the other. An entire industry faced upheaval and its workers subject to greater violence to 'clear them out'. In Bangalore, this elimination was inflamed with sudden heavy jolts of gentrification and revanchism. The galaxy of people and tapestry of places slowly crumbled over a long 20-year period in the process of creating a Bangalore that was supported in substructure by the many, built for the few, and imagined by the fewer. An entire ecology around street-based sex work in these areas in Bangalore unhurriedly but aggressively (often violently) disintegrated, pushing many workers to either further invisibility than ever before, leading to a gradual melting away of their grasp on their city.

Street-based sex workers sighed how ancillary after ancillary abandoned them, turned their back on them, and pulled the plank, and how they were pushed away place after place, from a city that was theirs to roam and work freely. Desires for gentrification and revanchism have been employed as battle cries against sex workers even among the working classes who are also, ironically, adversely affected by neoliberal processes. While until the early 2000s sex workers had serious issues only with the emissaries of law and order, their losses of space and social capital are now new concerns, the severity of impoverishment of city space ascending from male to female to transgender worker. There were new enemies among old ancillaries, and new threats within old places. Those who were ancillary actors have morphed into adversaries and eschewed their tolerance. Urban commons have become absolutely forbidden to them due to a newfound morality among policymakers, law enforcement agents, the working classes, and even new actors such as the media. Naturally the police have always been the first among adversaries for street-based sex workers all over the world. In Bangalore city

too, verbal and physical abuse against workers have been inherently high, which have skyrocketed upon large-scale transformations or disappearances of worksites. We gathered that their attitudes to sex workers are based not only on grounds of social morality and crime but also on *city image*. The police are hence mercenaries of everyday revanchism, their tentacles penetrating nearly all living and working spaces of street-based sex workers. With full support from actors who pose as the city's conscience, or from former ancillaries of sex workers, spatial and social marginalisation are deployed in full force by the police.

Bangalore's gentrification has been not only on the grounds of urban aestheticism or commercial elitism but also due to a newfound morality among policymakers, law enforcement agents, the working classes, and even new actors such as the media. Crusades against the prevention of the 'misuse' of 'public' spaces by 'anti-social elements' have enjoyed the full support of middle- and upper-middle classes, and backed by the corporate sector, who wish to 'rehabilitate' the city's image as peaceful, air-conditioned, and content, engrossed with their own upmarket concerns around image, aesthetics, planning, administration, and environment. Neoliberal urban transition has reworked streets, parks, transport terminuses, cinema halls, toilets, and other spaces, and the human ecology within them, to disfavour street-based sex work. Out of around 20 theatres in the Majestic and KR Market area, half of them had disappeared (turning into malls), and the other half were subjected to bold facelifts either indoors or on their outer facade. A more shining Majestic now provides an assuredly more dignified and upright movie experience.

Urban transition has reconfigured inequality with an accentuated potency towards these workers and has multiplied the layers of their precarity, practically planting landmines through their terrain. Even in their wildest dreams, they narrated, they did not realise that their old hunting grounds would disappear, and their old compatriots would abandon them, quietly watching them descend into misery. Their workspace tapestry is now a labyrinth that stonewalls them at every corner or plunges them into point-blank range of the police. Urban transition for the street-based sex worker in Bangalore is not just the sense of heartfelt regret or nostalgia but the loss of a sexscape. A layer of informal labour and livelihood is being scratched out through a variety of strategies, an entire alternative spatial and social contour of the city is being expunged, all in the name of the fabrication of a vista named Bangalore. Only their long-standing benefactors (health workers, social workers, a few lawyers, journalists, and researchers) remain sympathetic to them, and only the city's flora and fauna retain a supportive demeanour towards them. With their support, street-based sex workers have to now guard not only their bodily rights but also the right to reclaim their parts of the city.

Yes, street-based sex work still thrives in Bangalore with thousands of workers, but as a pale shadow of what it was a few decades ago. These workers have faced a hostility like few other cohorts of informal workers, with their claims to city spaces being systematically denied in a most brutish manner. They are blacklisted as both undesired in the humanscape of the urban imaginary and as immoral workers in the informal labour force. It is as a result of both dismissals—the human-spatial and the commercial-spatial—that they live and work as invisibles whose narratives become entirely unacknowledged. However, they too very much define a distinct urban cartography, which we have sketched out in this study by charting the loci around their urban spaces and ancillary actors—both of which have crumbled over the last two decades.

The denial of the city to sex workers begins with apprehensions about their very existence as informal workers and misbeliefs about their agency. The avowal of these workers to reclaim their position of existence, movement, operation, and political participation in the city is not only an assertion to re-appropriate spaces but to battle urban neoliberalism itself, even if not articulated with this vocabulary by these individuals and their compatriots. Sex work is undoubtedly work, and sex workers are legitimate workers who are able to choose and provide for themselves through this occupation, within which, as the literature has indicated, they encounter marginalisation, sexism, and exploitation. Recognising this would redefine what a 'modern' city is, who the 'public' ought to be in such a city, and finally of course, what a 'city' itself is.

## The Second Sex and Recreational Culture: A Socio-spatial Urbanscape to Redefine the Urban Peripheries: A Case of Kolkata

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*"Imagine an Indian city with street corners full of women: Chatting, laughing, breast feeding, exchanging corporate notes or planning project meetings. Imagine footpaths spilling over with old and young women watching the world go by as they sip tea, and discuss love, cricket and the latest block-baster." (Phadke, Khan, & Ranade, 2011)*

Can we imagine the contemporary urbanscape with the idea of female flaneur enjoying fearlessly, involving actively in the presumed inclusive recreational spaces? Is it ever possible to think that women are also equally hanging out at any familiar sight or equally enjoying 'tea' at the local 'tea shops' or loitering confidently within the neighbourhood just like men?

A good city is one which integrates recreation as a system within everydayness of the city enjoyed and experienced through its physical entity, where whether men or women regardless of differences have the freedom to participate. But, in Indian cities the social status of women has always been regarded as 'the second sex' within the normative layers of patriarchal domination. Here, the picturesque of 'women in recreation' merely sets forth an illusion of either 'a different radical city' or 'a utopian urban manifesto' of strong feminist belief (Phadke, 2011). The predetermined perception of recreation has always embedded within the activities of 'leisure', an act of enjoyment, amusement, and pleasure for 'fun'. But have we ever realised how women interpret 'fun' within their everyday life? How often do we explore the spatial realities of them in reclaiming their presence in the city spaces for 'fun'? Have we ever understood the most effective scale of their active engagement, influencing the quality of life?

Women don't have any residual time for 'fun', imprinted with designated fun activities to perform within. Their understanding of 'pleasure' to seek 'unconditional fun' has often been realised within the hardware of socio-cultural norms, shaping their behavioural ideologies. It always performs through the societal epiphany of everyday pattern by generating 'self-created' physical setting. It always unfolds through multiple layers, ranging from 'basic Right to the City' to active engagement to meet their daily ends, support their household activities and works, taking care of social relations, and so on, operating at various scales. It is always a driving force for creating a seam between public and private domain with cultural diversity, economic vitality, and quality of life, impacting the neighbourhood and city-level interdependencies.



The social construct always provides men to avail different choices in his surroundings regardless of whatever the time is. But for women, 'fun' always demands a 'purpose'—a legitimate space for going out, an excuse to step out, while getting social sanctity and safety. They neither have any designated time for 'fun' nor any designated recreational spaces in the city that serves their needs (Phadke, 2011). Because they explore their fun places, impregnated within the socio-cultural domain of everyday neighbourhood pockets, curated through daily confrontation. It includes availing daily needs, sometimes engaging with kids and family rearing, or involving in socio-cultural activities, also through finding opportunities for learning and economic stability and so on. All these are imparting the 'cultural landscape', where the physical setting is always a plethora of behavioural pattern, the way of association, familiarity, safety, and degree of engagement. The domain of triple role of women (reproduction, production, and community participation and management) locates from home to a range of surrounding neighbourhood and the adjacent neighbourhoods at max (Desai, 2007). Therefore, before looking towards the city-level destinations, we should first focus on our neighbourhood, which conforms the domestic domain: the most secured territory for the women, in 'quest of fun'. These small islands are not only enhancing the behavioural adjacency but also leading to the neighbourhood-level interdependencies, fostering new social relationships and enhancing the local identity. Thus, it is not a spatial exercise rather a complex socio-spatial dialectics, embedded within the cultural discourse of everydayness.

But the city is continuously reflecting the homogenous form of malls, theme parks, shopping outlets, night clubs, pubs, discs, and so on under the conventional tag of recreational spaces based on predetermined requirements with growing pressure of urban development. This continuous lack of understanding of the major aspects regarding active involvement of women, their need and aspiration is not only limiting the choices of recreation that a city can offer at various scales but also continuously creating a larger gap between culture and built environment of the everyday life. It is impacting equal association and participation of women from their surrounding neighbourhood to the city-level public spaces.

The city fabric of Kolkata has been influenced by the socio-cultural norms since the pre-colonial period where behavioural pattern of women played a pivotal role. The neighbourhood concepts in Kolkata have been depicted through the interwoven fabric of 'para'. It has not any physical boundary but a mental boundary created through socio-cultural norms, which is the primary territory of women's recreation. The degree of association with the everyday public spaces within the neighbourhood is primarily dependent on the legitimacy and familiarity. It is often found that the club grounds or informal pockets near schools/tuition centres or local tea shops, encroached street edges, the local Market Court, or market streets spilled over the edges are the magnet

points of 'Housewives' Adda' (chit-chat). The peripheral backyard parks or informal open pockets are of major considerations of the teenagers for its privacy as well as social sanctity. In a 'para', the tertiary alleys are the major cultural corridor for them connecting several resources along a particular route, animated at eye level with projected plinth treatment or in-between pockets animated with temporality. The courtyard spaces within the community along with built enclosure to it are highly women-centric spaces. Balconies and terraces provide visual variety and psychological comfort. 'Pukur' (water bodies) and informal pockets are not only community punchers but also part of animating memory for elderly women. Street edges, alleys, courtyards, animating nodes, and in-between pockets are the cultural entities used by the women only when built is working as a purposeful anchor within their domestic range. All these are producing the community landscape of a 'Para' together with shaping the socio-cultural identity of the city. But from 2010 onwards, with the introduction of extended Eastern Metropolitan Bypass, the thrust of peripheral development has been located towards the southernmost fringe of Kolkata. The major issue is that the high-speed and high-rise development with outward everyday spaces along major corridors continuously affecting the cultural harmony of the existing traditional fabric, restricting women physically and psychologically to be within the home only (Desai, 2007). These large pockets of development continuously increase impermeabilities. Along with these, what was previously a matter of fact of expansion of the family with an accompanying expansion of land is now a single plot of land subjected to constant fragmentation, reflected in the physical fabric of this fringe area. The spatial layout resulting as the self-division of plot makes it very difficult for the government's access to intervene for laying out basic infrastructure, which creates chronic situations provoking more challenging living conditions for women even within domestic domain also. The other factors influencing these kinds of development are all the lands being privately owned, existence of multiple landowners within a single 'plot', and mid- to high-rise dense clusters of housing without any public spaces. It continuously enforces a situation of absence of governmental regulation, support, or control in terms of growth, infrastructure, and resource allocation within such fringe areas of the city. It is also important to understand that there is no single woman (Pahdke, 2011), so homogenisation of the diverse intersectional need does not get fulfilled and 'recreation for second sex' comes as an afterthought of 'male design gaze'.

This paper emphasises the importance of all elements that will benefit the inherent lifestyle of people including all the genders to incorporate the most varied scales and nature of social spaces. It includes guidelines supporting building typologies and constitutional policies that recognise and emphasise the socio-cultural interaction between all, creating a cohesive identity of New Kolkata for the people, by the people. The change in equal cities can only be brought by the tools effective in the first interactional bubble of neighbourhood level where a woman and a man can participate

in their daily lives with freedom of recreation. The intent is also to reinterpret the neighbourhood in relation to the needs and behaviour of women and thus to transform them into spaces of engagement and renewed association. Till the 1990s, planning policies (women in development emancipation) majorly focused on the different needs of men and women separately without realising the interdependencies between intersectional spatial realities and varieties. Even after the 1990s, the approach (gender and development) has been limited to planning guidelines without considering the spatial aspects for equal participation. So, gender mainstreaming requires enforcement and implementations of a set of 'gender inclusive form-based code', allowing women to enjoy social and family life simultaneously. It should be beginning from immediate narrow alleys, which are the major socio-cultural corridor for the women, allowing them to explore opportunities of 'live-work and play' at eye level. Open spaces should not be categorised as only different hierarchies of parks rather courtyards, left-over spaces, informal pockets, or incidental spaces should be considered in order to achieve variety and appropriate scales of social association. The densification of the typological clusters should enhance the opportunities of both individual and shared resources based on the activities within it. It can be done either through community-level master planning for developing a newer area or retrofitting approach for an existing one. It also involves how their behavioural pattern identifies the existing network of everyday use through the mapping of different recreational destinations and analysis of safety in their everyday routes of various user groups. This extracts the design principals based on the systematic understanding of the behavioural setting associated with the women in a policy as well as morphological level as a part of community-led spatial exercise to maximise women's participation in the everyday spaces.

The critical understanding of complexities of physical spaces in relation to socio-cultural relations, evolving across time and context, is the key of co-creation of social spaces fostering new urban identities for equal cities. That is why it is important to value the people-oriented design ideologies for co-creating and co-managing the urban spaces. These are the foremost tools of community engagement for creating new urban realities through 'everydayness', which are always downplayed, within the local municipal jurisdictions. Community-oriented design principles can only be channelised through the involvement of local governance regardless of its formal and informal constitution. Therefore, the involvement of local club authorities, non-governmental organisations (NGOs), self-help groups, anganwadi, or local Mahila Samitis are the inherent part for enforcing community-level engagement where women play a pivotal role in decision-making. The outreach of government within such areas are only possible through the 'bottom-up' approach of 'people-oriented design principles'. The idea is to create a network of mentally and socially stimulating spaces using actual perception and usage of the pattern of recreation-enhancing lifestyle, routines and aspirations of different intersections in relation to women, thus creating association at

different levels (neighbourhood, community, borough, and city) to ensure sustainable development. As Ranade mentioned, when “you design the city for the women, then you are designing for all.”

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# I (Don't) Walk a Lonely Road: A Study of Women Seeking Leisure in a Public Park

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## Abstract

Generations of architects have developed public spaces using an idealised male form and successfully sold it under the pretence of 'neutrality'. In an already patriarchal state like India, this gendered design of public spaces imposes normative limits upon women's behaviour and reinforces the vicious cycle of discrimination against them. The objective of this paper is to study women's interaction with public parks and how this interaction is exacerbated by such 'neutral' decontextualised infrastructure. Taking Parimal Garden, a public park in Ahmedabad, Gujarat, as the site for study, the paper employs a mixed-methods approach that includes observation, temporal mapping, and photography to prove that Parimal Garden is highly gendered in nature. The paper definitively establishes direct correlations between women's pursuit of leisure and the cues provided by the spatial elements in Parimal Garden enabling them to do so. Here, leisure has been identified as a critical and higher-order goal that women in a public space aspire to seek in an attempt to make the most of their time outdoors and actively oppose the patriarchal belief that women belong in the private domain. The paper concludes with the thought that equitable spaces that are able to provide an inclusive experience to all, despite the strong bias that exists in the society, are the urgent interventions required to resist the systemic Indian patriarchy.

*Keywords:* Women, Leisure, Safety, Public Park, Indian Patriarchy, Gendered space

## Introduction

Ideally, cities are where socio-political processes, cultural norms, and institutional arrangements come together to create a place where people meet, exchange religious or political ideas, conduct commerce, or simply relax and enjoy themselves (Gehl, 2010, Sasidharan & Prosperi, 2012). In concept, it must be a place that is "open and accessible to all peoples, regardless of gender, race, ethnicity, age or socio-economic level" (UNESCO, 2017).

Unfortunately, a closer look at the patterns of use of most public spaces reveals that they are not used equally by all citizens. The lack of sensitive design aimed at women's needs, especially in societies plagued with patriarchal ideals, results in 'neutral' public spaces that are inadvertently biased and can actually make the experience of using them less safe for women. Multiple studies conducted by urban and gender theorists in India have been in circulation for over two decades, which reveal the close links between violence against women and inadequate infrastructure at the local level.

Wherever public infrastructure fails to fulfil women's parameters of safety, they are forced to take the onus of their safety into their hands and navigate the space as per their personal requirements of safety, thus excluding them from using the public realm freely (Phadke, 2012). Through such insensitive enactments of men's power over women, an innately gendered nature of public spaces in India can be observed, wherein the architectural arrangements of the space itself regulate and restrict women's access to these public spaces (Phadke, Khan, & Ranade, 2011, Srivastava, 2012).

In 21st century India, where cities have come to be characterised by limited space, obstacles to pedestrianism, pollution, and significant fear of crime, parks are the public spaces designed to serve as peaceful and functional oases to all city dwellers. However, much like the other public spaces in the cities, parks too fail to cater to the specific needs of women who wish to occupy public spaces comfortably and confidently for leisure. This is because leisure, or the idea of women 'loitering', that is, using public space without any defined purpose, is both incomprehensible and condemnable under the existing social order. The idea that for women, leisure may be sought, not just within the home as members of families, but as individuals in the public, appears to violate the social contract between men and women, individual and family, public and private, and by extension, between society and patriarchy (Phadke, Khan, & Ranade, 2011, Srivastava, 2012). As a result, this paper explores the associations between spatial cues and the experience of safety and leisure by women, in Parimal Garden, as a measure of resistance against restrictive social orders.

Thus, the objectives of the paper are (i) establishing an association between the spatial elements provided in a park and the patterns of women's use of the park, (ii) mapping spatial cues that aid women's experience of safety and analysing them as prerequisites to seeking leisure, and (iii) mapping spatial cues that aid women's participation in leisure activities and analysing them as a measure of increasing interaction with the public domain despite restrictive social boundaries.

## **Methodology**

In this study, women's activity patterns in Parimal Garden, a public park in Ahmedabad, are analysed with respect to the interconnectivity of two experiences—the experience of safety and the pursuit of leisure. The theory dictates that women must experience safety in a space, in order to relax and participate in leisure activities there. Using a mixed-methods approach that includes observation, temporal mapping, and photography, this paper builds a detailed case study on women's interaction with the built and unbuilt features of Parimal Garden in Ahmedabad and examines their patterns of use with respect to these ideas of safety and leisure.

## Experience of Safety

The safety of women occupying public spaces is regularly threatened by unwelcome acts of physical, sexual, and emotional aggression. The feeling of being unsafe in public spaces is accentuated by infrastructural issues such as low lighting on the streets, poorly maintained roads, overgrown trees, no signage, among others (Vishwanath & Mehrotra, 2007). Spatial cues that enable women to perceive a space as 'safe' tend to encourage them to access the space more freely. For the purpose of the study, three parameters of assessment were identified: *accessibility*, *high visibility*, and *maintenance and management*.

## Practice of Leisure

Women were observed to be participating in many different types of activities in the park. In order to analyse the associations between spatial cues and the pursuit of leisure through one or more of these activities, six features were identified throughout the park, with significant spatial elements, designed to generate one or more specific recreational activity. These sites are: *the jogging trail*, *the children's park* and *the open air gym*, *bench clusters*, *the brick pavilion*, *the 'Formal Garden'*, and *the water edge*.

## Results and Discussion

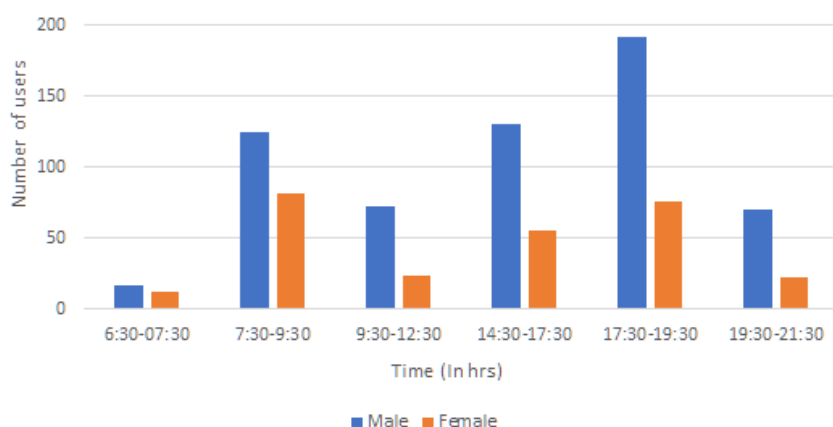


Figure. 1: Distribution of men and women users across the day, in six selected time zones.

### 1. Parimal garden as a public space is innately gendered in nature

A closer inspection of the 'neutral' Parimal Garden reveals that despite the high number of women in the park at different times, the park as a space is highly gendered in nature. This inference is drawn upon the observations that the number of men who use the park at various times of the day is much higher than that of women (Fig 1). The manner in which the men engage with the overall space in general and some spatial elements in particular is significantly different from how women engage with the space. While men are found sprawling all over the sites and engaging in various activities,



women's distribution over the site is limited and influenced by the time of day, number of people present, and even the activity they are performing.

## **2. Production of women's practice of safety is linked to spatial elements**

**Accessibility:** While all four entrances of Parimal Garden are located on major roads, our analysis reveals that there was significant variation in their use by women. The entrances strategically designed to be active and in sight of a critical mass of people at all given times, supported by adequate lighting, informative signage, and provision for parking and pedestrian activity (Fig. 2), were used significantly more. Additional factors such as the vicinity of the gate to a conventionally male anchor such as a public toilet discouraged women to use the gate whereas infrastructural provisions for vendors, and the consequent increase in light, activity, and a degree of familiarity, encouraged women to use the gates.

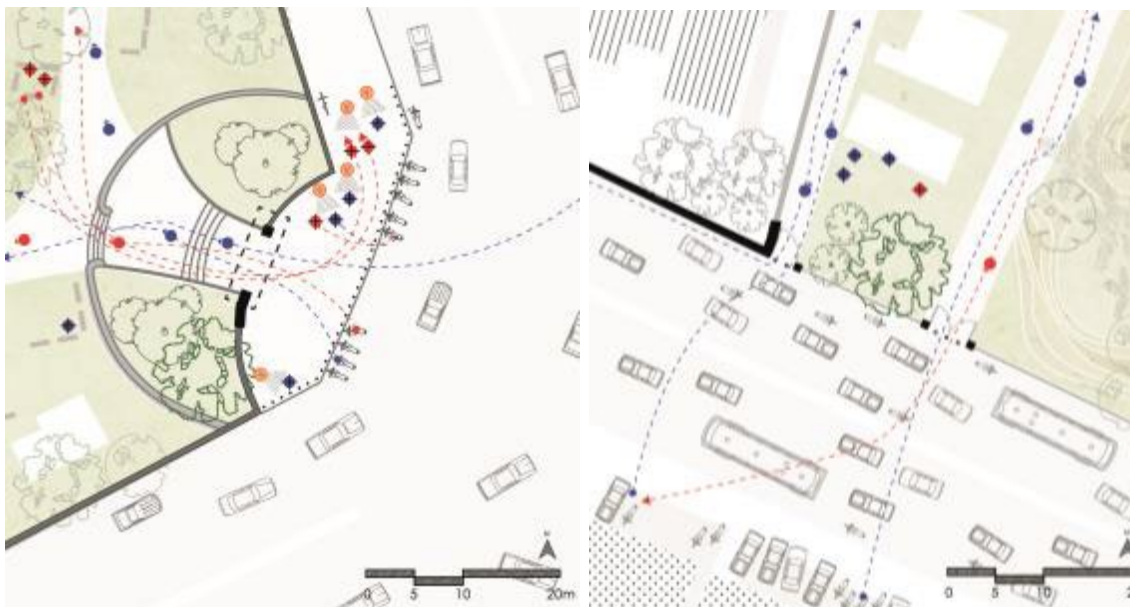


Figure 2: Women's activity patterns vary over the two different entrances. In order for parks to be accessed safely by women, multiple exits must be strategically designed to be active.

**High visibility:** Analysis of Parimal Garden reveals the subtler nuances of increasing visibility in a public park. Some of the key inferences drawn in the paper are that the production of optimal visibility (Fig. 3) in the context of a lush public park occurs at three levels.

**Organisational:** The layout of the park, deliberate design decisions to place certain activities in adjacency to each other, and the existing natural environment.

**Architectural:** Decisions taken at individual sites within the park, pertaining to form, material experience, degree of enclosure, visual permeability, and so on.

**Landscape:** At both scales, the decisions are strongly impacted by the abundant presence of natural vegetation, a variety of tall and thick trees, and large water bodies,



which impede or aid vision in different parts of the site. These also include the provision of amenities like adequate lighting and analysis of its interaction with shadows.

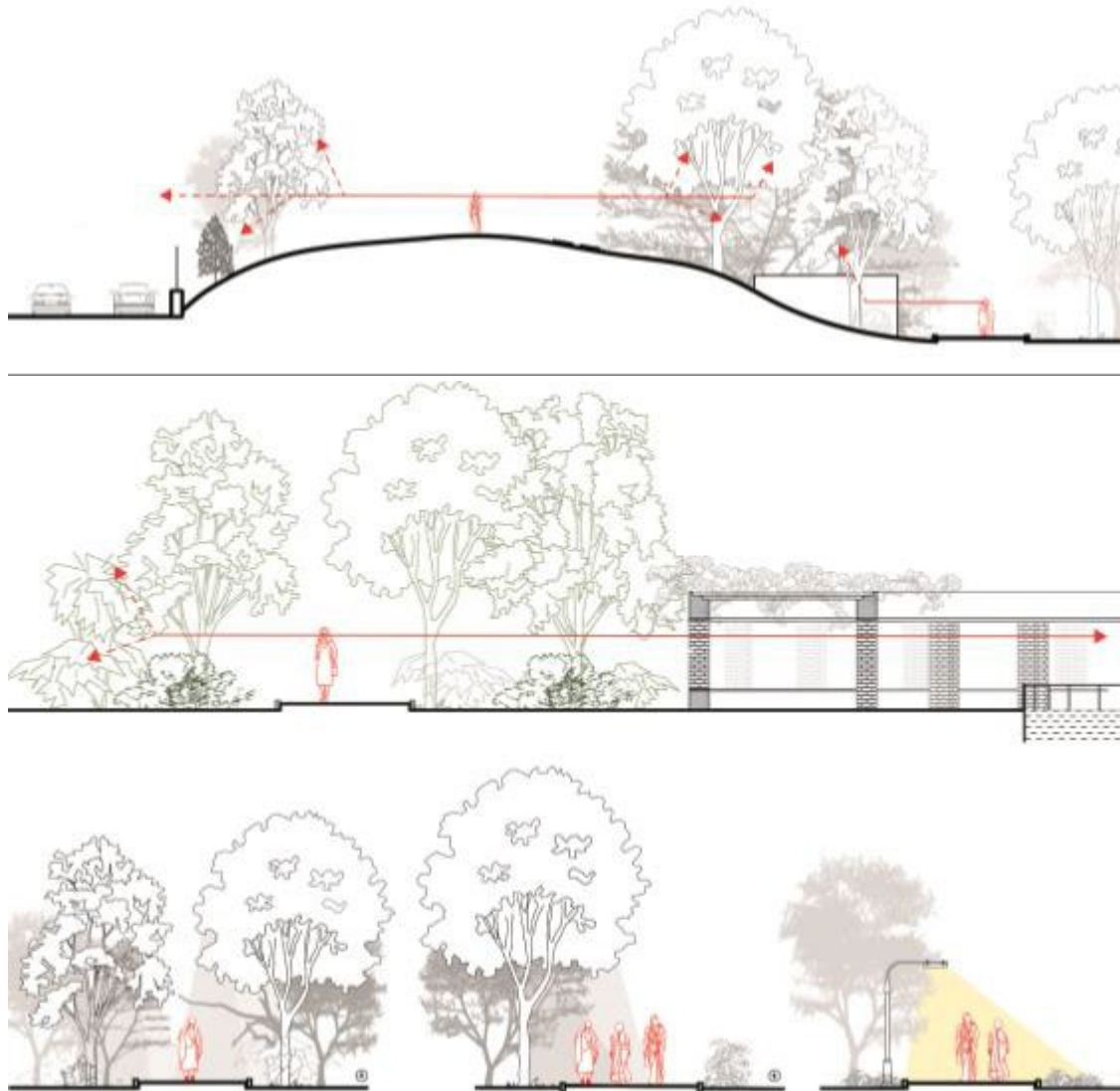


Figure 3: Analysis of sightline at Parimal Garden at the (i) organisational scale. Elevation of the hill restricts visibility. (ii) Architectural scale: The low lintel level restricts length of sight line. (iii) Landscape architecture scale: Impact of shadows and tree density on visibility.

**Maintenance and Management:** Additionally, the study reveals that the provision of safety is not a one-time solution, especially in the context of a dense landscape such as Parimal Garden where, in addition to the availability of amenities, the upkeep of these features is equally significant.

In addition to the operational maintenance, which deals with repairs on a regular and causality basis, maintenance must also be predictive in nature such as snipping low hanging tree branches based on their growth rate or mowing the grass in a timely fashion, in order to ensure continued safety at all times.

The overall distribution of women over the site and the patterns of their use indicate a direct correlation between spatial elements and their ability to cue the experience of safety.

### **3. Women's leisure activities are aided by but not limited to safety**

The theoretical framework for the study prescribes leisure as embodying women's ability to safely interact with the environment, for any activity of their liking and within the spatial conditions that they find ideal to do so. Thus, women's practice of leisure in a park is not limited to their experience of safety but is also motivated by the type of activity they wish to perform and enabled by opportunity and legitimacy that the public park provides them to do so (Fig. 4). The practice of women's leisure was found to vary over age of the women, number or grouping, type of activity, and degree of privacy required for each activity.

### **4. Women practising leisure in the public domain is an active act of resistance**

In our society, women are prescribed long lists of appropriate 'feminine'-like behaviours that they must present in the public and private domain. By opting to pursue leisure in a public space, women 'misbehave' and demonstrate a freedom of choice and personal control that attacks these restrictive social orders.

However, women can only risk the act of leisure, if sensitively designed environments support their intention of doing so. Parimal Garden is a unique case; although still gendered, it caters to many of women's requirements and perhaps that is why it is one of Ahmedabad's most celebrated gardens.

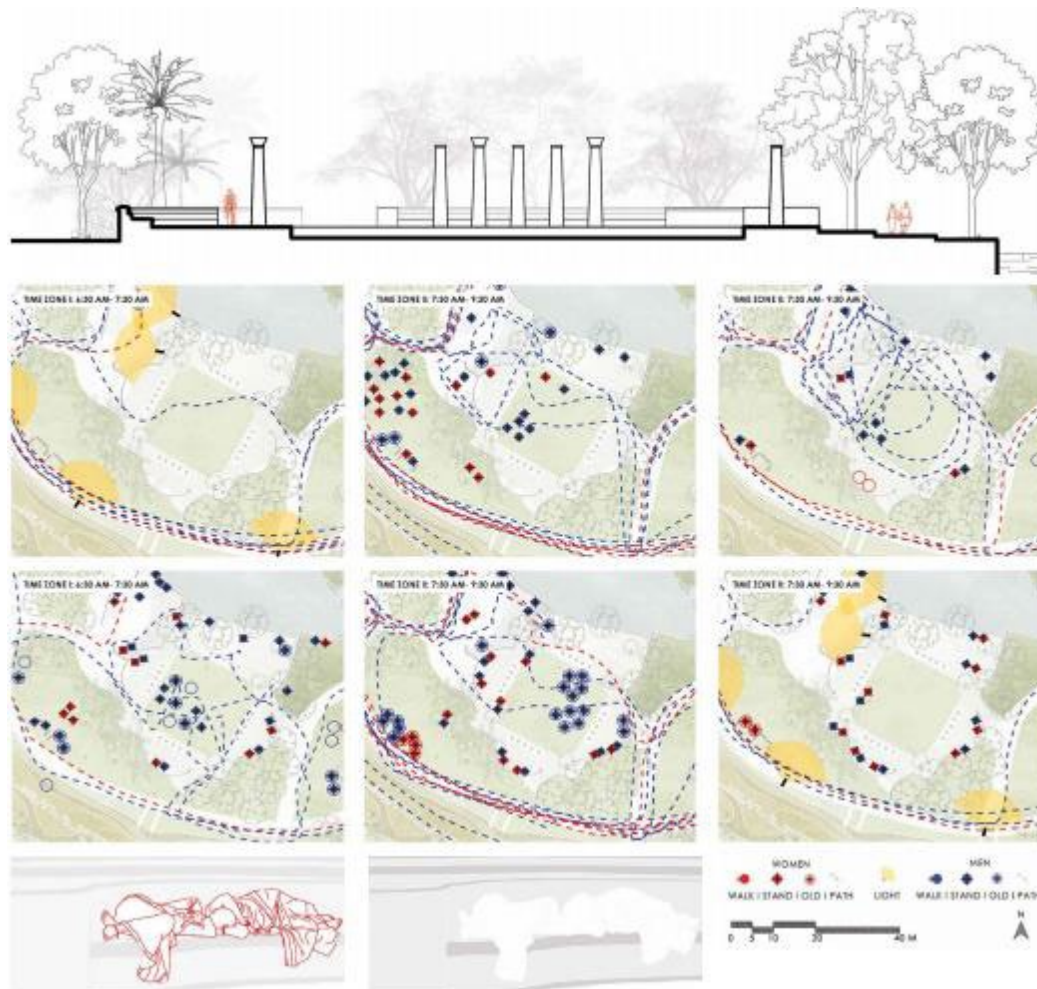


Figure 4: Example of one of the six sub-sites selected in order to analyse the meaning and practice of leisure by women of different ages, at different times with respect to different spatial cues. Depicted here is the formal garden, analysed using temporal mappings and measure drawings

## Conclusion

Upon inspection of various different spatial conditions in Parimal Garden, the paper infers that women are able to comfortably seek leisure when the built environment provides unique and intuitive spaces that create a safe and supportive environment. The design of such spaces occurs over a spectrum of scales—from placing the park in a relevant urban context, to the orientation of benches, till the trimming of leaves on an overgrown shrub. Thus, the inclusivity of a public park is impacted both by the design of built and un-built infrastructure, as well as that of the natural landscape. Once the paper definitively establishes direct correlations between women's pursuit of leisure, and the cues provided by the spatial elements, it concludes that even within a single public park, there exist innumerable design opportunities for the sensitive and inclusive production of leisure experiences for all of the city's occupants, irrespective of gender, age, economic strata, sexuality, or even disability.

The spatial arrangement of people in relation to each other, with a degree of greater or lesser relationships, impacts the social order wherein members of society live and reproduce these social identities (Hillier & Hanson 1984). Thus, in order to develop equitable, 'humane' cities, both men and women must be able to safely access and have positive experiences in the public domain while feeling that they belong there. This 'pleasure' of belonging is enabled by the critical availability of sensitively designed facilities that cater to women's safety and respond to their unique requirements for sanitation, caregiving, recreation, and leisure. Since the very act of being in the public without a domestic purpose is seen as 'unwomanly', the bodily experience of leisure, when brought to the city streets for every woman, supported by public infrastructure, begins to challenge the gendered nature of public spaces. Thus, for architects and urban designers, the decision to design unique spaces which are able to provide such an inclusive experience, despite the strong bias that exists in the society against women occupying the public realm, is the urgent paradigm shift required to resist the systemic Indian patriarchy through the built environment itself.

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# Fantasy Visions, Informal Urbanisation, and Local Conflict: Contradictions of Smart City Imaginaries in India

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*Keywords:* Smart Cities, Inclusive Planning, Insurgent Citizenship, Informality, Urban Governance

## Introduction

Smart city discourses are a dominant phenomenon in the urban context worldwide in the 21st century. In the urban discourse in India, smart cities have assumed a centralised role in building the futures of cities in India, triggered by regime change at the Centre in 2014. In this paper, I seek to understand the impact of smart city imaginaries (and their associated discourses and materialisations) on the collective and political life of the informal residents in cities. I study how informal urban residents, especially slum dwellers, negotiate the smart city plans and rhetoric that dominates the urban material and policy space in Indian cities while attempting to be inclusive towards their housing demands. Through in-depth investigation of an in-situ slum redevelopment project (part of the smart cities initiative) in Bhubaneswar city in Odisha, I examine the 'inclusive' smart governance in practice and the ensuing urban politics in the city.

Scholars have previously critiqued the 100 smart cities imaginary in India, terming it as a post-colonial utopian dream, driven by a neoliberal and entrepreneurial interest in the city that has the potential to undermine democratic values (Chakrabarty, 2018; Das, 2020; Datta, 2015a, 2015b; Watson, 2015). The relevant textual and visual perspectives and representations of smart city imaginaries have been examined and well documented across disciplines in theory (Hoelscher, 2016; Hollands, 2008; Kummitha & Crutzen, 2017; Prasad & Alizadeh, 2020; Rose, 2019; Söderström, Paasche, & Klauser, 2014). In general, literature engages with the phenomenon rhetorically with sweeping accounts of cities in the 100 smart cities list (such as studies by Datta, 2015b in Dholera).

A key knowledge gap however exists in terms of the lack of grassroots-based ethnographic accounts of knowledge and action related to the smart city initiative. This gap is acknowledged by Datta (2015b) who notes that "the available tools of analysis... need to be complemented by ethnographic details on the everyday struggles faced by those at risk of being excluded from India's urban future". In this context, it is useful to re-examine what the smart city imaginary represents in the Indian city and what it reveals and hides (Hollands, 2008).<sup>1</sup> Smart city initiatives (such as redevelopment projects that accompany the proposals) are a catalyst for fast-paced local changes to socio-spatial configurations in the city. These local area-based development projects are



thus a significant site of inductive inquiry for planning scholarship. Through a year-long ethnographic work in the city, I highlight how future goal dependencies in cities are in direct conflict with the existing institutional and power/knowledge configurations, thus contributing to the reproduction of political inequality and dehumanisation of slum dwellers. As we delve deeper into local narratives and actions, the key ideas of 'digital turn' in urban planning approaches in India seems contradictory and even detrimental to the marginalised slum dwellers who are at the margins of urban policy space in Bhubaneswar city.

### **Theoretical and Conceptual Framework**

Urban spaces are constituted by an open interplay of imaginations, discourses, and material spaces. Urban imaginaries play a key role in the constant deconstruction and reconstruction of this interplay. I take up a social constructivist approach in this study, thus assuming that all imaginaries are a social construct, and are open to interpretation from multiple frames. This is a post-structuralist position that understands planning and governance as institutional frameworks that take into account history, cultures (institutional and forms of governance for example), and future imaginaries and desires (goals). I use a combination of various theories and concepts to make our observations in the field. I draw ideas from evolutionary governance theory and co-evolutionary planning theory by Beunen, Assche, and Duineveld, (2015), which provide a theoretical lens to understand the planning process as a complex interplay between actors and institutions (a/i); power and knowledge (p/k); and co-evolution of discourses within a wider context of formal and informal (f/inf) institutional and governance pathways (that are influenced by path and goal dependencies). Additionally, I draw from ideas on urban informality (Alsayyad, 2004; Kundu, 2019; Roy, 2005, 2009), insurgent planning practice (Miraftab, 2009; Roy, 2009), and conflicting rationalities between and within actors (Ngwenya & Cirolia, 2020; Satgé & Watson, 2018; Watson, 2003).

### **Data and Methods**

I employ a qualitative methodological framework that draws on participant observation, document analysis, and semi-structured interviews of slum dwellers who risk eviction from the redevelopment project in Shantipally Basti, professional city planners, slum activists, and representatives, elected political leaders, municipal officials, academicians, and local non-governmental organizations. The interviews were conducted at various times within the previous year (between June 2019 and November 2020). Owing to the ongoing COVID-19 pandemic, all interviews between March and September 2020 were conducted through phone conversations and online platforms, keeping in mind all ethical considerations and with participant consent. All interviews were transcribed and the relevant identified narratives were coded using descriptive and thematic codes. I reconstruct the narratives of the respondents to understand and theorise from the ongoing conflict (between slum dwellers and the state) related to the displacement of

197 slum households as part of the Shantipally Basti Redevelopment project. As described earlier, I use multiple perspectives from various stakeholders to understand the relationship between actors (people, organisations); institutions (born out of interactions between actors, such as the smart city proposal, the Shantipally redevelopment proposal, media reports, city master plans, etc.); discourses (what the actors and institutions represent through their narratives and actions); and the co-evolution of forms and sites of power (state-driven, grassroots insurgence, etc.) and knowledge formulation.

### **Findings and Arguments**

The findings are threefold. First, analysis of the narratives reaffirms the academic discourse that the smart city initiative is a direct result of hegemonic middle-class discourses in tandem with neoliberal calls for an entrepreneurial city that are based on a Western-oriented urban aesthetic. These discourses create a demand for 'smart' governance frameworks that easily privilege the urban middle class, real-estate developers, and the social elite while marginalising the slum dwellers further by questioning their legal citizenship and legitimacy while using local scaled law enforcement and structural violence (see similar findings by Das, 2020; Datta, 2015b). Second, the process of materialisation of the 'smart' neighbourhood formation in the city is resulting in the creation of internally displaced persons (IDPs) within the city that has further impacts on their social and political networks and fight for legitimacy in the urban space. In this context, the smart imaginaries are in direct conflict with the existing informal nature of urbanisation that dominates the material landscape in cities. Finally, the affected slum dwellers balance their actions between holding on to political linkages to attain 'formal' citizenship status in the city, while engaging actively in counter-hegemonic practices (through a range of anti-eviction strategies) against represented by the smart city discourse.

### **Conclusions**

The study has several implications on planning theory and practice in Southern cities. The case of Shantipally redevelopment and resulting conflict shows a classic case of the dangers of goal and path dependency in terms of urban governance pathways, often resulting in investment lock-ins, conflicts, and a culture of mistrust among actors in the urban spatial and policy space. The hegemonic discourses accompanied by 'smart' imaginaries are attempting to build smart neighbourhoods that reproduce and reify the existing colonial planning pathways, often relying on violence and informal governance means such as deregulations (as described by Roy, 2005, 2009). In this context, planning pathways run the risk of creating complicated path dependencies (for example, new forms of conflicts may arise between tenured slum dwellers and the state related to livelihood and legitimacy in the city) that may lead to further state-citizen conflicts in the future. While in rhetoric, the smart city proposal in Bhubaneswar city claims to be

inclusive of slum dwellers' rights and livelihood; yet what is observed from this local case is that the planning process adopted for the materialisation of the same is highly contradictory. The idea of a smart city can be seen as based upon an imaginary that has a motivation to 'dominate through inclusion' (see Miraftab, 2009 for similar perspectives in other Southern cities).

Counter-intuitively, the speedy nature of conflict has given rise to new spaces for grassroots insurgent citizenship among the historically marginalised groups, such as rising women activists' voices and the use of formal legal channels to delay state evictions. These narratives are mostly motivated by a desire to attain 'formality' and legitimacy within the urban space. Findings from this paper can be useful to understand and theorise local urban politics in Southern cities, especially to examine the complex relationship between power in translation through urban imaginaries, on one hand, and formal-informal dialectics, on the other.

### Note

<sup>1</sup>The approach of 'documentation' as strategy for critiquing has a scholarly tradition (based on Foucauldian ideals) in planning studies that can be traced to in-depth inductive studies by Flyvbjerg (1998), Flyvbjerg and Richardson (2005), and Sharp and Richardson (2001).

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# Urban Property in Kolkata: Narratives of Everyday Experiences and Imaginaries

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Property, being all-encompassing in developing and capitalist societies, tends to make its presence felt on multiple grounds. The everyday experiences of individuals and communities with property at several points have drawn the attention of multitude of scholars. It is argued that “property is the focus of struggles at all levels of social organisation, within and between families, communities, classes and states” (Benda-Beckmann & Benda-Beckmann, 2006, pp. 1–2). This being suggestive that property must be and has been theorised taking into consideration diverse conditions of social, economic, and also ecological change. Political theorist Andrew Reeve (1993) has further argued that not only does property have a central place in social life, but society is also intrinsically about property institutions. Scholars observed that urban spaces in South Asian cities are layered with meanings, values, and norms mediated by shared language and cultural moorings. They assert that property is not only a political or economic relationship between persons located here but a social relationship as well. This then necessitates a contextual understanding of the actors and sets of relations involved in the production, consumption, and distribution of property across South Asian cities. Therefore, complex entanglements between temporal politics, practices, and imaginaries arising from a range of contexts call for a subject-centred perspective. This work argues that underlying the visibly changing aspirations and anxieties related to property ownership<sup>1</sup> are the concomitant changes in the degrees of interaction between communities in a city.

In this research paper, drawing from two rounds of qualitative fieldwork that was conducted between September 2017 and December 2018 in Kolkata,<sup>2</sup> I focus on the patterns and consequences of ownership of immovable property between two communities, namely Bengalis and Marwaris. The movement of migrant Marwari traders from the western Indian state of Rajasthan to the city of Calcutta (now Kolkata) can be traced back to the pre-Independence period. The emphasis here is particularly on the presence of Marwari families in a dominantly Bengali-occupied city and addresses the concerns that emerge out of everyday negotiations and interactions between these two communities. In her highly praised work on the Marwaris in Kolkata, anthropologist and historian Anna Hardgrove has captured the social life of the Marwari framed by the Bengali experience (Hardgrove, 2004). She notes that in shaping the symbolic boundaries of the community, these individuals constantly interact with the local Bengali residents in the city. The country-wide network of Marwari businessmen and traders has played a central role in the planning of Kolkata since the early years of the formation of Calcutta Improvement Trust. Urban historian Partho Datta has

mapped out how the commercialisation of older areas in Calcutta in early 1940s and the predominance of Marwari merchants “pushed the Bengali middle classes to move south, to places like Ballygunge, which had already attracted private developers” (2012, p. 270). It would be interesting to note at this juncture that in his work on Calcutta in the early 1960s, anthropologist N.K. Bose had pointed to the presence of several ethnic groups, their housing patterns, and how each had their own network of association. He claimed that “it was not until after independence, however, that the large Rajasthani element in the trade and commerce of the city began to regard it as their home” (Bose, 1965, p. 100). Almost in premonitory tone, he considered that the growing presence of this ethnic group (Marwaris) in the city would heighten the competition for the Bengali middle class in the process of sustaining themselves in the city. While “the Bengali middle classes were averse to trade and industry and preferred the liberal professions” (Bagchi, 1970, p. 240), the Marwaris are acclaimed for their entrepreneurship for several generations in India and abroad. They are considered to be traditionally a trading and banking community who over the years emerged as major industrialists (Timberg, 1978). This points to the characteristic difference that exists between these two communities.

At present, when scholars like Nikita Sud (2016, p. 9) point out that real-estate developers are key beneficiaries of post-liberalisation state policies of land in West Bengal, it is considered that as capital operates in networked formations where networks of family and community become highly important (Sud, 2016, p. 12), the presence of Marwari real-estate developers becomes conspicuous across the city. But this role of the Marwaris as real-estate speculators and property holders unpacks a different set of power relations within the city. In the course of my research, I observed that while, on the one hand, Marwaris are culturally disdained and considered to be a suspicious, close-knit community by the local Bengalis because of their role as large property holders and brokers, on the other hand, in certain ways as the economic power in Bengal is shifting to a different community, such as Marwari, this contemporary scenario can be considered the irony of the Bengali middle class in this city that used to have majoritarian Bengali population.

Therefore, building from a review of literature and ethnographic fieldwork in Kolkata, through this paper, I intend to highlight the existing two-fold relationship between the Bengali homeowners and Marwari real-estate developers in the city. First, there are a set of negotiations that take place when the Bengalis as homebuyers seek to buy a house from Marwari developers in the city. In West Bengal, following the government's intervention, several public-private partnerships have been formed to meet housing delivery (Sengupta & Tiplle, 2007) where most of the developers belong to the Marwari community. Hence an engagement between these two communities becomes inevitable as one meets the demands of the other. Second, another set of negotiations unfold

when Bengali homeowners try to sell their house to Marwari developers. With the rise of vertical living families since the mid-2000s in the city, the texture of the city has been undergoing rapid changes in certain pockets, if not entirely. As maintenance of property is increasingly becoming a challenge for the present generation of Bengali families, more and more individuals are inclined to sell off their ancestral house to developers in lieu of monetary gains or with the hope of moving into flat/apartment living. Therefore, the dual presence of a '*Medo*' (a term used to refer to Marwari in common parlance) businessman/developer in the Bengali middle-class construction of their identity can hardly be neglected. These Marwari businessmen are also seen as a class exploiting the Bengali community at large (Banerjee, 2009), yet negotiations and interactions between the two are rarely avoidable. Though this paper is part of a larger project, here I specifically seek to address the question of whether a community can be conceived simultaneously as a subject and an object in social science research. Here I highlight how the presence of the Marwari, who in spite of being the signifiers of business community, are often associated with the notions of 'other' and how the Bengalis as a community attempts to distinguish themselves from the other. Thereby this work attempts to grasp the logic of reproduction and articulate the everyday experiences and imaginaries of two antagonistic communities living in the city.

### Note

<sup>1</sup>Property is primarily differentiated as movable and immovable property. In this work, I engage with immovable property only and consider homeownership within it.

<sup>2</sup>I have mainly conducted interviews by following the purposive and snowball sampling methods, where I have gathered data from Bengali homeowners and Marwari developers across the city.

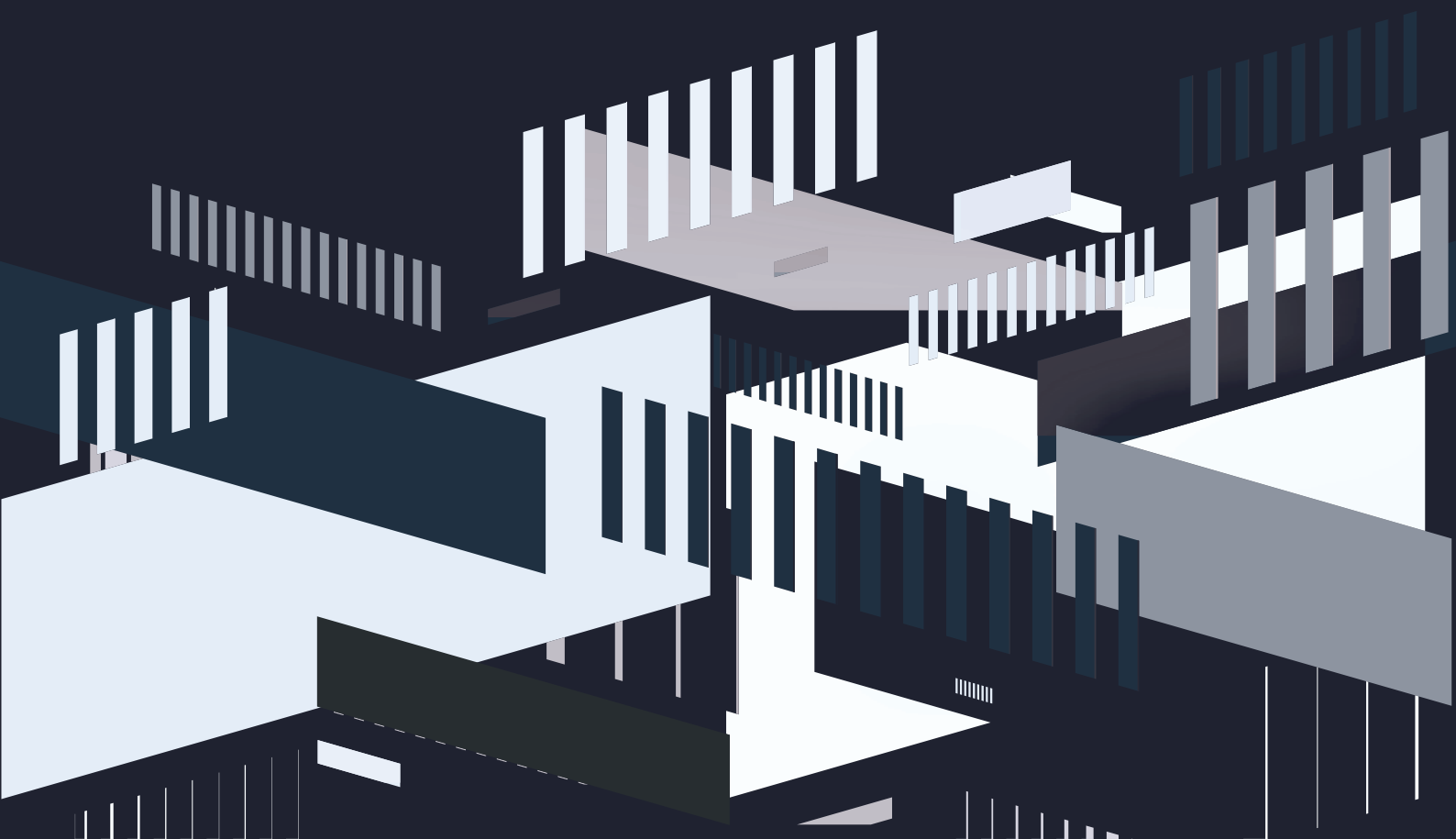
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Panel 6

Transversals: Materiality  
and Method for the  
Southern Urban Question:  
Invited Plenary



Teresa Caldeira; University of California, Berkeley

Kelly Gillespie; University of Western Cape, South Africa

Gautam Bhan; Indian Institute for Human Settlements

Abdoumalig Simone; University of Sheffield, UK

### **Panel Abstract**

This panel was jointly presented as a conversation, representing the working method the four panellists have been using over the past two years. Together, the panellists are interested in new ways of articulating urban questions, rooting them in the urban everyday to understand conditions of collective and everyday life. The panellists introduced the ideas of transversals as a method of thinking about the urban and speaking from and across multiple cities. They articulated a narrative from Sao Paulo as an entry point and argued with it in order to show how thinking transversally and collectively offers a new way of urban thought.



Panel 7

# Growing Cities: Urban and Peri-Urban Agriculture in the Global South through a Lens of Sustainability and Well-Being



## Panel Abstract

Today we live in an increasingly urban world: from a mere 13% urban dwellers in 1900, today the world is more urban than rural and by 2050, the global urban population is expected to be 6.3 billion (70% of the total) (UNDESA, 2019). Most of the population growth is projected to take place in the growing cities of Africa, Asia, and South America. Africa and Asia are urbanising today at a faster and with a greater intensity than the rest of the world's regions (United Nations, 2012). At the same time, today's cities are increasingly diffuse with urban areas growing on an average twice as fast as urban populations (Seto et al., 2011). This physical and demographic expansion has resulted not only in land-use change but also social, cultural, economic, political, and biophysical urban transformations (Seto, Parnell, & Elmqvist, 2013). Thus, urbanisation is a complex and dynamic process that takes place over multiple scales of space and time (Grimm et al., 2008a, 2008b).

While cities are key sites of innovation and development, rapid urbanisation has also triggered urban sprawl, urban poverty and inequality, relatively high unemployment rates, higher and often exclusionary living costs, and environmental degradation (Zhang, 2016). However, cities are also identified as critical sites of action to meet climate change and sustainability goals. They integrate communities, built infrastructure, and nature in ways that open up spaces and options to foster innovation and experimentation (Bulkeley & Castán-Broto, 2014), stimulate citizen involvement (Cloutier, Papin, & Bizier, 2018), and supply ecosystem services that improve the quality of life (Vargas-Hernández, Pallagst, & Zdunek-Wielgołaska, 2018).

Built form has tended to dominate urban imaginaries, with a focus on infrastructures for housing, manufacturing, transport, and public administration. More recently however, this focus on grey infrastructure has been expanded to acknowledge the role of blue and green infrastructures.<sup>1</sup>

Several researchers have identified green infrastructure or nature-based solutions as one of the key ways to achieve the triplet of sustainable development, well-being, and climate action through fostering biodiversity, maintaining air quality, regulating water resources, providing food and nutrition, improving public health, and building psychological values, which improve non-material well-being (Demuzere et al., 2014; Fink, 2016; Gill et al., 2007; Meerow & Newell, 2017; ; Wamsler et al., 2016). Such an expanded understanding of cities recognises the values non-human systems play in allowing cities to grow and thrive.

In this session, we focus on urban and peri-urban agriculture as one such facet of urban green infrastructure that has multiple implications on urban life and human well-being, sustainability, and imaginaries of what cities can be when green infrastructure is valued

as much as grey infrastructure. However, today's cities are seen to be evolving into 'second nature' consisting of overlaps and strong linkages between natural and social environments (Bohn & Viljoen, 2015). This 'socio-natural' process indicates that the evolution of cities and Urban and Peri- Urban Agriculture (UPA) in itself is a historical-geographical process and that they are inseparable from each other (Conrutt and Swyngedouw, 2000). It also suggests that any modification or change in one entails a modification or change in the other. This perspective has important implications in terms of interpreting and dealing with contemporary social, political, and environmental problems in cities.

Approximately 266 million urban households, that is, close to 800 million people, in developing countries are engaged in urban agriculture and provide 15–20% of the world's food (Armer-Klemes, 2000; FAO, 2019; Thebo, Drechsel, & Lambin, 2014). Furthermore, in recognition of the Sustainable Development Goals (SDGs), urban agriculture is envisaged to be assisting in decreasing hunger and poverty (SDGs 1 and 2), in creating sustainable food production patterns (SDG12), and in promoting the integration of environmental values in development (SDG 15) (Game & Primus, 2015).

Recognition of the potential of UPA in addressing some of the challenges posed by rapid urbanisation has gained momentum in the recent decades. Through a review of existing literature, Orsini et al. (2013) synthesised strengths and weaknesses of urban agriculture in developing countries. They highlight the contributions of urban agriculture in providing food and nutrition security, health, developing local economies, enhancing social inclusion and gender relations, and mitigating environmental impacts. Taguchi and Santini (2019) showcase the differences in urban agriculture perspectives between Global North and South. While in the North, urban agriculture practices tend to be popular as the means to lead a sustainable way of life or to create social ties within a community, in the Global South, it is practised mainly to provide food and nutrition supply for families and also to generate income.

Multifunctional UPA systems are now recognised to be contributing to enhancing social and economic benefits as well as enhancing ecosystem services (Cabral et al., 2017). Interest in UPA recently is triggered by recognition of its potential multiple co-benefits and contributions such as enhance urban food security, reduce urban poverty, promote social inclusion, enhance urban environment management, contribute to local economic development, and build food system resilience. Yet, academic literature that addresses the contributions of urban agriculture to urban sustainability and well-being from the Global South is rare to come across.

This session proposes to present urban and peri-urban agriculture imaginaries through the lens of sustainability and well-being outcomes experienced in India and Tanzania. We conceptualise the links of various types of urban and peri-urban farming systems

with well-being and sustainability outcomes, resulting in urban sustainable imaginaries/transitions as depicted in Figure 1.

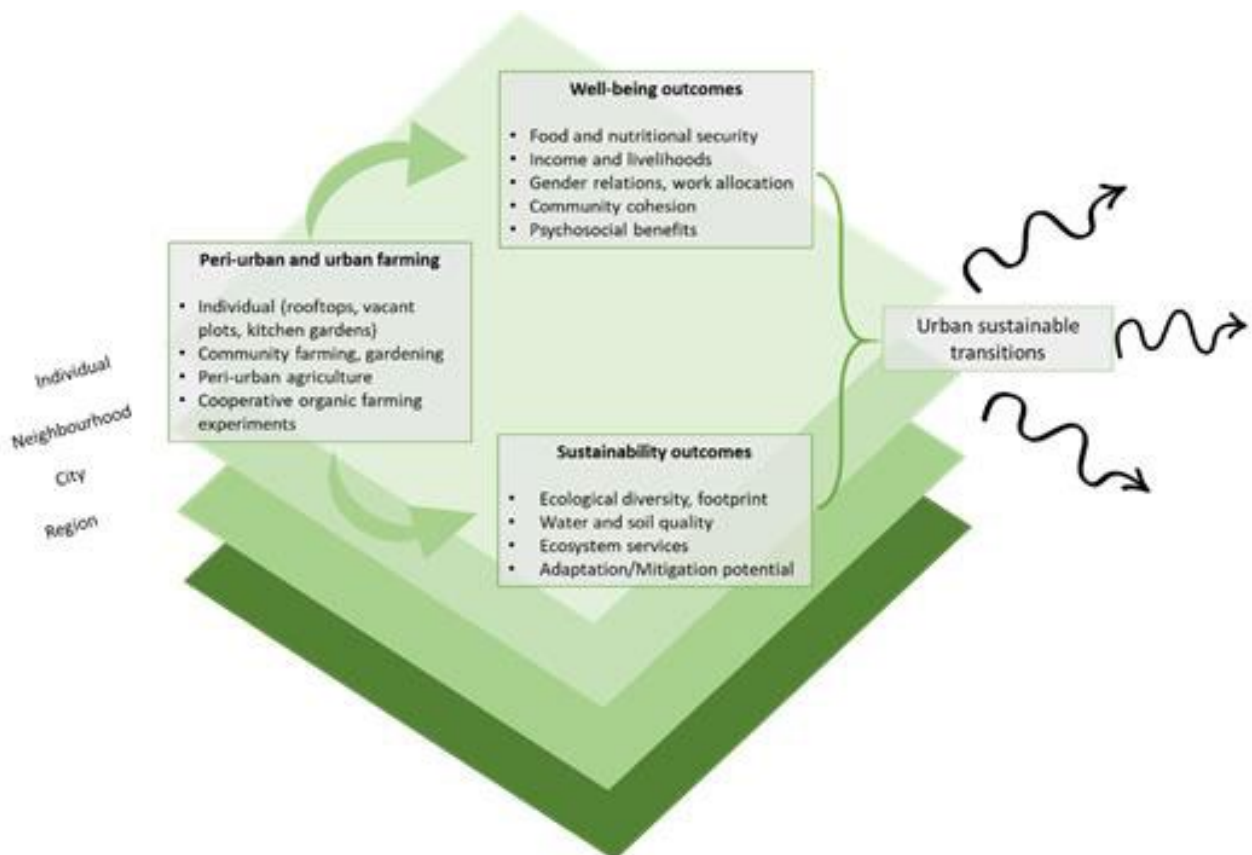


Figure 1: Urban and peri-urban agriculture imaginaries through sustainability and well-being lens.

Sustainability and well-being outcomes vary depending on the scale and type of urban and peri-urban agriculture practice existing in any region. The emerging findings of the collaborative research study between Tanzania and India, titled Urban and Peri-urban Agriculture as Green Infrastructure (UPAGri), will be presented in the proposed session. Taking examples of Dar es Salaam and Morogoro, the presentation by the research team in Tanzania intends to explore food synergies between the two cities with a focus on imaginaries of the production process, supply chain, institutional framework, and challenges and opportunities associated with UPA in the two cities. Their study will also attempt to envisage UPA's contribution in environmental conservation or degradation while suggesting a policy framework to facilitate sustainable UPA. The second study from Tanzania contextualises peri-urban agriculture in the wake of climate change in the fast-growing city of Dar es Salaam. Using both qualitative and quantitative research methods, the study highlights the perceptions of peri-urban farmers about future changes in the link between UPA and urban food systems due to the effects of climate change.

Imagining UPA as green infrastructure, the team from India chose two cities—Bangalore and Pune—for a detailed enquiry of perceptions about benefits and challenges of practising UPA. While noting the contributions of UPA in enhancing urban sustainability and well-being, the team highlights the gaps in formal policy support of any sort in facilitating UPA. Taking into consideration the potential of other sectoral policies, the study finds several entry points to steer support for UPA that would help sustainable UPA movement at city scale.

The fourth study in the session by one of the network partners in UPAGrI highlights the need for imagining the cities integrated with farming in order to reduce urban ecological footprint while generating green livelihoods. Taking the example of the national capital, New Delhi, the study found many challenges for urban and peri-urban farming (e.g. land governance, pollution, and exclusionary planning process). Echoing the previous study from Indian team on the gaps in formal support for UPA, this study imagines support from policy and planning frameworks in order to promote urban farming and seek innovative solutions to address multiple crises faced by today's modern cities.

## Notes

<sup>1</sup> Green infrastructure comprises the interconnected set of natural and constructed ecological systems and green spaces (Bazaz et al., 2018). It can be understood as a hybrid infrastructure of green spaces and built systems (e.g. forests, wetlands, parks, green roofs), which incrementally contribute to urban resilience and human benefits through ecosystem services (Demuzere et al., 2014).

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## Cities and Food Synergies: Case of Urban and Peri-urban Agriculture Production and Supply between Morogoro and Dar es Salaam, Tanzania

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Dynamics of food and cities are among the fast-growing concerns worldwide as population surge, urbanisation, and climate change continue to be a reality in the cities of the Global South. This is due to the fact that all cities are neither equal nor growing in the same pace and direction, thus calling for interdependence among cities of closer proximity to meet the food challenges amidst increasing population, urbanisation, and the increasing climate change effects.

Urbanisation in the cities of Global South is one of the major factors influencing global reality. It is estimated that, by 2050, 70% of the world's total population will be located in urban areas and will be subjected to forces of urbanisation that would bring fundamental changes to the socio-economic environment, including in the prospects for food and nutrition security (FCI, 2001). In trying to address the challenges of food in cities, the Food and Agriculture Organization (FAO) has come up with the Food Initiative for the Cities to overcome the negative effects of urbanisation on the urban *and* rural population, as well as the environment, by building more sustainable and resilient food systems. One of the aims of the Food Initiative is to place an added emphasis on urban and peri-urban agriculture (UPA) that contributes to food availability, particularly of fresh produce; provides employment and income; and enhances the food security and nutrition of urban dwellers. Moreover, UPA encompasses a complex and diverse mix of food production activities, including fisheries and forestry, in many cities of the developed and developing countries.

Food in cities creates a chain of trade all along from farms where vegetables are grown, the markets where the farm products are sold, the street food outlets where the foods are cooked, the individuals who own businesses, to their immediate families who benefit out of the business and roles of food vending activities in the cities of developing countries.

As the population continues to surge, particularly in the cities of the Global South, cities find themselves in a situation where they can neither sustain themselves in food production nor create good market demand (consumers) for the produced food, thus conditioning the cities to form a synergy of food production and consumption. Dar es Salaam and Morogoro are typical examples of cities that have forged a production and consumption relationship to address the challenges of inequalities between them in



terms of their size, population, geographical location, rate of urbanisation and socio-economic profile.

Dar es Salaam is a city in the east coast of Africa along the Indian Ocean dating back to 1800 when Sultan Sayyid (the Sultan of Zanzibar) settled and established a town within coastal fishing villages known as Mzizima (Vibrancy). The city is currently a business centre and the former capital city of Tanzania with a population of about 6 million (NBS, 2018). Dar es Salaam is among the three most urbanising cities in Africa and among the 10 fast-growing cities in the world expecting to be a mega city in 2030 (Sturgis, 2015). Due to socio-economic profile and population size of Dar es Salaam, the city is an attractive market for food products from all over Tanzania, Morogoro being one among them. Morogoro is a municipality located about 200 km from Dar es Salaam and the major activities in the city are agriculture and industries. Morogoro's population is about 500,000 according to the 2012 census. Both the cities have been actively engaged in UPA though in different scales due to parameters such as population size, rate of urbanisation, socio-economic profile, location, and soil type, among others.

A report by Aragrande, Argenti, and Lewis (2001) explains that food supply and distribution systems (FSDSs) to cities are a complex combinations of activities, functions, and relations (production, handling, storage, transport, process, package, wholesale, retail, etc.), enabling the cities to meet their food requirements. These activities are performed by different economic agents (players): producers, assemblers, importers, transporters, wholesalers, retailers, processors, shopkeepers, street vendors, service providers (credit, storage, portage, information, and extension), packaging suppliers, public institutions (e.g. city and local governments, public food marketing boards, Ministry of Agriculture, Ministry of Transport), and private associations (e.g. traders, transporters, shopkeepers and consumers).

This study intends to investigate the food synergies between the two cities by focusing on the production process, supply chain, institutional framework, challenges, and opportunities that are associated with the UPA of the two cities. Specifically, the study focuses on how the green vegetables UPA is practised (*process—land ownership, location, typologies*) in the two cities, particularly who are involved (*actors—individuals, formal/informal groups, private/public*) on the production side. The study also is interested in ascertaining the systems/framework (*policies—formal/informal*) that are in place to facilitate the UPA in the two cities. Yet another focus of the study is to understand how the two cities are interdependent (*supply chain—pull and push factors*) in terms of production, on one side, and consumption, on the other. Finally, the study will attempt to determine whether the practice of UPA plays a role in environmental conservation or degradation (*awareness, use of tools—manures, pesticides, water, etc.*) in the two cities. Methodologically, the study intends to use mainly qualitative and

exploratory methods due to the nature of the pilot study that was conducted in Morogoro and Dar es Salaam.

There is an extensive body of literature covering various aspects of UPA practice around the world, including Morogoro Municipality and Dar es Salaam city. The study by Mntambo (2017) shows a linkage between the fast growth of urban agriculture and its potential to reduce poverty, food insecurity, and environmental stress as well as the gender dynamics. Another study by Mdanku (n.d.) explains the involvement of communities in practising vegetable and fruits in Morogoro, where they adopt sustainable methods like rainwater harvest, natural fertilisers, and organic pesticides in their practice. All these studies have been conducted in the Morogoro municipality. There are other studies that report the negative implications, for example, use of low-quality irrigation water (Samson et al., 2018): farmers use low-quality irrigation water (e.g. from the rivers) for various reasons (e.g. lack reliable access to water, limited awareness of health problems associated with low-quality water). Other reasons why farmers use low-quality water for irrigation are: easily availability, scarcity of freshwater (domestic water supply), unreliable rainfall, and ability to produce vegetables throughout the year (Mayilla et al., 2017). Another negative aspect is noted by Katakweba et al. (2015) who highlights the transfer of faecal microorganisms between cattle, humans, water, and soils within the farms and from livestock farms to the neighbourhood in the selected households in the municipality.

Other studies show that the pace of urbanisation is causing loss of land for agriculture, particularly vegetables in urban and peri-urban areas, which may lead to a shift of urban agriculture from the extensive to intensive method (Putter et al., 2007). The report points out that the vegetable trading chain is driven by informal markets that operate based on trust between individuals who stay far apart from each other. In a study, Dongus (2001) covered several issues pertaining to urban agriculture in Dar es Salaam including an involvement of the urban dwellers in urban agriculture as a strategy to survive and that it offers employment and food security. He further added that almost 650 hectares, which is equivalent to 4% of the whole surveyed area, of the urban area in Dar es Salaam is currently used for vegetable production in open spaces, offering employment for over 4000 farmers. Dongus further noted that over 200 hectares of agricultural open spaces vanished during the last seven years, which is a sign of the impact of urbanisation. Malongo et al. (2014) have pointed out that food production in and around cities is an integral part of the urban fabric in much of the developing world and that it is important to diversify urban diets and provide environmental services in urban and peri-urban areas. The report stressed that there is a growing interest in UPA as a strategic component of urban resilience and climate change adaptation planning.

The above body of literature has touched upon many aspects pertaining to UPA; however, it can be seen that little has been said about the synergies that are forged between cities to address the interdependency of cities in vegetable production supply. Thus, this study intends to focus on the supply and marketing of vegetables between Dar es Salaam and Morogoro and the factors associated with the dynamics including market forces, climatic variation, population, and urbanisation. Moreover, the study will also focus on the demand and marketing of UPA products in Dar es Salaam and how farmers in the Morogoro municipality are taking advantage of the proximity, benefits and challenges faced by farmers within the food synergies, and how the interdependence between the two regions sustain UPA activities.

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## Contextualising Urban and Peri-urban Agriculture in the Wake of Climate Change: The Case of Dar es Salaam, Tanzania

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In this study, an assessment is made of the impacts of climate change and variability on urban and peri-urban agriculture (UPA) systems. Moreover, how UPA systems influence dwellers' livelihoods and its associated challenges and opportunities are also focused upon. Specifically, the objectives of the assessments were to assemble and synthesise knowledge on the state of peri-urban agriculture in Dar es Salaam with particular emphasis on its climate and environmental change aspects; identify where insufficient knowledge exists and highlight where additional research and assessments are needed; provide scientifically credible information that supports policy planning and decision-making at the city level and which informs climate-aware development planning more broadly; and build capacity of the scientists to undertake assessments on the topic of urban food production and climate change.

The assessment involved a total sample of 281 respondents. Equal numbers of respondents were drawn from urban and peri-urban wards. In urban areas, respondents were drawn from low-, medium-, and high-density areas. Primary data were collected using a structured questionnaire. Secondary data collection involved gathering grey literature from the libraries of several higher learning institutions and from the relevant departments of the municipalities of Ilala, Kinondoni, and Temeke. Data were also collected through transect walks, observations, picture taking, focus group discussions, formal and informal discussions, maps, and climate data. Data from the primary source was thereafter verified, coded, entered, and analysed using the Statistical Package for Social Sciences (SPSS) computer program. Moreover, over 50% of the respondents owned land on which they practise UPA. About two-thirds of those undertaking UPA reported on the challenges, namely presence of livestock diseases, lack of initial capital, lack of knowledge and skills among keepers, and expensive poultry feed limiting livestock production in UPA. Respondents agreed that chemical pollution and land degradation emanating from keeping dairy cattle in UPA would in the future have an impact on climate change and perceived competing water use with other sectors. Respondents predicted that there would be a change in linkages between UPA and urban food systems of crop-related products due to effects of climate change in the future.

The assessment results predict that because of climate change there would emerge additional challenges in the way people would access livestock-related food products from UPA. This is the same case with crop-related food products. Over 50% of respondents agreed that there would emerge additional challenges because of climate change in the way people would access vegetable- and crop-related food products from

UPA. About half of the respondents agreed that the effects of climate change would in the future entail additional production costs on eggs than in other livestock-related products and that because of climate change all livestock-, crop- and vegetable-related products produced in UPA would be vulnerable to climate risks in the future.

# Understanding the Impacts of Urban and Peri-urban Agriculture on Human Well-being and Urban Sustainability: A Case of Bangalore and Pune

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In the last few decades, cities across the world have undergone dramatic transformations. UNDESA (2018) predicts that by 2050, 68% of the global population will live in urban areas and 90% of this increase is projected to take place in Asia and Africa. However, the reality of such urban cities is two-fold. On one hand, it is marked with increasing demand for urban services including food supplies, growing inequality, and acceleration of the mega-city problems like congestion, shrinking green spaces, increasing greenhouse gas emissions, and proliferating informal settlements (Cook et al., 2015; Padgham, Jabbour, & Dietrich, 2015). On the other hand, urban cities are also seen as sites of immense opportunity and areas that improve well-being and sustainable urbanisation by leapfrogging unsustainable trajectories (Revi & Rosenzweig 2013; Bazaz et al., 2018). This applies to the context of most Indian cities like Delhi, Pune, Bangalore, Kolkata, Chennai, and Mumbai where rapid urbanisation is associated with multiple social and environmental challenges, thereby creating a need for innovative methods of urban design that combine built form of cities, food production, and design (Ali & Srivastava, 2017; Cohen, 2006). Hence, in this study, we specifically focus on urban and peri-urban agriculture (UPA) as green infrastructure and attempt to examine the implications of agriculture on human well-being and urban sustainability in and around two cities—Bangalore and Pune.

Bangalore and Pune have witnessed unprecedented growth in area and in their populations. The built-up area in Bangalore increased from 7.9% in 1973 to a whopping 58.9% in 2012 and its population also increased from 2 million in 1973 to 8 million in 2015 (Ramachandra et al., 2019). Pune shares a similar trend, with its population increasing almost three times from 1 million in 1973 to 3 million as of 2012 (Butsch et al., 2017). Such a burgeoning growth has taken a toll on their green spaces mandating the need to explore UPA as a potential nature-based solution. Therefore, using an exploratory methodological approach, the study examines the impacts of UPA on built

infrastructure, ecosystem services, and land and water use in the cities of Bangalore and Pune.

Specifically, we are exploring how UPA is socially differentiated and privileges/marginalises certain people/groups with varied human well-being outcomes. We also aim to co-develop and test strategies that allow UPA to contribute to urban sustainability. To unpack these questions, we use a combination of qualitative, quantitative, and spatial methods of data collection that include a detailed policy and literature review, farmer visits, 54 online interviews with diverse stakeholders, biodiversity assessments, and resource flow analysis extended over a period of 11 months.

Our preliminary findings indicate that the concept of UPA has started to gain worldwide popularity; however, in India, it remains niched and minuscule. Geospatial mapping of the land cover in both the cities indicate a dramatic increase in built-up areas. However, in the last decade, the nature of UPA in Bangalore and Pune is changing where sites of small and large food-growing farms in urban fringes and rooftop and kitchen gardens are becoming more common. Many residential, institutional, and private actors are recognising the importance of UPA, thereby engaging in community gardening that is combined with creative forms of knowledge sharing and peer-to-peer learning through social media, videos, and webinars, making it a larger movement. Practitioners are also recognising the potential environmental, social, and economic benefits of urban farming, ranging from food and nutritional security, closing the loop for municipal wastewater and solid waste management, to improved levels of income, health, and environmental awareness. The current COVID-19 pandemic, on one hand, has triggered the uptake of UPA, and, on the other hand, has highlighted the need to explore the potential of UPA as a strategy to reimagine and recreate a more localised, sustainable, and hence resilient food system that can withstand such future shocks.

Having recognised the importance of UPA and its trends over time, we realised that currently UPA does not find any mention in the Agriculture Policy of 2000, while the 2008 National Policy for Farmers suggest that home gardens and nurseries would be encouraged in urban areas. However, major programmes and schemes resulting from the agricultural policies of the country do not seem to be relevant to the scale and specific characteristics of urban and peri-urban farming. However, there are policies from other sectors currently, which can serve as multiple entry points for integrating and promoting the forms of UPA.

Our initial findings show that UPA has multiple benefits—from fostering people to undertake individual actions with sustainability co-benefits like rainwater harvesting and wet waste recycling to broader implications like potential heat island mitigation and reduced greenhouse gas (GHG) emissions through reduced food miles. Most critically, UPA practices have led to reimagining the role of city dwellers where bottom-up



practices of growing, sharing, and learning have created communities of solidarity, with very tangible subjective and relational well-being outcomes. In doing so, we argue that in dense and growing cities in India, UPA offers multiple benefits for sustainability and well-being: acknowledging them is the first step towards imagining healthier, greener cities.

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## Farming the City Is Key to Reimagining the City: Policy Insights from Urban and Peri-urban Delhi

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The process of urbanisation is central to the viciously exclusionary and unsustainable trajectory of the dominant developmental model. Urban development, guided by linear thinking and extraction-oriented urban planning, is pushing for expansion of cities outwards, upwards, and downwards, thus creating newer conflicts over resources, frequently leading to dispossession of peri-urban and rural communities. An uncritical pursuit of this variety of development has also brought a general lack of attachment with other forms of life. Urban life is now marked with a characteristic alienation from the key social-ecological processes which have historically made the survival of human societies possible. Another kind of separation that shapes the alienation of urban life is dissipating control over one's environment, which further widens the disconnect from the processes that affect us and limits possibilities of action.

It is not surprising then that the proportion of urban food supplies being sourced from distant rural regions continues to grow, while the vast tracts of urban and peri-urban land are being consumed by speculative growth of rent-seeking real estate. As a result, the ecological footprint of urban regions, especially that of food supply chains has grown huge. Also, tens of thousand tons of waste generated in cities every day is getting piled up in landfills, which have now become garbage mountains.

To address the roots of the crisis, the relationship of cities with nature needs to be fundamentally reorganised. Practice of urban agriculture in an urban neighbourhood and the vicinity of the city is one such activity which promises a radical alternative to the increasingly globalised, financialised, and ecologically intense urban food systems. By shortening the food chains and by creating feedback linkages between food, waste, and energy systems, it promises to not only bring down the overall ecological footprint of the city regions, but also let people take back control over the conditions in which their food grows, balance the nutritional composition of their diet, and reduce the number of toxic chemicals both in food and in the ambient environment. Urban agricultural production supplements the household food supplies and thus brings down the expenditure on food and increases effective household income. This has the potential to strengthen the interpersonal and communal bonds in urban neighbourhoods by creating local markets for exchange of home-grown food and food grown in community gardens. Urban agriculture can enable the practitioners and urban residents to cope with stressful urban life and improve mental health, and thus contribute to the overall well-being. Thus, municipal-level decentralised coordination of urban farming activities

can help a city region achieve significantly greater sovereignty over food, land, water, energy, livelihood, and knowledge.

Urban agriculture is a diverse set of practices with a wide range of objectives, inputs, outcomes, agents, processes, and feedback loops. These include the agriculture in urban and peri-urban fields, rooftops and backyard gardens, and allied livelihoods including poultry, dairy, cattle, and other forms of livestock farming, sericulture, and aquaculture (in a river, pond, or other water bodies). The ecosystem of urban agriculture includes not only these different forms of farming but also the waste recycling and composting process using its outcome as organic inputs to take care of the soil, sustainable management of water resources, grazing fields, and other urban commons, freight transport system, use of renewable energy sources at the farm, and so on.

This paper presents an overview of urban agriculture in Delhi and its suburbs. Extensive fieldwork was conducted for eight months to cover all the areas in and around Delhi and more than 100 people were interviewed, which include the farmers, agribusiness entrepreneurs, terrace gardeners, and researchers. Our findings suggest that there has been a serious decline in farming and allied activities in the study region due to issues of land governance, water pollution, and exclusion in planning. But the role of urban agriculture in the overall food security of Delhi, particularly concerning vegetables, milk, and meat, remains more than significant. However, the systematic neglect and exploitation of farmers have pushed urban and peri-urban farming in Delhi to the margins and it has become nearly invisible.

The inimical relationship between the global current of urbanisation and local practices of urban agriculture is exhibited in the form of end of the land tenure system, treatment of urban farming on the Yamuna floodplains as illegal, absence of housing, transport and other basic amenities, and the risk of loss of livelihood. Interestingly, the findings suggest that women are an integral part of the urban agriculture workforce, which is also consistent with the findings in previous studies on the subject across the globe. We also found that this is one of the very few meaningful livelihood options for the migrant poor who are traditionally skilled at farming. Thus, it can be seen as a strategy for conservation of rural knowledge along with the protection of the urban environment.

Urban agriculture has not received much scholarly and policy attention in the past. However, the trend seems to be changing with more empirical research being conducted to assess the benefits of various types of urban farming. Globally, cities in Cuba, Vietnam, and Japan, and various African cities such as Nairobi and Kampala are some of the real-world examples of how urban agriculture can become a key feature of urban development and transition to an alternative organisation of urban resources. We argue that Delhi and other cities in India should learn about (but not replicate) these initiatives in more detail and reconsider their urban policies in the light of these

inspiring stories of collective endeavour. It is tragic that because of the lack of institutional support, many sites of urban agriculture today are illegal. Therefore, we strongly recommend that cities move towards embracing urban agriculture wholeheartedly in their future policy and planning frameworks. It is high time that we create a critical mass of the urban farming community and seek ways of expanding it in our crisis-ridden cities.



Panel 8

# Media Imaginaries



# Speculating the City: The Urban Imaginaries of Contemporary Indian Science Fiction

Annika Taneja; Independent Researcher

## Introduction

If urban imaginaries offer a way of envisaging the future of our cities, speculative fiction offers a way of imagining life in these future cities. As we hurtle towards what Lefebvre termed “planetary urbanisation”, with 68% of the world’s population estimated to be dwelling in cities by 2050, it should be no surprise that cities have always been the setting for fiction that speculates upon the future (Linder and Meissner, 2019). Today we are entering the metropolises science fiction<sup>1</sup> had begun to imagine for us long ago. What kind of cities it imagined, of course, varies. For some works, it was the idyllic utopia—a term coined by Thomas More in 1561, but a concept that long predates him (Mumford, 1922). For others, the city-to-come was a carnival of horrors: filled with towering skyscrapers, starving masses, and authoritarian Big Brothers.

For decades, speculative fiction in the West was caught in a dialectical dance between utopia and dystopia, with the former often threatening to turn into the latter (Moylan, 2000). But in the hands of influential movements like second-wave feminism and Afro-futurism, imagining the future became a tool to reclaim the present (Barr, 1987; Dery, 1994). The works of a new wave of science fiction writers—such as Octavia E. Butler, Samuel R. Delany, and Joanna Russ—used speculation as an intellectual mode to not just critique the prevailing order and ideological apparatuses but also to open up new spaces of possibility and alternate ways of thought. Over time, utopia (and, equally, dystopia) evolved into a way for writers to explore and embody radically new directions for their society and inspire change in the world outside the text.

Meanwhile, in a now independent India, a different face of utopianism had been underway: what theorists Ruth Levitas and Lyman Tower-Sargent define as an impulse or desire for social change and betterment (Levitas, 2013; Sargent, 1994). Prime Minister Nehru saw the country’s future in its urban centres, in cities “unfettered by tradition” and freed from both the oppressive backwardness of its villages and the exploitative shackles of colonialism. Building up India’s cities, for him, was akin to building up the nation itself (Srinivas, 2016). The ambitions and the pitfalls of utopian projects such as Le Corbursier’s Chandigarh, industrial steel towns like Durgapur, and the Modi government’s Smart City Mission have been well documented by critics. Some historical fictional utopias, such as *Sultana’s Dream* (Hossain, 1905) or Ravidas’s city of Begumpura (Omvedt, 2008), have also found their way into the canon of Indian urban imaginaries. But the body of Indian speculative writing in English—with its diverse imaginations of



the urban—that has emerged over the last 20 odd years is yet to find its place in the conversation.

### **Methodology**

This paper endeavours to fill this discursive gap through close readings of two works of speculative fiction. It contextualises the endogamous, fragmented cities of these fictional futures through contemporary debate and criticism around gated communities, caste networks, and bourgeois environmentalism in Indian cities, forming what Darko Suvin called feedback oscillations. Suvin argued that as a reader uncovers the tensions, contradictions, and failings of a fictional dystopia, she may come to discover critical strategies that equally apply to her own reality. When this connection comes full circle, it forms a feedback loop: the reader begins to see her context through the lens of the text and recognises its shortcomings. It is, therefore, not the work of fiction itself, but the way that it is read that is crucial to this literary form's transformative potential (Suvin, 1979, pp. 3–15).

The close reading undertaken by this paper borrows its cross-disciplinary methodology from Olivia Bina, Andy Inch, and Lavínia Pereirac's work 'Beyond Techno-utopia and Its Discontents: On the Role of Utopianism and Speculative Fiction in Shaping Alternatives to the Smart City Imaginary'. In this work, the three authors parallel social science criticisms of smart city techno-utopias with works of Western speculative fiction set in techno-dystopias to argue that not only do the two forms of critique coincide, but speculative fiction further offers "not-yet imagined or realised possibilities and trajectories for change" (Bina, Inch, & Pereirac, 2019, p. 4). Thus, if utopianism is ultimately a desire for change or betterment, studying the urban imaginaries of speculative fiction as a critical and a constructive lens offers a way to "pluralise and diversify ways of thinking and knowing, as a precondition for expanding our capacity to imagine and understand transformational futures" (p. 2).

### **Findings**

This paper will analyse the urban imaginaries of two works of Indian speculative fiction with the aim of highlighting the socio-political subtext of these texts and the forms in which they facilitate a greater engagement with the urban present in their readers. To this end, the paper makes use of both the work of eminent utopian theorists such as Darko Suvin, Tom Moylan, and Lyman Tower-Sargent, but also roots the contentions and tensions of these speculative futures in social science studies of contemporary urban India. In doing so, it aims to start a discussion on critical science fiction in India and its role in imagining urban futures that are diverse, sustainable, and equitable. Ultimately, it hopes to lead to further and deeper scholarly engagement with the rich body of speculative writing emerging from India, its prophecies for our future, and its lessons for our present.

Of the two texts under consideration, one is a novel: *Leila* by Prayag Akbar is set in an unnamed Indian city of the future <sup>2</sup> and documents a mother's search for her missing daughter. The second is the graphic novel *All Quiet in Vikaspuri* (henceforth *AQIV*) by Sarnath Banerjee, which is set in a near-future Delhi and focuses on its water crisis and the ensuing water wars. Each of the texts contains a form of neighbourhood antagonism or neighbourhood-on-neighbourhood violence, triggered by rising social conservatism and dwindling natural resources, spurred by a state that has all but retreated from the commons.

### **Privatopias of the Privileged**

In his work on the rise of homeowner associations and their private governments in the United States, Evan McKenzie coined the term "privatopia" to describe the planned communities, mostly populated by affluent individuals and families, that embodied "the pursuit of utopian aspirations through the privatisation of public life" (McKenzie, 2003, p. 208). Rana Dasgupta, in his book *Capital*, echoes this image when he describes how the spatial structure of Delhi is constructed to keep its social structure apart, rather than together, concluding that it is "a segregated city, a city of hierarchies and clannish allegiances [...] and it has no truly democratic spaces" (Dasgupta, 2014, p. 12).

Both *Leila* and *AQIV* take the false insularity of the modern Indian gated community to its extremes. While *Leila* focuses on the breakdown of cosmopolitanism and the city's social fabric, *AQIV* offers a searing critique of the ethical and ecological barrenness of the residents of a future Delhi. Banerjee coins the term "short-termism" to describe the way the privileged prioritise the immediate fulfilment of their wants over humanity's long-term needs. This section unpacks the satirical image of the gated home/community as a delusion of self-sufficiency in the two texts.

### **Caste-ing the Commons**

The fight for control over community resources like water has always been at the centre of rural caste conflict, prompting Aditya Nigam to deem the traditional layout of an Indian village a form of personal dystopia for Dalits (Nigam, 2010). On the other hand, there has been a pervasive mythologising of the Indian city as space free of caste, as a space where merit determines access to resources and opportunities. Balmurli Natrajan's book, *The Culturisation of Caste in India* (2011), unpacks these claims of caste blindness in urban spaces, examining how the rhetoric of neoliberalism is repeatedly and pervasively used to disguise caste-based inequality and render it innocuous.

Both texts at hand are criticising the same phenomena: first, the belief that caste is not an organising principle in urban spaces, and second, the illusion that caste identities no longer contribute to material and economic wealth. This section will examine how, by

using their dystopian visions of the future to challenge the image of the present as one dictated solely by class considerations, these narratives force the privileged, urban reader to reconsider the comfortable illusion that caste has disappeared from the city.

### **Whose Environment Is It Anyway?**

In her book *Uncivil City* (2020), Amita Baviskar argues that the bourgeois environmentalism of Delhi ultimately achieves neither social nor environmental justice. Instead, such movements “penalise the wrong people and push the problem somewhere else: outside Delhi, into the future” (p. 23).

The future of Leila and, particularly, the future of AQIV are a consequence of precisely such an undemocratic environmentalism, as a result of which nature itself has turned hierarchical. Between the pristine privatopias and squalid slums of the city, the class divide has become inseparable from the pure/impure, upper/lower caste binary, creating a world where “everyone produces trash but only a select, marginalised few wade in and transform it” (Korom, 1998, p. 198). This section focuses on the satirical solutions to the ecological crisis put forth by each work, their echoes in present-day Delhi, and what, if anything, can be done.

### **Conclusion**

As Gyan Prakash, Michael D. Gordin, and Helen Tilley write in their introduction to *Utopia/Dystopia: Conditions of Historical Possibility* (2010), “Utopia, dystopia, chaos: these are not just ways of imagining the future (or the past) but can also be understood as concrete practices through which historically situated actors seek to reimagine their present and transform it into a plausible future” (pp. 2–3). This speaks directly to the crisis in urban imaginaries that Nick Dunn identifies, in which the promise of the technocratic utopia “leaves us grasping for radical alternatives for urban imaginaries or resuscitating the ghosts of previous ideas” (Dunn, 2018, p. 383). The urban imaginaries that populate works of Indian speculative fiction pluralise our visions of tomorrow through their detailed prophecies for different urban stakeholders. Ultimately, what they ask of us is that we imagine a better future for our cities, instead of being trapped in an ancient, mythical past or a fraught, post-colonial present.

### **Notes**

<sup>1</sup> This essay uses the terms science fiction and speculative fiction interchangeably in keeping with the conventional classification of science fiction as a form of speculative fiction.

<sup>2</sup> Akbar’s fictional city draws upon his personal experiences as a resident of Delhi and Mumbai. For more, see: <https://www.thehindu.com/lit-for-life/love-and-other-jihads-prayaag-akbar-talks-about-his-novel-leila/article22382409.ece/>.

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## Infrastructural Imaginaries and Urban Futures: Cell Antenna Radiation Controversies in Indian Cities

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In this paper, I will be examining controversies around siting of cell antennas in three Indian cities of Delhi, Mumbai, and Jaipur (from 2010 to 2017), and how various stakeholders (including journalists, city dwellers, regulators, radiation experts, telecom service providers, cell antenna operators, and oncologists) debated one another in rooftop meetings, newspaper columns, and media studios to emerge with particular infrastructural imaginaries and urban futures.

Indian cities are to some extent cellular cities, with cell antennas, cell phones, and cell phone service advertisements very much a part of their streetscapes and skylines. Though not visible, cell antenna signals enveloping the city's cluttered atmosphere make their way through (un)planned congeries of things and people. Bouncing off buildings and permeating crowds, these radio-frequency electromagnetic signals (RF-EMF) connect millions of cell phones (Mukherjee, 2020). As Shannon Mattern (2017, p. 2) writes, "since the mid-nineteenth century many cities' atmospheres have been charged with electric and electromagnetic telecommunications—telegraph and telephone wires and radio waves. These ethereal actants seemed to bend the laws of physics and raise profound existential and ontological questions about presence, temporality, and corporeality." After wireless telegraphy and then radio, the RF-EMFs the cell antennas emit are also part of the electromagnetic atmosphere of the 'ethereal' cities.

In 2010, some of the first reports of potentially carcinogenic cell tower radiation appeared in Mumbai's daily newspaper *Mid-Day*. Cell antenna signals were causing concern for some Mumbai residents who found their apartment balconies in the way of antenna beams. The Hindi newspaper, *Rajasthan Patrika*, in its local Jaipur edition, published 80 stories in three months detailing the anxieties residents experienced concerning the mobile phone towers in their neighbourhood. *Rajasthan Patrika's* sustained campaign, which was called *Bhatti mein shahar* ("city inside the furnace"), made the courts take notice and also encouraged mainstream newspapers and television channels, which earlier had been hesitant to cover the controversy, to take up the issue on a national scale. The heating effect of furnaces (*bhattis*) was equated to the impact of exposure to the non-ionising electromagnetic radiation of a cell tower antenna. By mid-2012, India's telecom regulatory authorities had passed 'stringent' laws restricting antenna emission levels and ordered evictions of cell antennas that flouted city construction rules. In early 2014, cellular operators were citing the removal of cell towers by the government and antiradiation activists as the reason behind the recurrent call drops experienced by India's mobile service customers. With the entry of

Reliance Jio in 2015, there was suddenly a spurt in infrastructural investments as other telecom players like Airtel were also constructing cell towers on a massive scale in order to provide affordable digital data packages to the rising number of smartphone users. I follow these set of micro-and-macro media events and public gatherings around cell antennas to theorise infrastructural imaginaries.

Disputes around cell antenna siting and calls for their evictions tend to be hyperlocal. Sometimes a neighbour might want a cell antenna on the apartment opposite to them to be removed because they are an eyesore or the noise of generator used by it to be a nuisance. Some resident welfare associations were concerned about the well-being of their residents and at the same time some others felt the rent provided by cell tower operators to put antennas over their apartment rooftops was ensuring economic prosperity. Given the nature of these hyperlocal disputes, I have closely attended to the connections between spatial practices and urban socialities, and the role of media infrastructures (like cell towers) as agents of change alongside people and institutions (Neves, 2020; Sundaram, 2010). Urban imaginaries are also shaped by media, both national and local (city-specific), and it is important to study urban imaginaries in relation to media urbanism, in the way that medial dynamics shape discourses of urban development, city dweller's aspirations of particular lives and lifestyles, and cultures of belonging to the city.

The philosopher Charles Taylor (2002) has noted that imaginaries, in their orientation towards the future, are almost always drawn from historical experiences, geographic predicaments, and presently existing fields of social practice. My reason for studying imaginaries and media together is because imaginaries stress shared understandings, and media helps to reconfigure them. Imaginaries lie between the work of culture and the tasks of policy, and they thread together development priorities with lived realities. In their conceptualisation of socio-technical imaginaries, Jasanoff and Kim (2009) advise scholars to consider such imaginaries to be not part of an individual scientist's or engineer's mind but as "promises, visions and expectations of future possibilities [that] are embedded in the social organization and practices of science and technology" (122). Lisa Parks (2015) explains infrastructural imaginaries to be "different ways of thinking about what infrastructures are, where they are located, who controls them, and what they do". Parks's interest in infrastructural imaginaries stems from how ordinary people in their everyday encounters approach infrastructures as "objects of curiosity, power, investigation, and concern". Combining the work of these scholars, I have argued elsewhere that 'infrastructural imaginaries' are coproduced by states and citizens and lie at the intersection of structured state policy/corporate initiatives and lived experiences/affective encounters of ordinary citizens (Mukherjee, 2019).



The cell antenna radiation controversy was at once local because cell siting complications affect everyday lives of people at a very local level as they have to continue to see a cell antenna, which they apprehend to be emitting potentially carcinogenic radiation from their apartment window or balcony or while crossing the street when returning from work. These affective encounters with the cell antenna are part of their quotidian lives. At the same time, as national TV in the form of lifestyle shows (like CNN-IBN's *Living It Up* and NDTV's *We the People*) took up the cell tower radiation issue, the discourse about these media infrastructures (that is, cell towers) became a national issue.

While I was studying the cell tower radiation issue in the early decade of the 2010s, the role of resident welfare associations was growing, and the elite urbanites as urban citizens were claiming a particular idea of the city for themselves. These elite urban notions were marked by specific ideas of cleanliness and pollution, and which, as Gautam Bhan (2017) has noted, created a public discourse on urban development that was based on inequality, impoverishment, and exclusion powered by judicial activism. The geographer D. Asher Ghertner (2015) has explained how the early 2000s witnessed a “drastic increase” in public interest litigations (PILs) against slums by “resident welfare associations” (RWAs). These were property owner associations that gave “neighborhood security” and “local environmental issues” as reasons for evicting slums. I examine online blogs maintained by resident associations that targeted slum settlements for removal in their neighbourhoods. In these blogs, resident associations also argue that cell antennas are polluters and a public nuisance that should be evicted. Such blogs even suggest that the people staying in the slums are an important vote bank, and so it is not easy for governments to remove slums just like that. While the slums resemble a visible ecological threat, the cell antennas radiate the invisible danger of carcinogenic signals. Many in government see them as part of India's development story, part of the ‘smart cities’ initiative of the ruling administration. Ironically, in this framework the slums become polluters while the orderly and sleek-looking real-estate projects and malls are ‘green’ projects, even though several urban planning documents suggest such urban development projects are damaging the water table and floodplain of cities like Delhi and Mumbai (Ghertner, 2015). Cell antennas might be aesthetic eyesores for some, but others consider them a part of Indian modernity that guarantees they can use their sleek mobile phones. Thus, they remain ambivalent structures in the urban planning scripts, at once comparable to slums as ‘polluters’, and yet part of urban development projects in the ‘green’ category inhabited by shopping malls and multiplexes (Mukherjee, 2020).

While the environmentalism of the anti-cell antenna campaign was certainly tinged by not in my backyardism (NIMBYism) and “bourgeois environmentalism” (Baviskar, 2011), it needs to be noted that some of the arguments made by elite urbanites about flouting



of regulations by cell tower companies was indeed accurate. Cell towers were built in large numbers in several places that flagrantly violated the regulatory standards set by Department of Telecommunications (DoT) and city municipal corporations. One of such sites I visited was of Gaurav Bhatia, who lived in Clover Apartments in the Cuffe Parade area in Mumbai. He feared for the health of his preteen son and daughter because of 29 cell antennas that are located on the rooftop of Hotel Supreme, a commercial lodge next to his residential apartment. Hotel Supreme is only three floors tall, but the apartments that surround it have more than 20 floors. The antennas are angled upward, which makes residents of the posh apartments very worried about their safety. Bhatia and residents of other neighbouring apartments had moved a petition to the Mumbai High Court, and after the ruling, there were delays in the implementation, but finally a number of antennas were removed in March 2017: that said, a number of them have been put back in place again.

In some of the other case studies, based on my fieldwork, I examine how cellular operators and citizens campaigning against cell towers presented their cases to resident welfare associations, including performing experiments of radiation/signal level measurement through radiation detectors and an assemblage of various objects including microwave ovens and aluminium foils. Instead of a techno-deterministic or media-centric approach that highlights the efficacy of radiation detectors and sensors, I analyse these practices as an exercise in 'lay' citizen participation, where human capacities to apprehend radiation emerge through actual encounters with sensing technologies. Here, media becomes a complex assemblage or, still better, a 'practice in the making', where particular radiation-monitoring technologies and environmental concerns, as well as bodies and politics, "concretize into specific occasions that can galvanize citizen sensing" (Gabrys, 2018, p. 508). Here, we find a different kind of media urbanism where somewhat uncanny media objects like microwave ovens are put in relation to more conventional media infrastructures such as cell antennas.

Overall, cell antennas remain ambivalent infrastructures of urban development. Some urban denizens view it as a symbol of development and a necessary infrastructure to end digital divide and inaugurate smart cities. Others remain apprehensive about the possible harmful health effects of cell antenna radiation. Even scientists and other experts remain divided and uncertain about the long-term health effects of cell antennas. Thus, a particular culture of uncertainty remains about this media infrastructure and the urban imaginaries it constitutes and is in turn constituted by.

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# Urban Imaginaries, Home and (Un/be)longing in the Jesus Trilogy of J.M. Coetzee

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## Introduction

Simone and Pieterse (2018), with their focus on the Global South, assert that “the city is always something to be remade according to new models, new possibilities of generating value” (p. 3). They also shed light on the notion of “re-description” of a city, which goes beyond “imagination, fantasy or forward visualisation” (pp. 10–11) and emphasise on a “doubleness” entailing a “sense of aspiration, of making things different” and “of seeing in what exists something other than what we think we are seeing” (pp. 10–11). Their focus is on the “knowledge of how different urban realities can be enacted or tested in trials, experiments, or even play” (p. 11). In this context, J.M. Coetzee’s Jesus trilogy attempts the ‘re-description’ of an anonymous city in the South, with the presupposition of an “irreal premise” (Pippin, 2018, p. 12), by referring to two unspecified Spanish-speaking cities named Novilla and Estrella. According to Marc Farrant (2019), the cities denote a “twentieth-century South American setting” (p. 166) while Hedley Twidle (2016) attributes them to a “vaguely Mediterranean geography”. Coetzee uses the pair of cities as a “literary symbol...the physical embodiment of the Utopian community [which] reminds us of its perceived potential to achieve a kind of contained perfection, always in a desirable and sustaining equipoise and forming a refuge from the chaos that lies outside its walls” (Preston & Simpson-Housley, 2002, p. 2). By focusing on the trilogy, I argue that Coetzee interrogates and critiques the current model and thereby proposes and privileges a new model to complement the idea of an afterlife. I also contend that Coetzee’s construct of a new map facilitates the longing for a home in a sinister yet benevolent set-up where ‘mutual dependence’ is the key.

## Background

At the outset, it is necessary to understand Coetzee’s connection with the South. The release of the Spanish version of *The Death of Jesus* before the English version indicates Coetzee’s prioritisation of the South. In fact, he reveals that the central idea of the trilogy is of a ‘next life’ where the language spoken is ‘not English’ but ‘Spanish’ (Azkuna Zentroa, 2018). Coetzee has been visiting the National University of San Martín, in Greater Buenos Aires, twice a year since 2015, to direct a seminar series on ‘Literatures of the South’, with participation from invited writers of Australia and Southern Africa. It is a response to the global hegemony of American and British culture, ‘the cultural gatekeepers of the metropolises of the North’. “Coetzee’s vision of a culture of the South”, as Attridge (2019) rephrases, “embraces Latin America (several of whose countries he

has visited), Southern Africa, and Australia—and...New Zealand". Interestingly, Coetzee resists the term 'Global South' as "a concept merely, an abstraction invented by social scientists" (Attridge, 2019; Azkuna Zentroa, 2018) and proposes a "real South ... of shared physical experiences and long, complex histories of colonization". The Jesus trilogy bisects the notions of a mythic South and the real South in favour of an imagined South. It marks the culmination of the 'third stage' in Coetzee's life, which dwells on the 'second-order' questions such as "What is the difference between living in the real world and living in a world of representations?" (Attwell, 2016, p. 213).

### **Urban Imaginaries in the Jesus Trilogy**

Coetzee creates an alternative space in the Jesus trilogy, "a hazy, dreamlike version of our own", where the borders are "unclear" and the cities "feel etiolated, empty" (Spaeth, 2020). Nevertheless, Coetzee seems to follow Lynch's notion of "imageability", which entails organising the city's visual quality according to coherent structuring elements (Lynch, 1960, p. 9). Beginning with the arrival of Simón and David, Coetzee endows the city of Novilla with tangible markers such as the Centro de Reubicación Novilla, which is described as "a low, sprawling building" (Coetzee, 2013, p. 1). Ana directs Simón and David to the supervisor, señora Weiss: "Go to Building C. I will draw you a map. When you find señora Weiss, ask her to give you the key to C-55..." (Coetzee, 2013, p. 4). In fact, this can be interpreted as Coetzee's instruction to the readers to follow his map to find the 'key' of the trilogy. The readers walk with Simón when "he follows [Ana] across the park, across a street, across a second street" and reaches her dwelling (Coetzee, 2013, p. 6). Subsequently, Coetzee pictures the docks where Simón finds employment as a stevedore, where "wharves stretch upriver as far as the eye can see" (Coetzee, 2013, p. 13). Likewise, he reveals that Simón's place of residence, which later becomes Inés' home, is at "East Blocks: block B, number 202 on the second floor" (Coetzee, 2013, p. 149). He also introduces the readers to La Residencia, the place where Inés originally lives, with the glimpse of "a brick wall and a rusty gate overgrown with ivy... [and] a weather-beaten painted sign" (Coetzee, 2013, p. 81). As Simón and David keep walking, "they come to a point where the brick wall gives way to a high wire-netting fence. On the other side of the fence is a tennis court" (Coetzee, 2013, p. 82). Besides, Coetzee situates the Institute of Further Studies "on New Street, near the big intersection" and describes it as a "tall white building with glass doors" (Coetzee, 2013, p. 141). By invoking the sense of sight, Coetzee infuses life in the city.

Estrella is towards the north of Novilla. Coetzee draws the passage between Novilla and Estrella through small towns and road signs. The curiosity and ambiguity of Simón resonates with the readers: "They have no map. He has no idea what lies ahead on the road. In silence they drive on" (Coetzee, 2013, p. 311). Coetzee does not say but shows, as in the road sign, "*Estrellita del Norte 475 km, Nueva Esperanza 50 km*" (Coetzee, 2013, p. 321). He describes the farm in which Simón and Inés work upon their arrival with

attention to detail. He then situates the Academy of Dance “in the heart of the city, in the same building as the art museum” (Coetzee, 2016, p. 40). The description of the Academy is immaculate: “a sign in florid gold characters—Academia de la Danza—and an arrow pointing to a stairway...swing doors... a large, well-lit studio, empty save for an upright piano in a corner” (Coetzee, 2016, 42). For David to be enrolled there, Simón and Inés are forced to leave the farm and seek accommodation and employment in the city. Simón picks the job of delivering advertising material to households while Inés finds work in a boutique. Coetzee hints at the inevitable shift from farming to other activities in the city, for better prospects of education, and the resultant displacement. The art museum, which lies on the north side of the main square in Estrella, is bordered by “a long sandstone colonnade” (Coetzee, 2016, p. 42). Simón explores “the walls are rather sparsely hung. *Zafiro Gorge at Sunset. Composition I. Composition II. The Drinker*” (Coetzee, 2016, p. 54). Coetzee also gives a detailed account of Las Manos, the orphanage on “the far side of the river” (Coetzee, 2020, p. 2), where David stays till he is inflicted by the mystery disease.

Coetzee positions these physical features in his imagined topography with utmost care and calculated precision, possibly due to his proficiency in mathematics. According to Ryu Spaeth (2020), there is “no overarching culture” in the cities. However, these conventional markers do not undermine “the city as a field of experience” but define and facilitate its culture (Alev Çınar & Thomas Bender, 2007, p. xi). For example, the prominence attributed to the Academy, complemented by the museum and the art gallery, denote the importance of dance, music, and arts in Estrella. Markers such as Centro de Reubicación Novilla, free buses, free accommodation, easy employment, and the Institute of Further Studies, which offers the opportunity to be a better citizen without any cost as such indicate the city’s role as a benevolent facilitator of life and activity in Novilla. However, an exception to this leniency is the city’s strict intervention in matters of education, thereby making it compulsory for every child to attend school. Even in Estrella, the Three Sisters make arrangements for David’s admission in the Academy of Dance. Senor Robles, who is an engineer by profession, agrees to teach David without any fees at all. Senor Arroyo and Ana Magdalena of the Academy take personal interest in David. The hospital where David’s mystery disease could not be diagnosed is the only place in Estrella which does not live up to the expectations in what is, otherwise, a hospitable place. The citizens help one another in this utopia. Simón and Inés’ sacrifice for David and their acceptance by Elena, Alvaro, Arroyos, and the others indicate the significance of mutual dependence, which is the ‘overarching culture’ of the cities.

### **Home and (Un/be) longing in Urban Imaginaries**

The idea of home is central in the trilogy. In the beginning, the “new arrivals” are looking for employment and “a place to live” (Coetzee, 2013, p. 1). They belong to a different place and only carry “shadows of memories” (Coetzee, 2013, p. 77). In this context,

Novilla and Estrella both sate the longings for a home and, at the same time, espouse a sense of unbelonging. At first, the urgency for a home is reflected in Simón's inquisition to Ana at Centro de Reubicación Novilla, "Are there organizations [in Novilla] that help to bring families together—families, friends, lovers?" (Coetzee, 2013, p. 4). Ana's response, "No, I've never heard of such an organization" (Coetzee, 2013, p. 4), exonerates the city from matters of filial concern. However, the city plays the role of a facilitator by providing free accommodation, free transport, free education, and employment. Focusing on the negative side of the city, Marie Luise Knott (2020) points out the setting is that of a "welfare-state dictatorship", where an "invisible power" treats its citizens as "subjects" and strips them of "their memories, their histories, and their passions". Hania A.M. Nashef (2017), in a similar vein, analyses the role of a "faceless controlling bureaucracy" in Novilla (pp. 358–380). As the plot progresses, the thrust of Coetzee shifts from the 'invisible power' to the interdependence of citizens.

Simón's attempt to gain access to a "Personal Therapist" at the "Leisure and Recreational Centre" in Novilla is inhibited because, the receptionist tells, he is a "transient" (Coetzee, 2013, p. 165). When Diego asks Simón, "First, who are you...?", he replies, "Who I am doesn't matter. I am not important. I am a kind of manservant" (Coetzee, 2013, p. 95). In another case, Dmitri confronts Simón and calls him "a stranger from nowhere" (Coetzee, 2016, p.120). These reminders of being an outsider evoke a sense of unbelonging. Both the cities, on the other hand, have a network of mutual dependence, which Judith Butler calls "precariousness". Butler describes precariousness as "living socially, that is, the fact that one's life is always in some sense in the hands of the other... a dependency on people we know, or barely know, or know not at all" (Butler, 2010, p. 14). Novilla is inhabited by "refugees" (Pippin, 2018, p. 12) and "other displaced persons" (Anker, 2017, p. 185) while Estrella is "crisscrossed by the paths of immigrants" (Coetzee, 2016, p. 66). The setting of the trilogy thus facilitates the agency of precariousness and responds to Butler's urge for "the kinds of networks that receive people and which understand that everyone has a right to be received...everybody has a right to belong" (Ahmadi, 2020). Even David, Simón, and Inés do not have any prior connections of blood or kinship though they become a family.

## Conclusion

According to the UN (2020), "Today, more people than ever live in a country other than the one in which they were born. In 2019, the number of migrants globally reached an estimated 272 million". In this context, Coetzee's construct of a landscape composed solely of refugees tries to undo the binarism of self and 'others' and liberates the latter from being viewed as "second-class citizens" (Ahmadi, 2020). Coetzee, by his own admission, regards himself as an "international author in a different sense: a writer who is not located in any particular language or any particular country" (Azkuna Zentroa, 2018). He has lived in South Africa and Australia and visited Latin America. Novilla and Estrella give him the scope to create a transnational landscape with the fusion of the



places he has lived in or loved. Simón echoes Coetzee's sentiment when he says, "Here as opposed to where? There is nowhere else to be but here" (Coetzee, 2013, p. 21). Coetzee makes it amply clear that his readers have to inhabit his urban imaginaries to meet and understand his characters. Coetzee, like Senor Robles, is "writing a history of the settlement of the valley" while his reader, like Simón, wonders, "A history. I didn't know that places like Estrella had a history" (Coetzee, 2016, p. 24). The silver lining, which Coetzee highlights, is of a precariousness predicated on the notion of "corporeal vulnerability" shared by all mortal beings and the consequent mutual dependence to locate a home in each other. To sum up, Coetzee's urban imaginaries are not merely literary symbols but effective expressions of urban studies, held together by interdependence.

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# Space Making by Women in the Neoliberal City: The Cinema of Alankrita Shrivastava

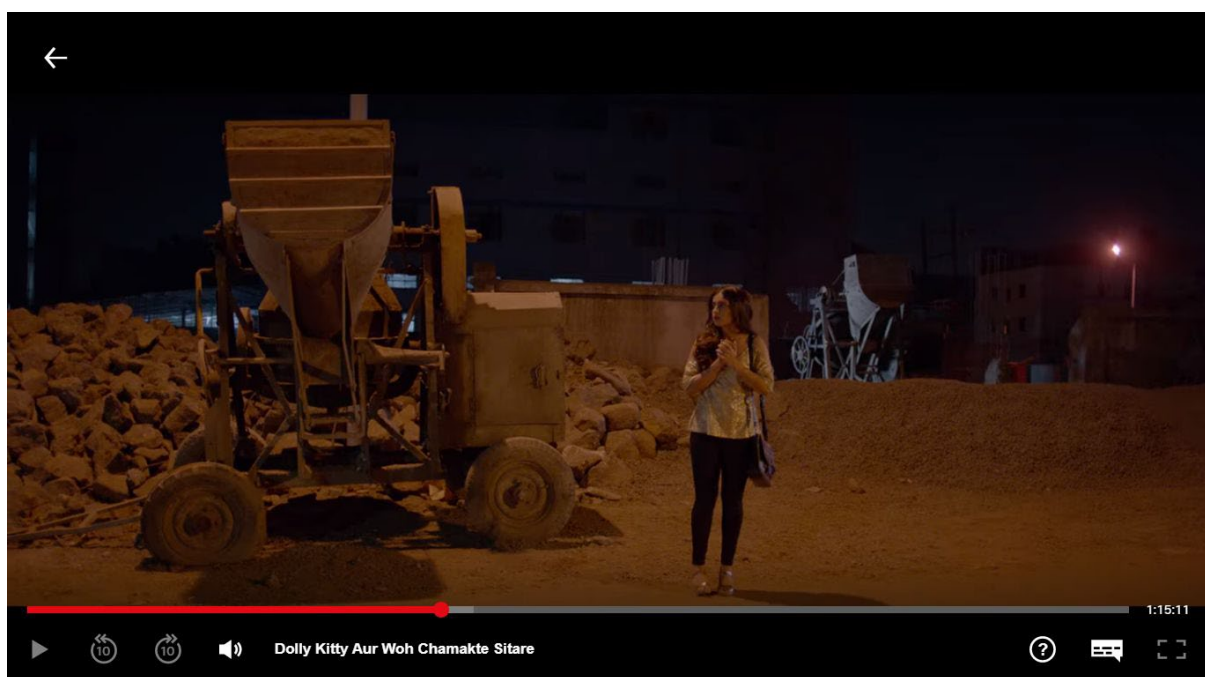
Isha Tyagi; Tata Institute of Social Sciences, Mumbai

## Introduction

*"I could not persuade her that a place does not merely exist, that it has to be invented in one's imagination."*

—Amitav Ghosh (2009, p. 23)

It is night-time in Greater Noida and a young woman dressed in a shimmer gold cold-shoulder top is waiting alone by the roadside for a friend to go for a party. The place where she is standing seems to be in the middle of nowhere. What is right behind her is cement, concrete, and those construction machines depicting a city still under construction. The worst fears of being stalked or harassed by a group of men do come true as a bus passes by from which she runs away, a fleeting but haunting reminder of the *Nirbhaya* case. Thankfully her friend arrives in a cab and the moment she enters the car, she leaves the placelessness of the unfriendly city behind to head straight into a place of leisure. In another place, we see her feeling the wind in her hair as she travels in a jeep zooming through the lone wide roads of the city as her friend in the driver's seat shouts that "Greater Noida is the new Shanghai". This happens even as typical JCB excavators stand solemnly on the sides of the road. The message is clear. The city is still being formed, projects are still under speculation, and the promise of neoliberalism has not been delivered yet. Yet, the euphoria and eagerness to posit Greater Noida as a world class city where starry-eyed dreams can be realised is all over the place. Though these are scenes from the latest film of Alankrita Shrivastava, *Dolly Kitty Aur Woh Chamakte Sitare* (2020), they are not quite far from the present reality of neoliberal urbanisation in our times.





(Screengrabs from DKAWS (2020))

In contrast, in Srivastava's earlier film *Lipstick under My Burkha* (2016), the city of Bhopal hasn't been swept by the wave of neoliberalism yet but is feeling its pressures. In that city, Usha, a woman in her fifties who runs a small business and is respectfully known as 'Buaji' in her community, reads in private the erotic stories of Rosie. Rosie, like Usha, is a woman with many desires living a closeted life, desperate to escape the confines of her house. But as per the story narration, the key of Rosie's locked house is lost and she has to content herself by living out her desires in her head even as the city outside engages in production with fervour. This psychological reality of living in a city and yet not being able to participate in its attractions due to one's economic, social, and spatial constraints is experienced by all the four women in this film. This forces them to claim freedom in secretive ways and in turn engage in a creation of space for themselves that enables them to chase their dreams.

### **Cinema and the Production of Space**

Space is neither static, nor neutral, but a social production at the three realms of existence—the one "conceived" by urban planners and imposed from a "far order", the one "perceived" in the everyday interactions by the people whose social relations structure the space in the "near order", and the one "lived" at the level of imagination, both individual and collective, through a mediation of signs and codes of spatial cultures (Kalyan, 2017, pp. 13–14; Lefebvre, 2014, pp. 291–292). These three realms of space intersperse and influence each other, creating slippages for the body at a micro-level to perceive and produce their own ideas of space, and in turn, their realities. Therefore, a focus on the everyday lives of people to understand embodiment of space from a cultural studies point of view becomes imperative to see the lived city.

When films try to tell these everyday stories, they are tasked with inventing the cinematic space and consciousness. In doing so, they reproduce the contested, creative space and in turn the urban imagination (Mennel, 2008). When we see a film, we see versions of space and the city that are mediated via the social worlds of the subjects in the film. These versions also depend on the filmmaker's own social class and their understanding of the world since the latter invents the space on screen. Since "cinema is a peculiarly spatial form of culture" (Mennel, 2008, p.15) and a "metaphor for

consciousness that constructs a new space and time originating in itself" (DeBlasio, 2019, p. 217), cinematic texts offer rich possibilities to explore the production of space and the experiential aspect of a city.

Ceuterick (2020) draws from various critical feminist theory scholars to analyse the "affirmative" aesthetics of occupancy of space by women in cinema. She applies Sara Ahmed's concept of "willfulness" as a way of inhabiting space that was always inaccessible in the first place, by consciously getting in the way of power structures that order space and social life.

Ahmed (2006) explores the concept of inhabiting space by being "orientated" in space to follow a certain "direction". Bodies inhabiting space tend to get "directed in some ways more than others" due to being asked to repeatedly follow a certain direction (ibid., p.15). By direction, Ahmed does not simply imply going a certain way but is also gesturing towards an order that one is asked to follow.

This order may not always suit the person inhabiting space and they may desire unfollowing the directions to explore different possibilities for themselves. One of the ways to unfollow may be to exercise one's will in challenging the given orientation of space. Drawing from Ahmed, Ceuterick (2020) does not locate willfulness simply in an individual's disobedience but in the collective "affect" of the small acts of resistance that a woman may be exposed to in their social and cultural sphere, and in the consequent experiential and "affective" habitation of space by them in ways that have been denied to them.

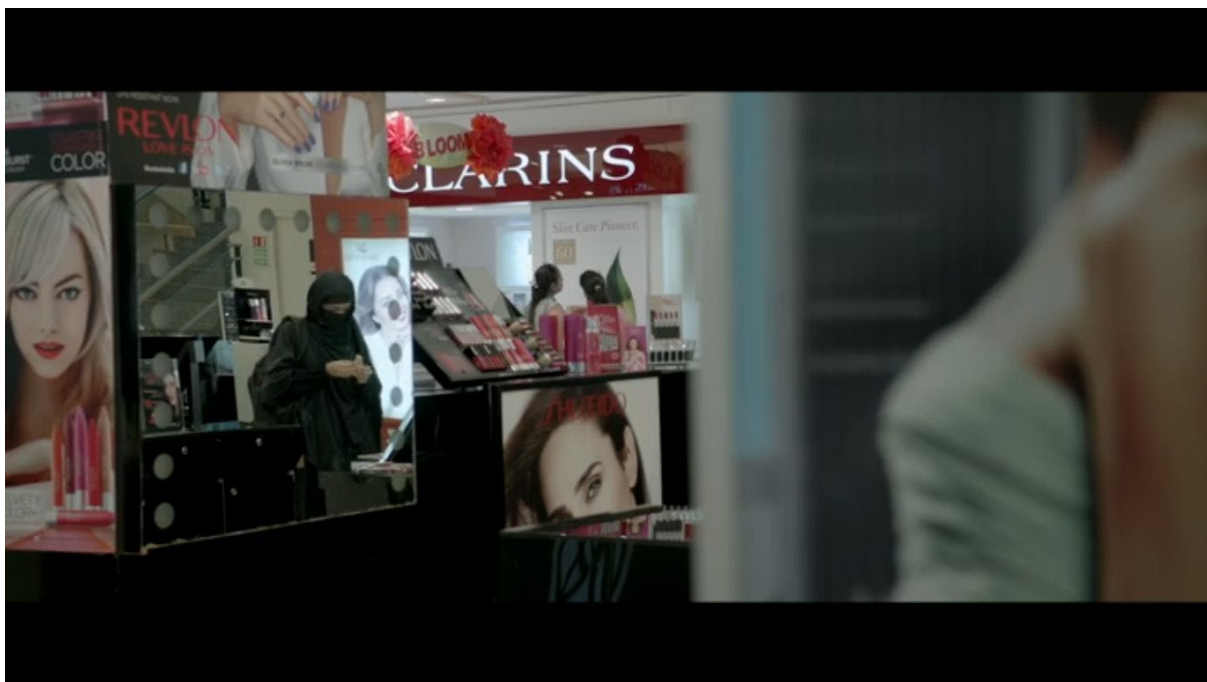
Hence, wilful bodies change our ideas of space by giving new directions, and we need cities that facilitate such spacemaking. But when it comes to feminist imagination of the urban, the discourse in urban society is dominated by a fear of the outside, that directs women to stay inside their homes for safety, when it should be the other way round (Phadke et al., 2011). Therefore, for new feminist urban imaginations, as a method we must turn to cinema and the subject of wilful women as they negotiate their way through the city to create space for their own desires and doubt (Ceuterick, 2020). The cinema of Alankrita Shrivastava, I propose, is a good place to start.

### **The Cinema of Alankrita Shrivastava**

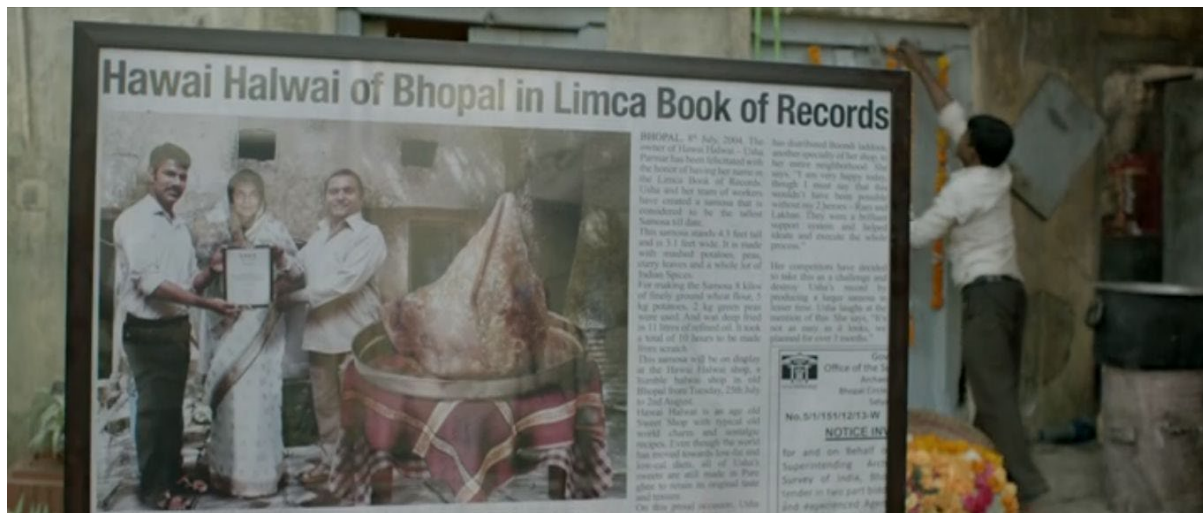
With her two films *Lipstick under My Burkha* (2016) and *Dolly, Kitty Aur Who Chamakte Sitare* (2020), Shrivastava explores the potential of women's desires in changing the trajectory of their lives that tend to follow a certain imposed order. In interrogating womanhood across religion, class, and age, she inserts the neoliberal city into the filmic exploration of women's pleasures and aspirations. By neoliberal city, I imply a city in which urban policy prioritises "market-centered growth" and "elite forms of consumption" that give rise to a consumer society (Brenner & Theodore, 2002 as cited in Miles, 2012).

*Lipstick under My Burkha* (LUMB) follows the private lives of four women in the city of Bhopal whose economic and social constraints prevent them from accessing space and their freedoms. They perform clandestine agentic actions by creatively bending their

spatial constraints to enjoy fleeting moments of freedom. At the same time, the city inhabited by them is trying very hard to resist the erasure of existing, local relations of production. The neoliberal forces of urbanisation threaten histories of social connectedness and seek to change the economic geography of the city via the promise of malls and high tower residential buildings. In between the women and the city, the ambivalence of the neoliberal project is laid out in the film. On one hand, the rise of consumption-based economy creates economic opportunities and social spaces for women in the film to explore their pleasures and freedoms. But on the other hand, it also threatens to destroy *Hawai Manzil*, an age-old building where various Hindu and Muslim families live in a community by replacing it with a mall. The only thing that comes in the way of real-estate builders and their project is the will of a senior lady Usha Parmar (Ratna Pathak), who is the owner of *Hawai Manzil* and also runs a local, renowned sweet shop that is housed in her building. The irony is that the same woman who stands resolutely by her people against the lure of neoliberalism is thrown out of her own house at the end of the film by the people living there, simply because they can't accept her as a woman with sexual desires of her own. *Hawai Manzil* is not just a housing society, but one of the few examples of inter-religious cohabitation and a relic of secular history in a time of rising vitriol against religious harmony. Can a city that does not fully accept its own women and outcasts them ever hope to be an independent economic entity that can save itself from losing its secular identity to neoliberalism?







Screengrabs from LUMB (2016).

*Dolly, Kitty Aur Woh Chamakte Sitare* (2020) (DKAWCS) takes the urban imagination further by laying out the unfulfilled promise of neoliberalism and throwing its women into the “placeless places” of the city of Greater Noida, which unlike other cities has a recent history of urban development. The giving away of plots of land by the state government to builders has led to the rise of residential buildings, malls, and expressways connecting the city with nearby towns and cities. Cities like Gurgaon and Greater Noida were built near Delhi to decongest the capital and provide nearby connectivity to associated businesses and offices. Despite the desire to pose them as world-class cities by urban planners, these cities have a “spectral” and haunting quality to them (Kalyan, 2009). This is because the speculative investment-led real-estate development is still underway and mired in financial scams leading to rise of empty, ghost-like buildings that don’t seem to belong to anywhere (Anand, 2019; Kaushal, 2019).



Screengrabs from DKAWS (2020).

In this film, Kaajal (Bhumi Pednekar) who is a young, single woman and a migrant to the city works at a shiny, call centre-like office of a 'romance' app where women are hired to sell pleasure via a telephonic conversation to lonely men. The set-up is glass like, and no less than any corporate office of a multinational corporation (MNC) with all the facilities for employees who are all women. Though Kaajal, who becomes Kitty on call, is initially uncomfortable in talking to men in a flirtatious manner, she eventually adjusts to the work requirements. She faces conflicts between a deep, intimate love she longs for and the romance that she is expected to create and sell at work without any emotional attachment. Soon enough, Kitty begins to enjoy her work and turns the tables of the professional buyer-seller relationship imposed by neoliberal culture by nurturing an emotional attachment with one of her clients. "No need to become too personal", said her boss smilingly after her call with a client seemed to touch an emotional chord with her. Neoliberalism demands that workers keep their emotions aside when working so that it does not affect their work quality, and this is deemed as a professional conduct (Veldstra, 2020). But at the same time, in a job like that of Kitty, it banks on the worker's emotional labour to make profits. It is interesting to note what happens to our cultures and relationships when the values of detachment and buyer-seller relationships are constantly messaged in various ways to people and what do the slippages in 'professional' conduct mean in a consumer society. Further, the veneer of a corporate

work environment and its perks falls apart when Kaajal is unable to defend herself for angrily driving away one of the clients before her unempathetic bosses, highlighting the precariousness of her work and lack of labour rights.

Kaajal's elder sister Dolly (Konkana Sen) is a married working woman with children, who swings between being shamed by her husband for desiring pleasures beyond a certain age, and by her sister for seemingly not enjoying her life enough given the access to leisure she can enjoy in the big city that she lives in. This reflects the pressure of binaries imposed on women by patriarchy and neoliberalism—that either they should be desireless entities, or, invest in relentless consumption, to feel whole or enough.

Through the trajectory of characters in both films, Shrivastava raises scepticism over the promise of neoliberalism. She explores what the opportunity of consumption and work mean for women, and how they negotiate their needs and desires through the city. Her films are a way of unpacking how neoliberalism interpellates women to create new subjectivities and how women orient themselves in space in the process. This offers possibilities of discussing the future of neoliberal city and the imagination of freedom for women in it.

### **Research Questions and Methodology**

"Films produce spatial imaginaries in which processes of change may occur" (Ceuterick, 2020, p. 5). Drawing from theoretical frameworks of space by Lefebvre and Sara Ahmed, and taking Ceuterick's examination of aesthetics of occupancy of cinematic space by wilful women as a method to uncover urban imaginations of the city for women, this paper would try to examine the two films discussed above by asking the following questions:

- How does neoliberalism reorder space and people to create new physical and psychological geographies in the city?
- In what ways do wilful women reimagine and create space for themselves in the everyday to realise their desires?
- How do neoliberal values in the opportunities for consumption and economic aspirations complicate the idea of women's freedom?
- What is the future of a truly intersectional inclusive feminist city in neoliberal urbanisation?

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# Provoked to Perpetuate: Planning Visualisations as a Question of Spatio-Visual Injustice—The Case of Cairo

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In the current globalised and mediatised age, the popular media's image of the city hardly represents the majority of citizens' everyday city experiences or perceptions of their future. This misrepresentation of urban conditions in media on one side creates processes of visibility and invisibility for the city among not only the general public but also urban planners who get enrolled in the process of producing these city(ies) (images). On the other side, it effects and facilitates marginalisation, disablement as well as socio-spatial injustices and the further exclusion of vulnerable groups from services and infrastructure. In Egypt, these vulnerable groups form the majority of the population. This accordingly is suggested to be termed as 'visual justice'.

The emphasis of this research is on investigating the agency of planning visualisations in the current mediatised world. A grounded theory methodology is employed to build a theory from five research papers that constitute my PhD thesis. The proposed theory investigates how planning knowledge is *constructed* and *communicated* in the mediatised world. Egypt is taken as a glocal representation of and manifestation for the widespread use of planning visualisations in cities. The research explores how urban planners are educated and how plans are communicated in order to keep (certain) political and economic agendas and ruling bodies in operation.

The research addresses the gap in the literature regarding the need to theorise and understand the (in)justices communicated via planning visualisations. Accordingly, the purpose of the research is two-fold; first, to identify and trace the ways in which planning visualisations and justice intersect. Second, to cumulatively build from the five research papers that constitute the thesis an interdisciplinary, glocal middle range theory that explains visual justice in the mediatised world. Hence, the overarching research question that guide this research is:

How and why planning visualisations become a question of justice in the mediatised world?

In this context, urban planning is explored by investigating its products (planning visualisations) and processes (media tools and operations employed to produce these visualisations). Planning visualisations are not only found inside design studios in universities or only offices of planning and architecture; in fact, they are visible to the general public through mainstream media like television, newspapers, and the street billboards in many cities. Via the various mediums, planning is visualised and communicated through 2D plans, 3D rendered images, infographs, and even

caricatures and press news. This reflects the broader definition of planning visualisations employed in this research. Accordingly, using Egypt as the empirical setting for this investigation, the position of media and communication in constructing planning visualisations and in power (re)structuring is discussed with a particular focus on the five communicative situations presented:

(i) the education of planners and the construction of the *Academic City*, which is on one side, exclusive to large-scale formal urban projects targeting higher classes of the society, and on the other side, largely dependent on visual and graphic tools for its communication;

(ii) the public visual communication of planning found in street billboards and the consequent construction of the *Professional City*; how the public are targeted yet excluded from the planning process as well as from the process of producing public planning visualisations, and what this implies for professional planners who are enrolled in the process of constructing the visualisations they initially create;

(iii) the state's mediatisation of urban projects in a centralised/neoliberal planning and media context like Egypt and how the mediatisation of urban projects in this setting has embedded visual politics that constructs urban planning and the *Propagated City*;

(iv) the parallel visible cities to public versus private transportation users in this context presenting the ordinary city versus the *Mediatized City*; and

(v) The influence of these (illusionary narratives) on the perception of the general public and on the visual and real-estate culture(s) of Egypt's urbanisation presenting the embedded story of marriage in driving the visualisation of the real estate and the consequently constructed *Co-Constructed City*;

Figure 1 summarises the research scope. Eventually, this research provides an attempt to understand and review planning theory (and hence process and practice) in the politically and economically affected context of media and academia. This is to understand what role can mediatisation (communication and visualisation) of planning play in facilitating social/spatial/visual justice within the dynamics of the mediatised world.

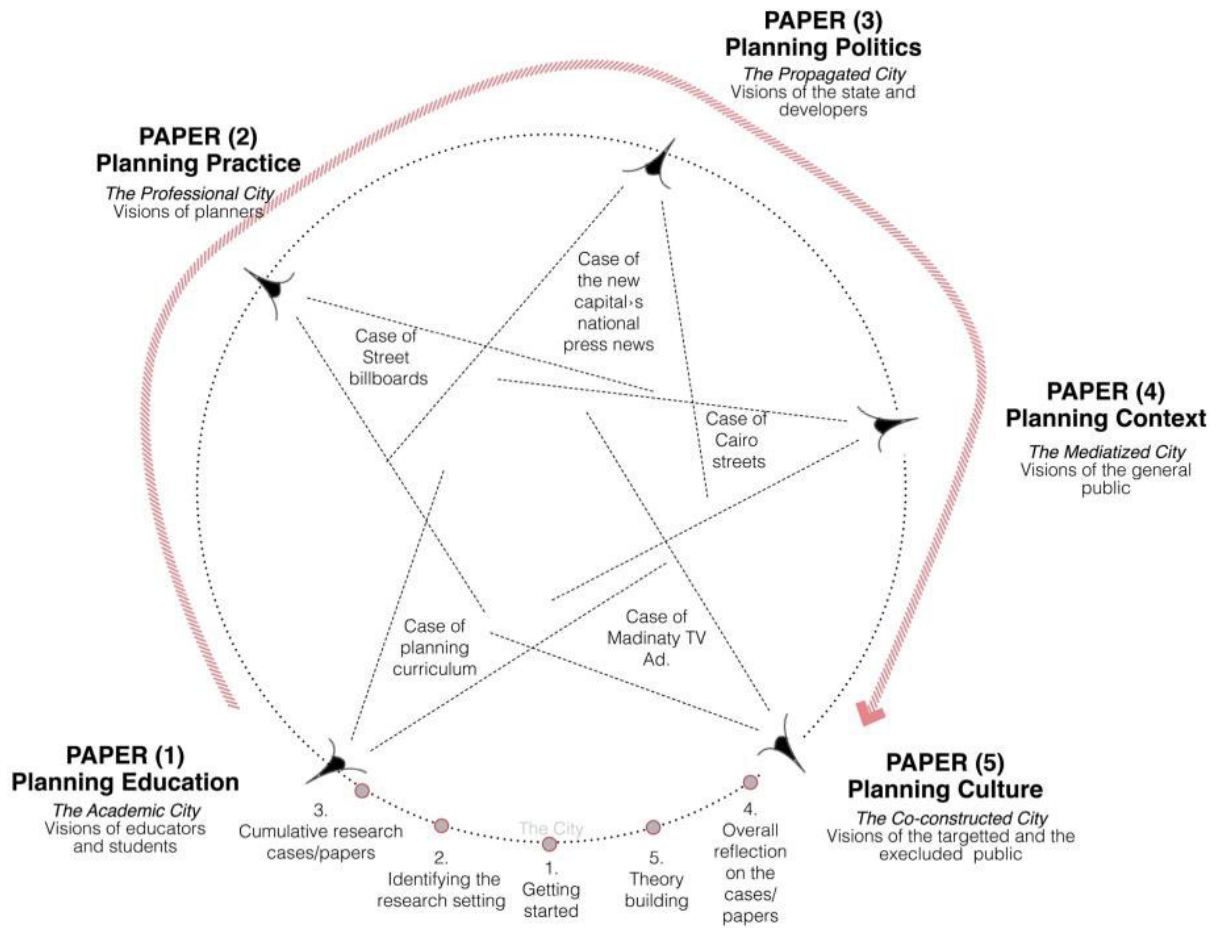


Figure 1: Research scope and the process of cumulative theory building



Panel 9

# Fair Work: Employment in the City



## Beyond Security: An Urban Policy for Migrant Workers

Divya Varma; Aajeevika Bureau, Centre for Migration and Labour Solutions

Maansi Parpiani; Aajeevika Bureau, Centre for Migration and Labour Solutions

Kavya Bharadkar; Aajeevika Bureau, Centre for Migration and Labour Solutions

Daniela Goldstein (2010) notes that the contemporary nature of capitalism is characterised by the 'security moment' wherein a focus on securitisation of the city has usurped all aspects of urban life. In this schema, the work and housing arrangements of the urban poor are considered as illegal and deviations in the state visions of planned spaces, predictable flows, and securitised cities with a strong focus on urban infrastructure and law and order machinery. In India, civic bureaucracies pursue these narrow and materially driven imaginations of utopic security (Bear & Mathur, 2015) excluding the fact that cities are lived in and are fundamentally shaped by humans and communities, and their interactions with the city. Most importantly, they render insecure the work and living arrangements of the urban poor, particularly migrant workers, who displace themselves to cities in search of their own notions of security of income and better futures for their families. However, their migration to cities, which was a means for betterment, itself becomes the end in itself. Migrant workers struggle to maintain survival levels of income in the city in dense neighbourhoods with little state provisions and juggling multiple jobs in diverse sectors, foregoing any aspirations for security or mobility.

The paper is set against this fundamental contrast in imaginations of security of the city. Drawing from research and praxis with migrant communities in two cities in western India, we argue that for a fundamental transformation of migrant workers' lives to take place, urban policy needs to go beyond its paradigm of security of the city. We provide both a critique of existing policy as well as recommendations for the imagination of a more inclusive urban labour policy in Indian cities.

Our research hinges on a fundamental demonstration that the conceptual framework of permanence, singularity, and spatial fixity needs to be abandoned in favour of recognising migrant workers' temporary and multi-local ways of work and life. Universalisation of social security provisions, including electricity, water, sanitation, roads, and public foodgrains provisioning needs to be made accessible to workers, irrespective of where they live and for what duration. This, however, would not suffice without a fundamental shift in imagining urban policy away from material security of the city and its infrastructures to human security of life and its potential.

Here we urge to push the discourse beyond that of secure space, tenure of work, or permanent housing. We ask instead, how notions of a secure life could be created for migrant workers within their existing mobile, temporary, and multi-local trajectories? How could we create universal models of provisioning which do not force workers to fix themselves to a particular employer, sector of work, address or domicile, in order to be eligible? These questions pose some serious challenges to the fundamental assumptions on which state policy and also urban and labour movements tend to be based.

The paper is methodologically based on a comprehensive review of a range of urban policies. The National Urban Livelihood Mission, for instance, requires beneficiaries to have a proof of local domicile for the large majority of its services. Similarly, water and sewerage networks imagined within the framework of AMRUT and implemented through ULBs completely fails to bring within its fold migrant residences, situated either within workspaces or in unrecognised settlements in urban peripheries. Through this investigation, we show how urban governance imagines permanent domicile-based citizenship when contemplating the delivery of urban services. The Indian state alienates migrant workers from its patronage or accountability through centralisation of power, sedentary biases in policymaking, and urban governance lacking participation.

Despite their closely related nature, urban policy and labour policy remain distinct from each other—and both exclude migrant workers, who slip through the cracks of weak regulation and weaker implementation. The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, enacted in 1979 with the intent of securing free, safe, and dignified labour migration, suffers from acute bureaucratic apathy in implementation. Most migrant workers are engaged in informal livelihoods—in informal roles in the formal sector or in the informal sector—and face exclusion from a majority of labour protection laws in India. This is because their application is based on the size of the establishment, and most laws only apply to workplaces where more than 10 or 20 people are engaged. Self-employed workers suffer an even starker degree of vulnerability in the absence of an employer or establishment. The Building and Construction Workers Act, under which state-level boards are constituted for administering social security to persons engaged in building and construction work, has even been hauled up in the Indian Supreme Court for its tardy implementation, misappropriation of accumulated social security funds, low enrolment, and under-utilisation (Upadhyaya, 2020).

Access to public services, especially urban services, are constrained for migrant workers who remain unenumerated under the decadal Census, upon which public provisioning is often based. Their access to state-sponsored housing schemes is denied by virtue of their status of tenancy—whereas such schemes often cater to property owners. The lack of permanent domicile denies migrant workers access to water connections,



sponsored toilet construction, skilling, or other benefits under the National Urban Livelihoods Mission, subsidised tertiary care, take-home ration, maternity benefits under the PM Matrutva Vandana Yojana, and the Atyodaya Anna Yojana (PDS).

These gaps in urban labour are also combined with challenges in the imagination of a truly inclusive alternative by activists and movements of urban workers. Imaginaries of labour movements, for instance, continue to be influenced by the myth of the glorious age of secure industrial work. Dick Bryan and Michael Rafferty (2018) argue that they tend to frame their demands along the lines of a 'permanence lost', which needs to be regained, failing to consider the limits of industrial working-class movement, which often excluded the labour of women, ethnic and racial minorities, children and the old, and immigrants, and was largely limited to the Global North. Taking this argument one step forward, Kathleen Millar (2017) critiques the fact that steady waged work continues to hold our imagination of a good and worthy life and skews the basis on which urban belonging and a sense of worthiness and value in the city are built. The majority of urban populations, particularly in the Global South, are not wage workers and are hence denied the right to belonging and value in the city.

In addition to work and livelihood, migrants also struggle in their access to housing and other urban services. Most migrant workers, for instance, bear the burden of dual social reproduction, having to maintain homes in both the village as well as the city (Gidwani and Ramamurthy, 2018). This often makes rental or worksite arrangements more affordable and manageable to this group. Their trans-local and temporary housing arrangements mean that they are unable to access urban services because of the nature and tenure of their tenancy in the city. Urban planning is primarily static, whereas circular migration and urban labour flows are extremely dynamic. Urban planning remains restricted to land use and engineering without engaging much with employment, informality, and labour migration. Over-centralisation of power and budgeting renders urban local bodies incapable of responding to migrant workers' interests, which are also underrepresented in the urban discourse due to their exclusion from political participation through voting. How do we go beyond these mythical criteria of permanence and security for inclusion in the city, irrespective of the work people do, where they live and for how long?

The policy imaginaries which we outline address this question in two ways. One, we propose a shift towards an enhancement of physical and social infrastructure for the urban poor and migrant populations in the form of education and health care facilities in the neighbourhoods and sites where they live. The adoption of universal, rights-based entitlements guaranteeing minimum consumption to migrant workers and their families, subsidised through their employer or the state, and catering to the heterogeneity of circular migrants. We recommend a paradigmatic shift in the interface of urban governance with migrant workers, inviting legitimisation of migrant workers

settlements, monitoring of facilities extended by the state, and state intervention to address the gaps through public provisioning. Two, the paper conceptualises labour policy as a fundamental component of urban policy, wherein registration of workers under different boards or sector-specific social welfare provisions, must also automatically render them eligible for urban provisions, and enable their political agency in the city.

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# Role of Land Rights in Improving the Quality of Life in the Slums of Delhi

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## Introduction

About 1 billion people live in slums and informal settlements worldwide. By 2030, 3 billion people will lack access to adequate and affordable housing, according to UN-Habitat, the United Nations' settlements agency. The country's 2011 census revealed that the [slum population](#) currently stands at 65 million people, up from 52 million in 2001. About 2613 of India's 4041 towns are classified as slums. In the territory of Delhi, where capital city New Delhi is located, 1.8 million of the 22 million residents live in 22 slums.

These urban poor population by default generally settles at the peripheries of the city with little to no provisions of water, sanitation, or transportation. This process allows them to establish de facto territorial claims wherever they get shelter. The increasing emphasis on the right to affordable housing, property right, and land rights of the urban poor was extensively dealt with in the available literature. The legalisation of land rights and incremental construction through aided self-help in the slums was suggested as a cost-effective approach to the urban crisis (Davis, 2006). Housing rights can be considered as a bundle of rights that advocate the extent of entitlement the residents enjoy. Land right, incorporating within itself all the housing rights, allows the residents to capitalise on the land they occupy. A comparative study of these settlements should allow us to ascertain the impact of housing rights on living and housing conditions of the residents. How do the land rights impact the slums and whether it improves the living conditions of the slum population are the central questions of this study.

## Aims and Objectives

This study aims to examine the role of land rights to an informal settlement in Delhi. It also assesses the subsequent improvement of slum housing and living conditions of the urban residing in the informal settlement.

The main objectives of the study are:

1. To understand the existing legal and institutional framework of the national or state level that have guided the development of slums in Delhi
2. To assess the impact of housing rights on the living and housing conditions of the slums.

## Methodology

A historical assessment has been made to understand the process of land right and their different aspects that secure the tenure of housing security to the urban poor. Content analysis has been done of all the relevant legislation that guaranteed the land right to the slums in Delhi. All the provisions contained in the legislations have been categorised into land rights, property rights, and housing rights that facilitate the security of tenure. This approach has provided a roadmap to identify the slum locations for the household survey.

A structured questionnaire based primary survey of the slum households was conducted in three slum locations in Delhi. These slum locations are selected based on the categories of (1) JJ Bastis; (2) resettlement colonies, and (3) unauthorised colonies. Among these three slums, JJ Bastis with no housing rights was identified as the target group. We selected three sites—Chunna Bhatti (JJ Basti), Madipur (resettlement colony), and Nangli Jalib Ext. (unauthorised colonies)—for the survey. The sample survey was limited to 150 households only, that is, 50 households from each site.

## Major Findings and Discussions

From 1941 to 1951, the urban population of Delhi nearly doubled, reaching up to approximately 2 million. As these residents were unable to access formal land or a housing market, they built their residence along the drains, railway tracks, or wherever the land pocket was vacant. Until 1991, the slums were viewed as a blight with no scope for improvement, and the only solution to the problem was forced evictions. Only after the Eighth Five Year Plan (1992–1997), the Centre focused on the revitalisation of the existing housing stock and renewal of urban zones, which was reflected in both Master Plan of Delhi (MPD) 2001 and National Urban Housing and Habitat Policy, 2007. Followed by MPD-2021 promoting special area redevelopment schemes, regularisation of unauthorised colonies and the provision of guidelines for redevelopment for squatter rehabilitation scheme were granted. The recent policies that impacted the selected sites were the following.

- *Acknowledgement of property rights or conversion of leasehold rights of resettlement colonies to freehold, 2013 by the government of the National Capital Territory of Delhi (GNCTD).* The original residents have stayed in the same place since the time of allotment, which is approximately 40 years, as an impact of delayed freehold possession.

*Delhi Slum and Jhuggi Jhopri Rehabilitation and Relocation Policy, 2015, by GNCTD.* The highlight of this policy is the automatic conversion of leasehold right of the property to freehold after 10 years. The policy promotes in-situ

rehabilitation of 50–55% of eligible residents but fails to provide accommodation for ineligible residents and those on rent.

- *National Capital Territory of Delhi (recognition of property rights of residents of unauthorised colonies) Act, 2019 by the Delhi Development Authority (DDA)*. This Act recognises land rights if proper documents are presented for it. It is more feasible to make an inventory of existing land records instead of correcting or tracing old records. This allows unauthorised colonies to take part in the formal land market.

### **Impact of Housing and Land Rights on Slum Improvement**

Considering community upliftment through improved infrastructure, certain characteristics were consistent in the availability among the three sites in terms of access to physical infrastructure such as electricity and water availability. Although JJ cluster receives water through public tap due to spatial constraints, water availability timings remain the same for all three selected sites, that is, two hours daily. Similarly, in the case of sanitation, the toilets in the JJ cluster are community-shared toilets for ease of management and lack of public space. Furthermore, the residents knowing that they can be evicted anytime just through a notice, with no sense of security, invest neither time nor money for the upgradation of such services. This is also reflected in the household size being minimum in JJ cluster among the three sites, as it is not a favourable settlement to live in with family, with no security of tenure. With approximately 50% of the sample in JJ cluster being rentals, the need for public rental housing to accommodate the migrants is necessary.

In the case of the resettlement colony, the residents of JJ cluster were allotted plots and construction material was availed to them on subsidised rates, allowing these people to build their own house. To cut the cost of plumbing works and access better living conditions, the construction of toilets was done in front of the house, in the extension area occupying the public street.

Madipur resettlement colony has developed a household industry of shoe manufacturing due to its proximity to Madipur Village, known for rubber manufacturing. Similarly, Chuna Bhatti (JJ Basti) has developed the woodwork household industry due to its proximity to both the wood market and furniture market. Presence of skilled labour within the JJ Basti and resettlement colony has led to the emergence of household industries.

The residents of the unauthorised colony, with semi-land ownerships, have had the financial capital to invest in land development. As most of the residents are from the

nearby village, their sense of security has been found to be better when compared to the other sites. This is also reflected in their asset ownership and higher income/expenditure. They build incremental housing provisions with improved access to water and sanitation. This implies that land right enables the slums improvements in terms of better housing facilities and living conditions, leading to regular job opportunities and asset creation.

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# Morphology of Narsimharajapura post COVID-19: People, Perceptions, Spatial Manifestations, and Representations

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The COVID-19 pandemic affected life globally at the scales of the metropolitan regions, cities, towns, and even the villages and across political boundaries. In India, as the lockdown was declared in two phases from 25 March 2020 (*Times of India*) to 31 May 2020 (*India Today*) and again from 14 to 22 July 2020 (*Economic Times*). People working in the metropolises and cities and the migrant workers among others fled to their hometowns. The information technology (IT) professionals, other professionals using information and communication technologies (ICT) and students went back to their hometowns as they could work from home. Narasimharajapura is a small town set in idyllic settings in the Chikmangalore district of the state of Karnataka in India. It has a primary sector economy with the people engaged in agriculture and agro-based activities. Narasimharajapura, too, saw the return of its own people who had migrated out, seeking employment in both ICT-based industries as well as the labour force, skilled/semiskilled/ unskilled, to work in larger cities. The return of the migrants and the reverse influx of its own people brought about changes, both physical and non-physical, in the small Narasimharajapura town. This paper explores these changes, examines their impacts at varying scales, and attempts to predict a positive future for the Narasimharajapura town, viz. its people, places, spatial manifestations, and representations.

**Keywords:** COVID-19 pandemic, migrant returnees, Narasimharajapura, morphology, people, perceptions, places



## All Is Not Well on the Yamuna Front: Skills and Livelihood Aspirations of Yamuna Pushta's Working Homeless Men

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By sunset, Central Delhi's 'Pushta'—the 1.8 km stretch from Nigambodh Ghat to Kashmere Gate along the Yamuna riverbank—is a parallel city. One that belongs to homeless men who populate the area's low-crenellated brick walls, barren knolls, footbridge and footpaths, underpasses, and 20-plus portacabin government night shelters.

How do these men survive the city without housing? Why do they live here? They are largely migrant labourers who rely on daily wage gigs at catering company-managed wedding events, on construction sites, and in dhabas. Worksites are in Delhi and other states such as Haryana, Rajasthan, and Punjab. But the journey, for many, begins in the Pushta, where contractors hire daily wage migrants at numerous local labour 'chowks'.

G, a resident of a Pushta shelter, explains working conditions, job-site facilities (e.g. food, 'shelter', and toilets), and the 'division of labour' in wedding event gigs, the major source of homeless daily wage income:

I was living on the Pushta, working as a cargo transporter in Gandhi Market, when I heard about this shelter. Contractors hire workers from Yamuna Bazaar, Hanuman Mandir, and the Pushta [to work wedding events]. 500 rupees per shift. There is a division of labour: there are dishwashers, and helpers to dishwashers, for instance. I assist dish washers. I leave today at 4 o'clock. We'll go to the warehouse, load the van, leave at night, and reach [the venue] the next morning. We'll unload items [for the wedding] and work until 12 or 1 a.m. We stay at the warehouse. A one-day job is not a problem. Two to four day gigs are difficult. I just got back today—you can only sleep after loading the materials. Shifts are from early morning until 2 a.m. the following night. I earn 500 rupees for minor (light) work, 600 when assigned tasks require heavy lifting. There are facilities on the job—toilets, etc. And bosses pay you.

R has worked the mobile wedding circuit in Delhi, Mumbai, and Kolkata for more than two decades. The Pushta, in this regard, is a pit stop. An urban space to access jobs and, in the interim, food and shelter. "I get jobs from Company Bagh and Nigam Bodh Ghat. Tuesdays I [get food from] Hanuman Temple and when really in need, the gurudwara [*langars*]. I use three or four shelters in Yamuna Pushta [while in Delhi]."

Men's existence in Yamuna Pushta represents a survival strategy itself. It is a site that, in the absence of housing, affords other essentials—shelter, water, *and* daily wage work together. Take J:

I [currently] bathe in the Yamuna. I [used to] use the nal near the shelter—built recently—to bathe. When I had money, I'd pay the 2 rupee fee to use the public bathrooms. I [only] fear God. Who else? Everyone is in [God's] hands and subject to [His] will. When healthy, you must actively look for work. So, I go to the chowk. I find jobs easily in this area. [Contractors] hire workers and everyone hangs out here. That's why I'm here.

Jobs, food, and water are survival assets available at the Pushta. But accessing these necessities makes homeless labourers concomitantly vulnerable to unrelenting destitution. Job-site exploitation is one such major risk. R describes employer–labour relations as 'master–servant', since "[bosses] demand we work double what we're paid".

Dhaba bosses in Haryana towns often refuse to pay homeless labourers at all. Then abuse them when they demand wages. Hear PR's journey from a Central Delhi labour chowk to Rohtak:

The contractor told us jobs were available in a new Bahadurgarh dhaba. There were six of us in the van. When [the driver] paid the toll at Bahadurgarh, I asked, "Did we just leave Bahadurgarh?" He didn't answer. Just sped up. We reached a dhaba in a place past Rohtak. The boss approached and [explained terms and conditions]. We thought he's a straight shooter. But when we asked for our 200 rupees [daily wage] two days later, he refused and was prepared to kill us. I said, "You don't pay! You fraud!" The police won't help. [Bosses] and their henchmen beat [workers]. A few of these guys are hired for this very purpose. One beats you, another threatens you until you stop demanding wages, and promise to not leave.

The absence of a social protection system makes homeless labourers vulnerable to dangers of the city's informal economy—below minimum daily wages to non-payment, abuse, and bondage (Harris-White, 2005). Harris-White (2005) has argued that social exclusion, in this context, stems from the denial of justiciable legal regimes to destitute migrants *in* this economy—not from denial of jobs outright. Unemployment is, indeed, a prevailing vulnerability of homelessness in Western countries (Speak, 2004). How do Delhi's homeless labourers survive rampant job-site exploitation and violence? What capacities do they have to overcome these threats? What barriers do they face in doing so?

In this context, this study assesses

- skills homeless labourers have, in relation to those required of jobs they actually find and
- how such labourers inhabit and rely on Yamuna Pushta as an urban space to access labour contractors, shelter, and basic needs.

Men define 'skill(s)' differently, likely based on their own histories with bosses, intermediaries, and conditions on job sites, indicated by these two perceptions, based on experiences as wedding event labourers.

PR: "I'm a 'skilled' worker. Work 18-hour shifts. There are different kinds of loaders. I earn 500 to 1000 a day. Shaadi party workers earn 2000 a day. I find 'placements' [from newspaper ads] or [get jobs] at Company Bagh labor chowk. I have contacts too or the dhaba boss calls me on the phone. I only work in 'catering' companies and 'dhabas'."

J: – "[Yamuna Pushta] is a strange place and you must keep thinking, 'where will I sleep, what kind of job will I find'. I have no skills. So I can't even feed myself. [After all this time here] I still have not acquired any skills. I went to Mumbai for a year after leaving home [he left his native Nepal in 1995]. I worked in a bhel puri shop for INR 300 a month, serving customers (clear and clean plates). When you have nothing, what will you do?"

### **Yamuna Pushta: A 'Non-Place' or a 'Social Geography'?**

The ability of Delhi's homeless to resist injurious, oppressive working conditions is undermined by a devil's bargain—they must accept and that is rooted in the city's geography. As described, migrants depend on places, like Yamuna Pushta, for jobs. These informal—not legally recognised—urban geographies exclude people who reside in them for essential public services like housing and sanitation. Three-fourths of Delhi's land falls under this category (Heller et al., 2015). Urban poor people thus often rely on brokers—social workers, labour contractors, or elected officials—to secure such necessities (Berenschot, 2010). In Yamuna Pushta, homeless men use their labour power (capacity) to secure jobs through contractors. Daily wage jobs often enable momentary access to basic needs, acquired either through contractor or employer-mediated worksite arrangements or, of course, earned income.

Yamuna Pushta's landscape has undergone drastic changes from the 1970s to the mid-2000s. The Pushta was once a vast enclave of encampments inhabited by migrants who held local service and construction jobs. Government demolitions of these *jhuggis* vacated the Pushta indefinitely,<sup>1</sup> transforming this geography into an eventually disinvested, urban wasteland (Baviskar, 2011; Bhan & Sivananda, 2013; Dupont, 2008;

Dupont & Ramanathan, 2008; Speak 2014) of “foot-loose migrants” (Breman, 2013). Jobs are locally *sourced* but worksites are in locations often outside Delhi. In today’s Pushta—devoid of housing—the labour network, manifest in local chowks, pulls homeless migrants. Connections to daily-wage-circuit powerbrokers temporarily secures basic needs. Labourers brave non-payment, abuse, and job irregularity for the *potential* of ephemeral respites from unforgiving onslaughts of destitution.

Amita Baviskar has argued that a perceived lack of cultural and historical identity of Yamuna Pushta’s people renders this area a “non-place” (Baviskar, 2011). Unlike an ‘anthropological’ space, where communities are forged through acknowledged and ‘shared social relations’, the Pushta’s people are invisible. We insist that it is the ‘cultural’, ‘historical’, and ‘official’ invisibility of the Pushta that permits the extractive ‘master–servant’ logic of local labour chowks to continue unabated, and from capital’s perspective, to thrive.

In this regard, the Pushta is, what Harris-White (2005) has called a “social geography”—an urban space ‘expelled’ destitutes use to secure resources and shape and transform in the process of doing so. Aside from jobs, physical protection is prerequisite for surviving the city’s streets. As PR explained,

A head loader who slept behind Company Bagh (a labour chowk used by Yamuna Pushta’s homeless) said “Bhai, sleep here.” He asked me where I was from, so I told him. He said, “Sleep here (referring to beside him), not there—people get mugged there.” I slept alongside him without hassle for 15 days.

Legal, geographic-based, exclusion of the informal city’s inhabitants—from public goods and access to justice—renders *urbanising* spaces invisible to policymakers and highly prized by powerbrokers of the informal yet diversifying economy. Homeless people reside and find work in such disinvested sites are perpetually vulnerable to sustained poverty, violence, and injury. In this context, we analyse occupancy rates of the 20 shelters in this area to understand mobility, congestion (an indicator for shelter exclusion), and access to services and labour intermediaries.

## Note

<sup>1</sup> One-fourth of reclaimed land in Delhi from the mid-1990s to mid-2000s—67 eviction sites inhabited by 21,551 families—remained vacant (Dupont, 2008).

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# Synergised Shared Spaces in a Divided City: The Case of Shillong, India

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## Introduction

As boundaries between rural and urban begin to blur, cities witness an increasing ethnic diversity and socio-political disparity. This in turn has led to an urban divide centred around plurality and identity (Gaffikin, 2011). Thereby, accepting this multiplicity and learning to live with it is a challenge for many cities in the present and future. Such scenario is especially prevalent in the North-Eastern cities of India, which have a history of local and migrant friction, leading to territorialisation of city spaces and divided urbanism. Intolerance to differences is making our city spaces polarised and undemocratic (Low, 2006). Meanwhile, reduced public spaces offering exposure to varied cultural and economic backgrounds due to increased privatisation has escalated conflicts and indifference among people. Hence, urban spaces today need to play a significant role in helping people experience multiplicity and 'thrown-togetherness' (Massey, 2005) in a positive construct promoting a shared identity beyond ethnicity.

## Theoretical Premise

Various studies throw light on the relationship between urban divide, built environment, and a collective culture (Figure 1). Sennet (1998) and Gaffikin (2010) highlight the spatial expression of urban divide that includes formation of enclaves of homogeneity, limited everyday encounters, defensive built environment, and a negative memory of public spaces. The same has been elaborated in the seminar with respect to Shillong city. Identifying these expressions in the city forms an understanding of the importance of collective culture (Amin, 2008) to mitigate the existing urban divide. Positive encounters (Schuermans, 2018), conviviality, and symbolic solidarity (Amin, 2002) form the outline of required virtues in future planning of divided cities.

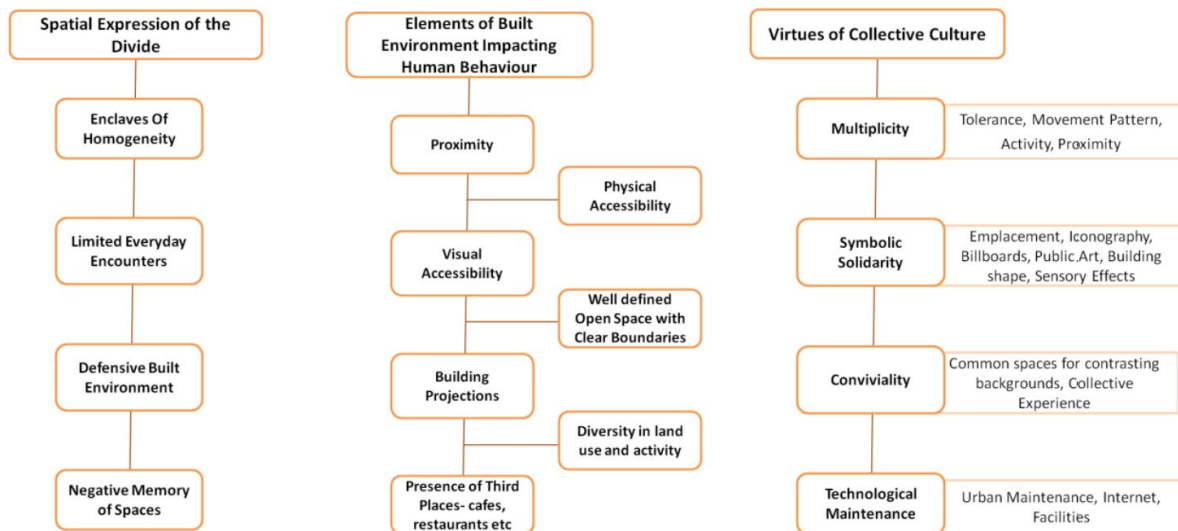


Figure 1: Theoretical premise for divided cities, built environment, and collective culture. *Source: Author*

## Framework

The paper inquires the role of urban design in creating shared spaces in a divided city considering the case of Shillong, Meghalaya. This North-Eastern city of India has a history of intolerance between its local and migrant population, resulting in a conflicted and fragmented urban landscape. Understanding the cause of the divide and the perception of it forms the preliminary section of the discussion. The seminar further explores how this divide manifests itself in the public realm through formation of homogeneous neighbourhoods, limited everyday encounters, building use, and movement pattern. The seminar also forms an understanding of how built environment characteristics has inculcated an anticipation of fear and conflict in the existing public spaces of the city in question through a comparative analysis of different precincts. In the further section, using overlay method as a tool, the study explores the pattern of inclusivity of shared interest activities contextual to Shillong city. Lastly, the seminar shall propose a structure plan of potential places and activities that can be inserted or promoted to increase positive encounters and public participation in the city, making it less territorialised and more inclusive.

## Case Detailing and Analysis

Shillong, the capital of Meghalaya, is dominated by the Khasi tribe. However, being the Eastern administrative hub of British Empire and the capital of Assam state post-independence, it witnessed huge inflow of migrants from start of the century who today form half the population of area under the Shillong Municipal Board. The migrants and local community have formed clusters of homogeneous neighbourhoods, fragmenting the city into ethnic enclaves. This has limited their interaction with the significant other over the years, pointing towards the need of inclusive spaces beyond the neighbourhoods.



The movement pattern for necessary and optional activities (Gehl, 2011) within the precinct highlights the lack of conviviality, that is, the scope of daily negotiation with differences in workplace, public spaces, schools, and so on (Amin, 2008). The pattern also identifies certain places of overlap—traditional market lewdoh for convenience shopping, nodes and streets such as Police Point and MG Road for commuting, taxis and parking, and commercial centre Police Bazaar for lifestyle shopping. The built environment of these identified places is further analysed on the parameters (Dempsey, 2008) of density, permeability, visual accessibility, frontages and projections, diversity in land use, open space structure, and memory. The study infers that mixed use, dense neighbourhood of Police Bazaar with its diverse activities and permeable frontages support much more encounters as compared to the single use, MG Road dominated by monotonous facades of government buildings, high compound walls, and narrow sidewalks.

Activity nodes like Police Point, while having a mixed footfall, the lack of street furniture, pedestrian–vehicular conflict, and overcrowding fail to create an inclusive built environment (Figure 2). Further, the inward-looking environment and negative social memory of markets like lewdoh and residential neighbourhood Mawkhar keeps them at bay.

With a view to promoting inclusive built environment, the study further maps the existing scenario of common interest activities within the precinct. The various layers of food, music, art, festivals, and pathways, among others, highlight that cultural exchange through such activities currently remains limited and mostly indoors. Lack of designed spaces for shared activities, sidewalk ballet (Figure 3; Jacobs, 1961), and leisure reduces their potential to create focused interaction and a shared identity among people.

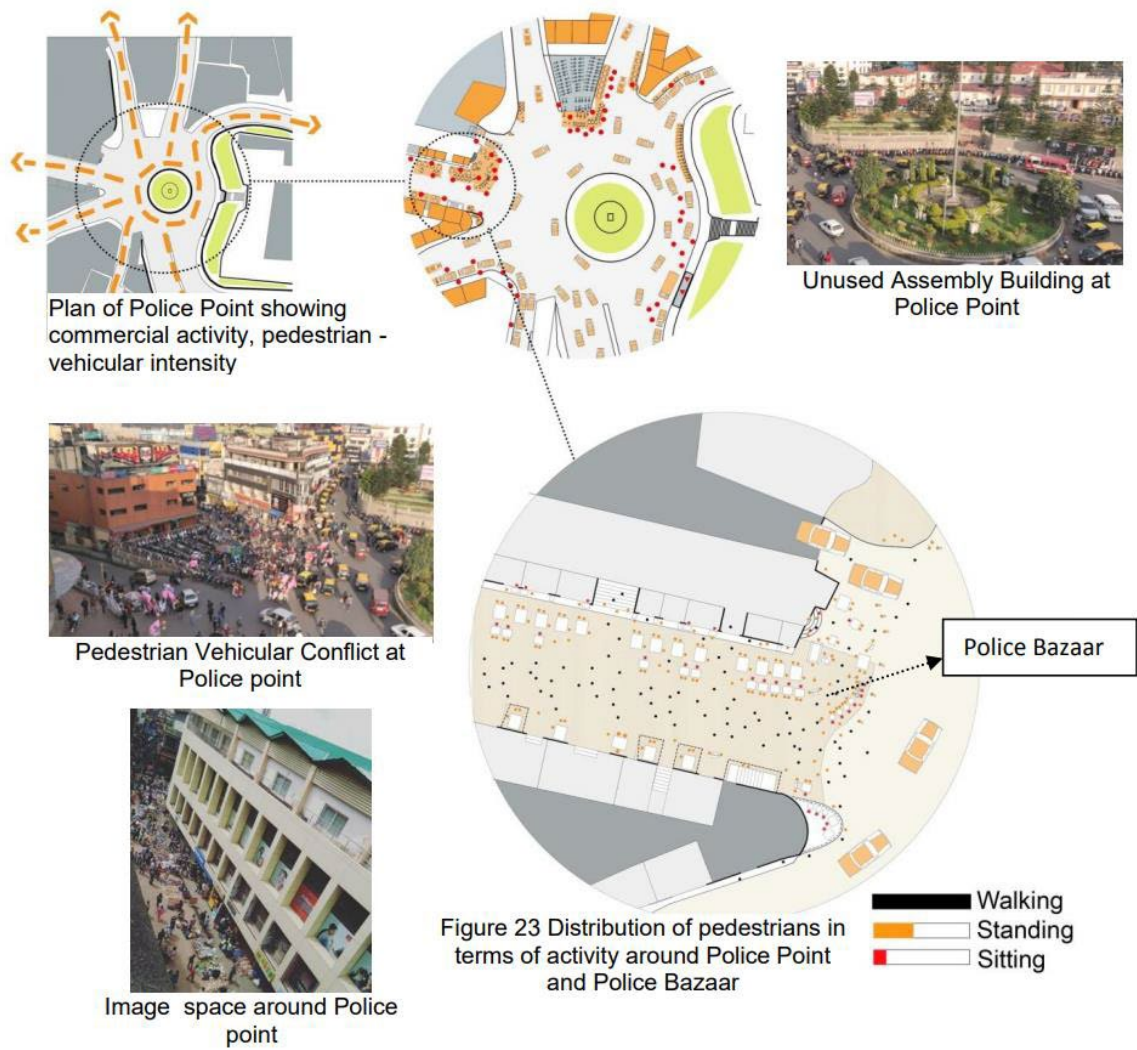


Figure 2: Mapping of scope of encounters in one of the precincts. *Source: Author*

## ACTORS OF SIDEWALK BALLET

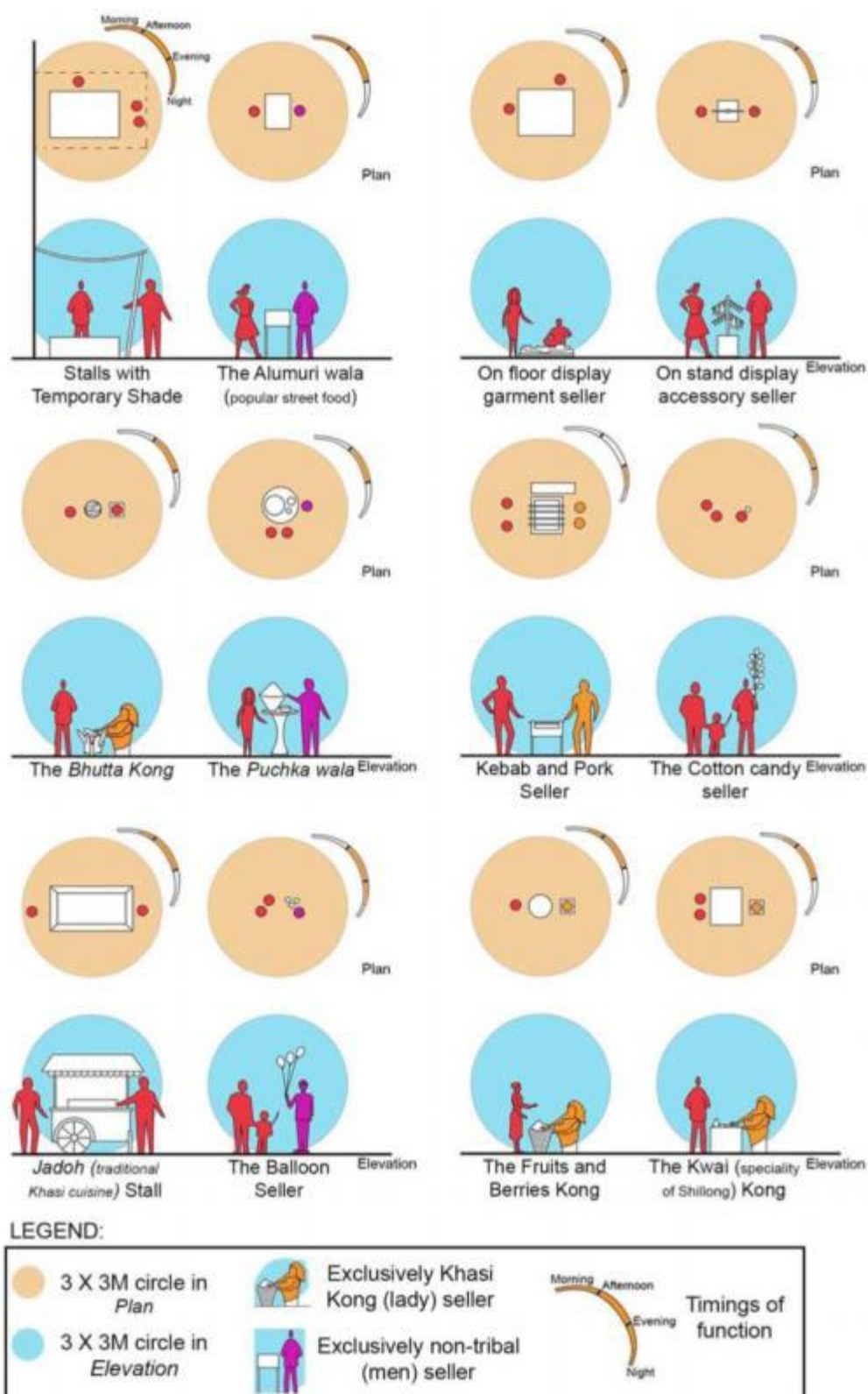


Figure 3: Mapping of inclusivity of sidewalk ballet. *Source: Author*

## Design Strategy

Based on the above study, it can be fabricated that cities facing urban divide centred around ethnicity and identity shall aim to create an interconnected public realm that encourages positive encounters between people creating more inclusive and less territorial urban spaces. The design strategies adopted to realise the vision is based on the theory that seeing people different from oneself responding to the same setting in similar ways creates a temporary bond (Carr et.al., 1993). Informed from the concepts of democratic spaces (Sennet, 2006), slow urbanism (Dogrusay, 2009), shared identity, and third place dynamics (Oldenburg, 1997), the seminar proposes a network of shared spaces that shall be inserted at three different scales (Figure 4).

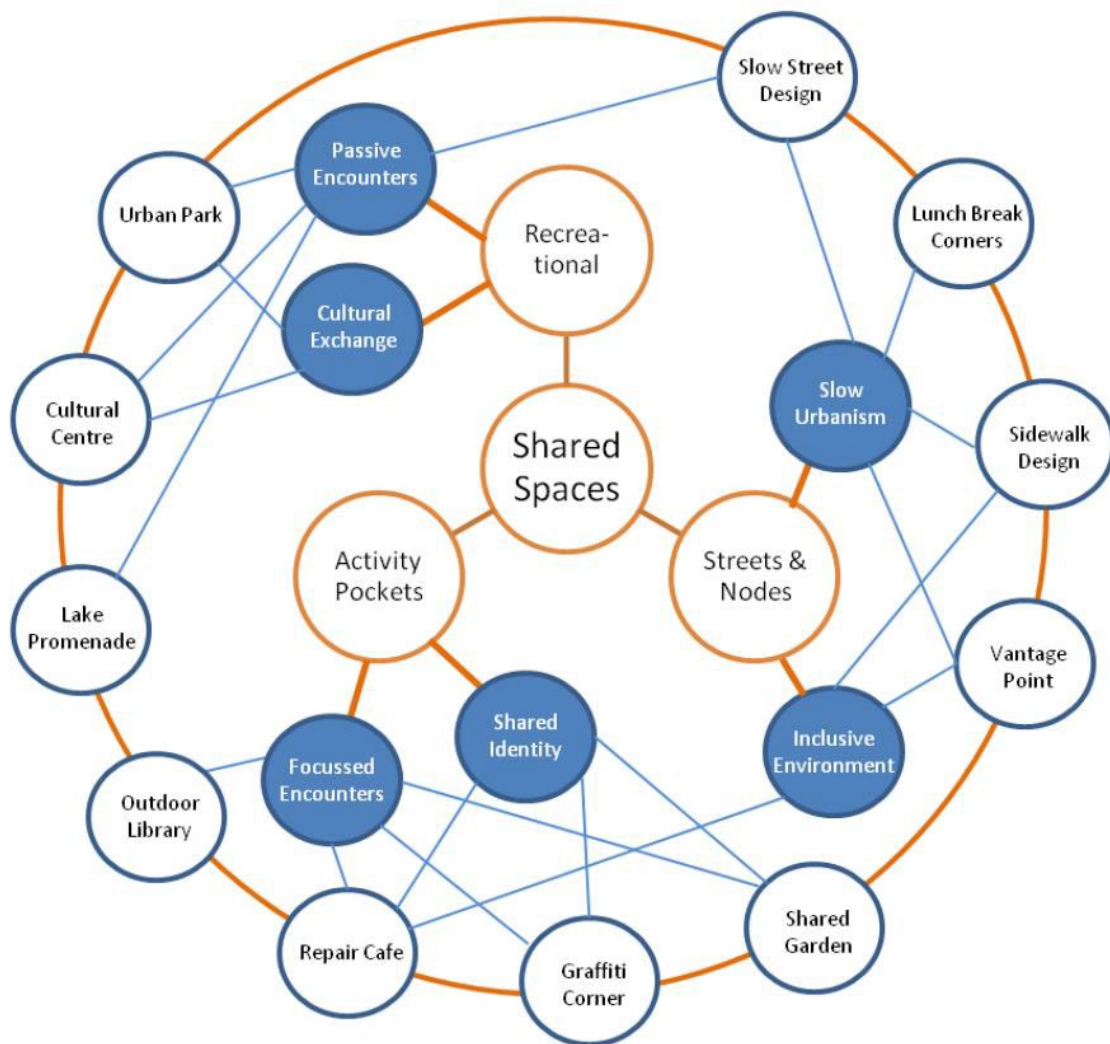


Figure 4: Design strategy at three different scales. *Source: Author*

First, city-level recreational pockets. This shall be designed by the conversion of the redevelopable government land parcels at Police Point and Barik Junction into an Urban Park and a Cultural Centre. These will help achieve the objective of passive encounters while also providing platforms for cultural exchange. The second spatial insert shall be a series of activity pockets along MG Road with a view to encourage focused encounters



and promote a recognition for each other beyond ethnicity. These will include an outdoor library with promenade looking over Ward's lake, a repair café with Jadoh stalls at foreground of the Secretariat building, a graffiti corner along MG Road, and a shared garden for community gardening in an underused traffic island. Lastly, the conduit for change shall be through street and node redesign based on the objective of creating an inclusive, barrier-free, pedestrian-friendly built environment. This shall include design elements from slow urbanism and slow streets reducing visual barriers, incorporating street furniture, lunch break corners and vending zones outside government buildings. Together, these strategically driven spatial transformation will lead to an emerging activity circuit, which is both inclusive and shared. Additionally, these emerging circuits can be visually connected exploiting the topographical advantage of hill city (Figure 5).

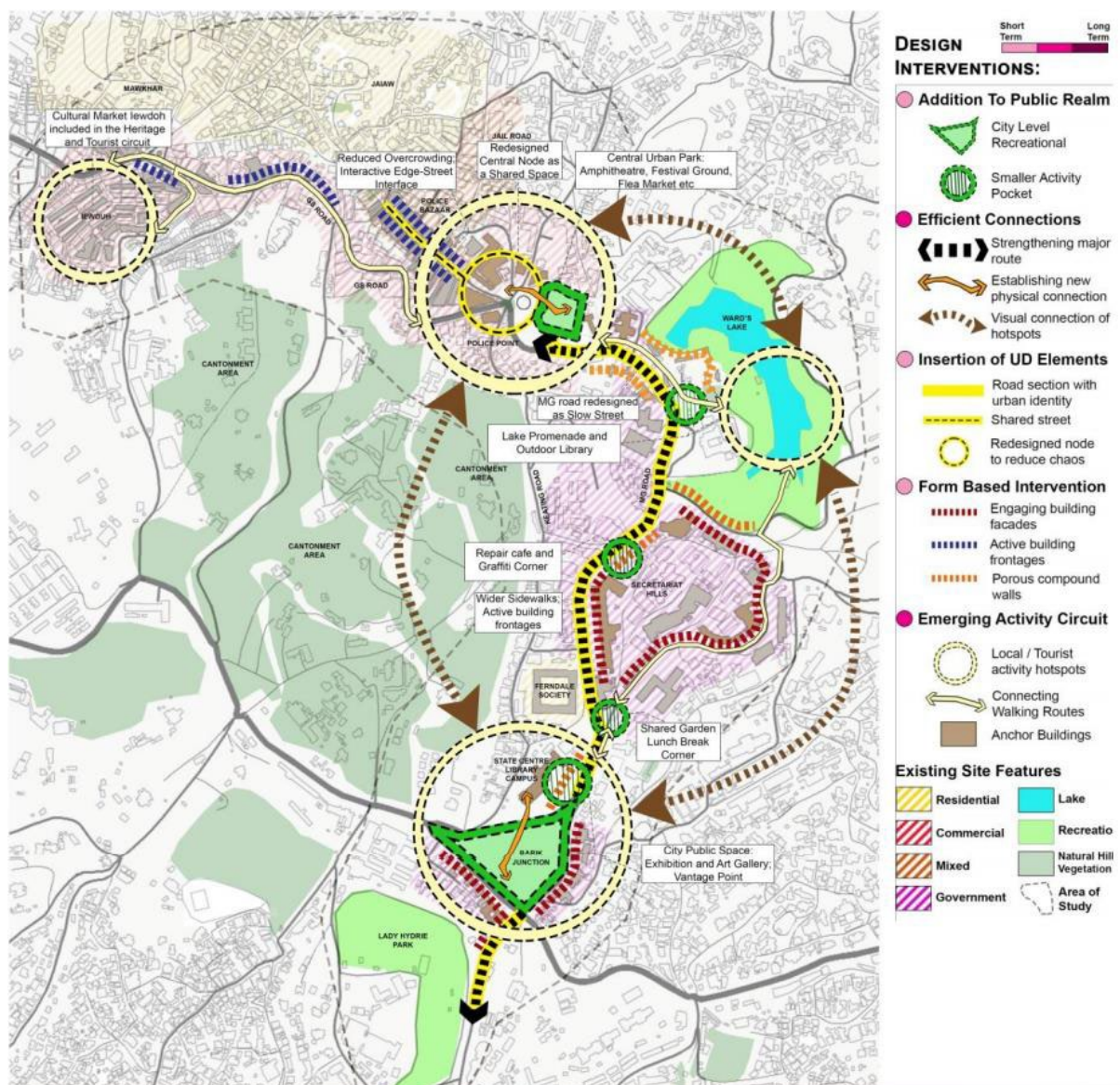


Figure 5: Proposed structure plan for Shillong city. *Source: Author*

## Conclusion

First, the seminar recognises the limited role of urban design in addressing social issues in our cities. However, it throws light on the possibility that physical interventions within the city fabric can provide a platform to experience different cultures, which can help transform predetermined social narratives. It reinforces the importance of using urban design elements for retaining people in public spaces and promoting social behaviour. Further, the paper also showcases how urban design can be used as a tool in ethnically divided cities to create positive stories about public spaces like life-enhancing, stimulating, safe, and inclusive as opposed to stories of exclusion, marginalisation, and hostility. In conclusion, the discussion paves way for further research on designing public spaces to induce tolerance in our cities that are becoming more indifferent and inward than ever. As a way forward, it would also be interesting to see how new age social spaces in the light of global pandemics comply with the norms of social distancing while still ensuring social interaction.

"Human Beings have to learn to co-exist with multiple identities and any attempt to freeze identities can only have harmful consequences which is what ethnic conflicts are all about." (Sen, 2008)

"When public spaces are successful ... they will increase, opportunities to participate in communal activity. This fellowship in the open nurtures the growth of public life, which is stunted by the social isolation of ghettos and suburbs." (Carr et al., 1993)

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Panel 10

# Reimagining Urban Services



## Domestic Water Supply Scenario in a Small Indian City: Reforms, Service Delivery, and Futuristic Solution

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Water has been recognised as the fundamental need and a basic necessity for human sustenance. From the past, many civilisations around the world have demonstrated that water plays a very important role for social and economic development. Having access to safe water is equally essential for rural as well as urban populations, but the increasing demand for water along with climate change impacts had led to unsustainable water use, resulting in water scarcity (Joseph et al., 2020). With rapid urbanisation in the future, there will be more pressure on the nearby water resources, which will further intensify water scarcity. Water scarcity can be in terms of unavailability of water resources or lack of water access due to a weak institution and inadequate infrastructure (WHO, 2007). Many studies have concluded that demand-based water scarcity has a major impact than climate change water scarcity (Joseph et al., 2020). As the population grows, the development-driven water demand limits the per-person water availability and places strain on the existing water supply (Okello et al., 2015).

Having access to clean and safe water was recognised as a basic right for human existence by the United Nations, which led to increased water coverage worldwide. Yet, till 2015, about 663 million people have no access to improved drinking water and, moreover, 2.1 billion people do not get safely managed drinking water (Mokssit et al., 2018). Out of all the freshwater resources available on earth, the most reliable source is groundwater. It has been well-documented in various regions that groundwater is getting seriously depleted and contaminated (Gleeson et al., 2020) with the overexploitation of 33% of major basins across the world (Hayat, 2020).

To address several economic and social inequalities, there should be an improvement in the management of water resource and water supply access so that no one is deprived of opportunities and benefits derived from water. From the 17 Sustainable Development Goals (SDGs) established under the 2030 agenda by the United Nations in 2015, SDG 6 is to “Ensure availability and sustainable management of water and sanitation for all”.

Considering the urbanisation growth, it has been predicted that by 2050 the water demand may accelerate by 55% (UNESCO, 2015), which will be fulfilled either by digging deeper bore wells or through advanced technologies and innovative solutions. As of 2015, in rural areas, out of five people, only two had water access to piped water supply. On the other hand, in urban areas, out of five people, four had access to piped water supply. Significantly, this proportion of the covered population decreases when

indicators like quality, time, and price are considered. Despite being the least costly method for transporting water from sources to users, piped water is not available to all sections of the society, resulting in increased inequalities (WWAP, 2019).

In India, there are around 370 million (2011) urban dwellers and still most of the Indian cities didn't achieve the target set by the government for the full coverage of continuous water supply (CWS) with complete cost recovery. Groundwater has been a major source of freshwater in the country, but with time, it is getting depleted. The water supply condition in India has been recorded as very low, even compared to other developing nations (Arslan, Aziz, & Saloni, 2012). From three decades, houses have spent extensively in alternate solutions to make up for inadequate infrastructure (The World Bank, 2014). The Indian urban population is expected to reach 800 million by 2050, which will pose a serious challenge for water management in fulfilling the growing demand.

Most of the Indian cities get water supply for a limited time a day or per week, the pressure is irregular, and the quality of water most of the time is unsatisfactory. There is no capital/main city in the nation with 24 hours' water supply, and four to five hours' supply is most commonly seen. This irregular, inadequate, and unpredictable service quality enforces financial pressure and health risks on the users (McKenzie & Raya, 2009). The population that is beyond the range of water utilities manages their water requirements through different forms and the most commonly operated options are public stand posts, illegal connections, and water vendors. The vendors perform an intermediate function, either by reselling municipal stand posts water or groundwater water through tankers or water bottles in the areas. These private water suppliers barely have any quality checks and sell between five and 50 times the cost of the city's piped water supply. Yet, during the time of scarcity, they act as a water service mechanism. For the low-income population, the coping cost of these mechanisms gets very high (Ahluwalia, 2011; McKenzie & Raya, 2009).

The problem statement of this research says, even though the government had made numerous interventions in the urban water sector for many decades in the past, but still a large portion of the urban population has to adapt to insufficient water supply service quality. Every section of society is getting highly affected due to inadequate services, which is a basic need for living. At a larger scale, this acts as a hurdle for economic development and increases social inequality. This situation stresses the need for cities to update their existing water supply management systems through innovative strategies to make services available and affordable for everyone.

The growing urbanisation with the varying scale of cities and their dependency on various water sources explain their water supply condition and emerging challenges.

Shah (2016) draws the attention towards the small cities where the main source of freshwater (ground and surface water, i.e. piped water), is much limited. Most of these small cities all over India struggle with water crisis every year. The nature of small cities is that they grow from being an agricultural hinterland to a centre for urban development, which is connected to local developing rural areas by its suburban or peripheral areas. The water infrastructure in their scenario can be understood as the core area of these cities having a well-established system for supplying water along with private bore wells but the peripheral area dependent only on the wells and bore wells (Shah, 2016). The inefficiency of water supply system (WSS) in the city along with the rising demand due to urbanisation led to emerging of a complicated transferring of groundwater from the peripheral and neighbouring rural areas to the city through tankers. But the quality of transported water becomes a matter of concern because mismanaged waste disposal and weak sanitation pollutes the groundwater. This transfer of water through bridges the gap between the supply and demand (Shah & Kulkarni, 2015)

Taking this into account, the Shivpuri city of 1.8 lakh population (2011) from north Madhya Pradesh is selected as the study area for this research. As per Census 2011, for approximately of 88% of the population at the national level and for 90.5% of the population in Madhya Pradesh, the main source of water is tap water, wells, and hand pumps. With a dependence on piped water of 23.4%, the state ranks fifth in the nation, and the Shivpuri district ranks 37 in the state (Sinha, 2013). Along with this, the district is prone to drought and in 2016, the district, along with many other districts in India, was extremely affected by drought. One of the works of (Kala, 2017) had highlighted the water crisis in Shivpuri municipal area during the time of the 2016 drought. When most of the bore wells, which are the main water source of the city, went dry, the city's demand was fulfilled through water tankers. The public had to wait for an extended time and stand in a long queue to get the required quantity of water in the city as a result.

The challenges in the water sector, especially in developing countries, demand critical action to manage the water resources of urban areas efficiently (Bassi & Kumar, 2012). And as stated by Shah and Kulkarni (2015), the small cities like Shivpuri with less than a million population have a high potential for a sustainable WSS by balancing both surface and groundwater sources.

This research work is based on the assessment of service quality of water supply in the municipal areas. Since many years, water sector has been reformed in the face of various environmental, social, economic, and administrative challenges. It includes the basic understanding of how the urban water supply system had reformed over the years and the various challenges it had faced. In the case of small urban centres, the

utility receives less attention and they lack in technical capability and are financially weak. As it has been known that water is important for human life, the next stage of this research deals with the public perception and their experiences with the existing WSS in terms of its service quality. The assessment has been done by taking into consideration few indicators of service level benchmarking as per the Central Public Health and Environmental Engineering Organisation (CPHEEO) guidelines. A mixed-method approach is adopted in this research. The inferior quality of service has a direct impact on the public; thus the assessment is based on their perception and for that, a sample size of 214 household surveys has been collected. Water utilities have failed in providing water access to all and are facing major losses because of leakages and small recovery of cost; therefore, an approach of the decentralised water supply system is considered in fulfilling public water demand. The research highlights a few important aspects of a weak water supply system, which burdens the consumers with high coping costs. The feasibility of alternate water sources within urban area had also been touched upon in the research.

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## Politics of Hygiene: Through Infrastructure Disconnected from Governance

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Public toilet is one of the fundamental and inevitable part of public infrastructure, associated with human biology but ironically also one of the most overlooked. The post-pandemic situation has exposed public toilets as the most vulnerable public infrastructure demanding critical attention for rethinking the public toilet strategies.

India has the largest number of people who openly defecate and one of the major reasons for open defecation to exist in such a level in the country is surprisingly not the economic stature of the people or the lack of water, but the sheer low priority given to the need for a latrine. And, moreover, open defecation is a main cause of health issues among rural people, with more than 60,000 children under five years of age dying due to diarrheal diseases. And this issue of open defecation is not only a prevailing issue in the rural areas of the country, but majority of the urban slum dwellers also defecate in the open. This is because constructing toilets with the basic facilities are often considered as a luxury or an unwanted expense by most people. Surprisingly, electronics and vehicles are mostly given more preference to building toilets (Recyclebin, 2017).

Within such a socio-political reality of Indian cities, the launch of Swacch Bharat Mission (SBM) has made a significant progress with the sanitation coverage in rural India going up from 42% to over 63% (Institute, 2012). Furthermore, the SBM is not only a toilet construction programme focusing on building individual, community, and public toilets and improving solid waste management but also is a behaviour change mass movement with equal focus on creating awareness among the public about sanitation and improper facilities. While the mission has had a positive impact with the construction of public and household toilets having accelerated in the past few years, the practice of defecating in the open continues. Indubitably, the practice has a lot to do with one's conditioning, but the poor maintenance of public restrooms is also detrimental to eliminating open defecation.

This argument is further solidified looking at the example of Kerala, which has been declared open defecation free. That means that every person in the state is said to have access to basic sanitation facilities. This said, it can be very well seen from our day-to-day life experience that this is not true entirely. People still urinate out in the open,



affirming the neglected attitude, as men don't have any inhibition or guilt for openly urinating, which is sort of an accepted norm in the state. Public toilets are important, especially in the city areas. As there are a wide range of people passing through the cities in a day, most toilets are in a bad condition lacking in hygiene, facilities, and even safety (Recyclebin, 2017).

Out of the 50 surveyed toilets, 19 toilets either have a reduced usage or are not used at all. The reason for this is their location, less privacy, and lack of hygiene and facilities. But most of the toilets are unused or used moderately due to the lack of hygiene, which is the direct result of lack of timely monitoring and maintenance (Recyclebin, 2017).

This paper thereby explores one of the primary reasons for hindrance in effective use and availability of adequate public toilets in India—inefficient operation and maintenance (O&M).

So what does O&M of a public toilet mean?

The aim of toilet block O&M is to provide a functioning and sustainable service that responds to users' needs at an affordable price and which, at the same time, improves sanitary and environmental conditions in the area in which it is located. This includes several activities such as the following:

- Availability of infrastructure as space and artefacts
- Cleaning, maintenance, repairs, emptying, replacement, or rehabilitation of toilet block facilities and equipment
- Human resource management
- Allocation of roles and responsibilities to all those involved and collaboration with public authorities
- Managing toilet-based economy.
- Politics of socio-spatial design elements.

In India, O&M for public toilets is often outsourced to a third party by municipal governments. The most common O&M models for public toilets include public-private partnership, public management, and private management.

- *Public-private partnership* (PPP): O&M tenders are awarded to non-governmental organisations (NGOs) or private cleaning companies, and toilets are built using municipal funds.
  - The cost of maintaining these toilets (including cleaning products, water, electricity, etc.) is subsidised through the tender. However, these toilets usually charge a user fee between INR 2 and INR 5 per use to supplement local government payments to the contractor.

- This model is most common in urban areas where NGOs such as Sulabh International use a 'pay and use' model to offset costs to the urban local bodies (ULBs) for maintaining community toilets.
- *Public management*: Toilets owned and maintained by a municipal agency.
  - Typically, toilets are free for users and the caretakers conducting O&M are directly employed by the municipality.
  - This O&M model is still used in some places, particularly in smaller cities. However, the number of toilets maintained under this arrangement has decreased in recent years in favour of a PPP model.
- *Private management*: Toilets funded, constructed, operated, and maintained by the private sector, usually on land leased from the municipal government.
  - A user fee is charged, which varies based on the location of the toilets.
  - Ownership of the premises is transferred back to the municipality when the lease period expires, typically after 5–7 years.
  - This is the least common O&M model in use in India today (Platform).

The research paper investigates various models of toilet governance in the city of Trivandrum by inspecting public toilets under various bodies like the municipal corporation, NGOs, entrepreneurial startups, and tourism departments. It examines the different management structures and stakeholders involved in each set-up and the design considerations of each model to understand the various complexities involved in O&M of public toilets. How each system affects the behaviour of users, improving access to public toilets, counter discrimination based on sex and gender identity, and developing a better cognition towards sanitation are also examined.

Through this investigation, the paper is trying to understand the way forward involving a careful rethinking of public toilet governance and creating effective regulatory institutions to tackle the issue of hygiene and sanitation in public toilets, with the aim of bridging the intensifying gap between the desire and reality of a 'clean city'.

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# What Affects Urban Households' Energy Consumption Patterns? Technological Innovation and Behavioural Interventions

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## Abstract

The increasing attention being given to issues of climate change and sustainable development has led to a growing interest in energy conservation policies. While the traditional literature has focused on supply-side interventions aimed at reducing energy consumption through innovation and technological development, recent studies in behavioural economics have stressed on the need for public policies to focus on consumer end-use as well. This article draws on this emerging strand of literature within behavioural economics and reviews the factors that affect consumer energy consumption choice of households in an attempt to draw out important lessons for public policy.

## Extended Abstract

The relationship between growth and energy consumption, of course, has been very complex marked by massive global inequalities and heterogeneities of consumption patterns. But although the long-run relationship between growth and energy use is not straightforward, the two have indeed become intricately connected since the Industrial Revolution, giving rise to economies whose very stability and reproduction has become increasingly dependent on ever-increasing rates of energy use (Hannesson, 2009; Pablo-Romero and De Jesús, 2016; Vance et al., 2015). Between 1965 and 2012, one estimate for the world suggests that energy consumption grew by well over 200% (International Energy Agency, 2013). Notably, the share of electricity in the total energy consumption, which was recorded to be 19% in 2017, is projected to increase to 20.3% in 2025 to 23.7% in 2040 (World Energy Outlook, 2018). Indeed, even among contemporary developing economies like China and India, which have grown at tremendous pace over the last few decades, a ravaging hunger for energy has been characteristic of their respective development trajectories (International Energy Agency, 2020). There is considerable evidence linking growing energy consumption to the dangerously high emission of greenhouse gases (GHGs) in the atmosphere and to the ongoing problems of climate change (Malm, 2016; Pablo-Romero and De Jesús, 2016). Given this scenario, managing energy consumption and supply has acquired great importance within national and international policymaking. The recent study argues that a paradigm shift

in terms of production and consumption is essential to reduce energy footprint (FngHELLa et al., 2019). For instance, there are several ways to manage both supply and demand side of energy requirement, such as increasing energy efficiency in extraction and conversion, shifting towards non-fossil-fuel-based energy (e.g. renewable, nuclear, or other sources), reducing demand by using market-based instruments, various social and behavioural norms, and nudging approach. From the supply side, the challenge has been to find new ways to meet current and future demand for energy in a cost-effective manner. Moreover, given that climate change mitigation has become important as evident in the Paris Agreement (2015) signed by a number of developing and developed countries, there has also been an emphasis on finding alternative, clean technologies of generating energy. Goal 7 of the Sustainable Development Goals (SDGs) is committed solely to energy-related issues (*affordable and clean energy*).

However, while the stress on the use of clean technologies is obviously important, what is often missed is that the mere availability of cheap and efficient technologies does not automatically result in its actual adoption by end users. There is no obvious reason for entrepreneurs and consumers to choose energy-efficient technologies, appliances, and so on just on their availability because the actual adoption patterns and choices are governed by complex social, cultural, and psychological processes. Moreover, as a number of studies have shown, the availability of efficient technologies can actually generate complex feedback loops, which may encourage rather than reduce energy consumption (Polimeni and Polimeni, 2007). From a public policy perspective, this then means that apart from supply side interventions, influencing demand-side determinants of energy efficiency can be crucial for managing energy use. Typically, demand can be influenced either by non-price mechanisms or via various monetary, price-based incentives like taxes, subsidies, and others (Allcott, 2011). In practice, previous studies have shown the effect of monetary incentives on consumption to be inconclusive (Fishman et al., 2016) or even negative (Frederiks et al., 2014; Sudarshan, 2017). Price-based incentives are also much costlier to implement (Allcott, 2011). More importantly, adoption behaviour is not always driven by the calculus of gains and losses but also shaped by informal institutions, traditions, past habits, and are often made under bounded rational conditions. As a result, usual price-based incentives may not always work as planned or, even if they do, may require complementary non-price interventions (Thaler and Sunstein, 2009). Recent literature in behavioural economics suggests that ‘nudging’ consumers by providing them information about energy costs and environmental externalities and internalities could have significant implications on the adoption of low-energy-based consumer durable commodities. It is in this context that this review paper aims to address two following questions: (i) do efficient technologies and market-based instruments conserve household energy? and (ii) are behavioural interventions effective?

While it is, of course, true that by reducing energy input per unit output or by generating energy through clean, renewable means, technological innovations can play a key role in meeting the growing energy demands of the world economy in a sustainable manner, the problem is that a one-sided focus on technological fixes can be misleading. For one, over the last several decades, despite all the improvements in technology, energy needs have shown no signs of decreasing. Based on this, Vance et al. (2015) estimate that efficiency increases alone may not cause a dent in the energy demand–supply matrix, since energy efficiency would have to grow at historically unprecedented proportions in the coming years to meet the growing needs of the global population. Further, even if such high efficiency increases were to be made possible in the coming years, there is no guarantee that they would actually reduce energy consumption. For although technological improvements may result in the use of fewer inputs for given level of output, the very nature of this change may also generate complex backward and forward reactions that may actually spur producers to use more energy or consumers to increase their demand of energy-intensive goods (Foster, 2001). Put differently, while technological changes may help reduce energy input for *a given amount* of output, in the long run the incentives of economies of scale may actually push producers to produce more of the said good and hence demand greater, not lesser amounts of energy (Brookes, 1990). And if this increase in production goes hand in hand with declining prices, consumer demand would also likely increase.

This paradox, of course, goes back to the late 19th century, when economists suggested that technological improvements may actually increase energy consumption rather than decrease it. This is because the cheapening effect that such technologies would have on the final product could unintentionally lead to higher consumer and producer demand than before (Jevons, 1906 [1865]). Though originally propounded by William Stanley Jevons to explain how steam technology led to an increased consumption of coal, this paradox has been the subject of a large body of contemporary literature, which underlines the very same unintended consequence of efficiency increases on energy demand. Several studies have emphasised these rebound effects in the context of both micro-level and macro-level data (Fowlie et al., 2018; Polimeni and Polimeni, 2007). For instance, in a study of the cash-for-coolers subsidy that was rolled out by the Mexican government to enable households to replace old air conditioners and refrigerators with more energy-efficient ones, Davis et al. (2014) found that in some cases energy usage actually increased as a result of the subsidy. The authors also found that additional features included in the size and features of the new appliance models may also have driven consumers to use them more “than one would have expected based on the pure price response” (Davis et al. 2014, p. 229). Evaluating the nation’s largest energy efficiency programme, Fowlie et al. (2018) report that upfront investment costs are two times higher than the costs saved from reduction of energy use as demand for energy use increases because of energy efficiency, that is, rebound effect.

Two options are available using which a household can uptake plummet energy use: (i) cut down the use of different household appliances and bulbs and (ii) adopt energy-efficient technologies, that is, purchase high star rating household gadgets (see Andor and Fels, 2018). Both of them need to be targeted through policy, and several studies observed the role of behavioural interventions to promote these measures (see Andor and Fels, 2018). In this context, recent literature on household decision-making suggests that people repeatedly underestimate the energy savings that they can make from adopting efficient/clean technologies, which results in “the low adoption of energy efficient technologies despite potentially large saving” (Alcott and Taubinsky, 2013, p. 2). In principle, such behaviour may arise due to a number of reasons, but economists have started to stress on how behavioural factors can act as barriers to optimal decision-making. Energy labelling and star rating are two such mechanisms which help in increasing the levels of energy literacy apart from conducting programmes and implementing non-price-based policies. Low levels of education and energy literacy can decrease awareness of energy labels and prevent consumers from correctly assessing the information provided (Marie-Charlotte Guetlein et al., 2008). Further, even in cases where cognitive barriers are not significant, it has been argued that consumers and producers simply do not make use all the information that is available to them and thus underestimate hidden costs of their actions (Allcott and Greenstone, 2012; Kahneman, 2003;). This is what Sallee (2014) refers to as “inattention bias”, which she defines as the unwillingness of decision-makers to take the effort to find and incorporate relevant information while making choices due to the perception that the costs that go into such an exercise far outweigh any benefits from it. This is particularly true in case of inter-temporal choices, where agents have to make decisions that impact them not only in the present but across several periods as well.

In general, behavioural interventions by policymakers can take a number of different forms. Unlike price-based instruments, however, these interventions seek to directly influence consumer preferences directly or indirectly through what are called ‘nudges’, which usually involve a comprehensive set of interventions ranging from providing energy savings information, goal setting, and a commitment to allowing households to do peer comparison of energy consumption with their neighbours (Thaler and Sunstein 2009). While the distinction between nudges and traditional price-based instruments of intervention is often vague, the idea behind a nudge derives from the notion of ‘libertarian paternalism’, that is, the idea that interventions be designed such that they do not overtly constrain consumer sovereignty and while still, gently, pushing decision-makers to adopt privately optimal alternatives (Hansen, 2016). They are, in Galle’s (2014: 839) words, “innocuous little speed bumps” that decision-makers can opt out of at minimal costs. More generally, Hansen (2016, p. 158) states that “A nudge is a function of (1) any attempt at influencing people’s judgment, choice or behavior in a predictable

way that is made possible because of cognitive boundaries, biases, routines and habits in individual and social decision-making posing barriers for people to perform rationally in their own declared self-interests and which (2) works by making use of those boundaries, biases, routines, and habits as integral parts of such attempts.” Nudging is considered as an inexpensive approach to plummet energy use (Alcott, 2015).

Following the Paris Agreement (2015), most of the countries are looking for options to reduce energy consumption in industry, residence, and agricultural sectors. There is a dearth of evidence, particularly in context of developing and emerging market economies, which could enable the public policy towards energy conservation. Moreover, it is imperative to learn lessons from the studies conducted in the developed countries, and therefore, this study provides four policy insights that policymakers should consider while designing policy in the developing and emerging market economies. These are as follows: (i) although ideas of manufacturing innovative efficient technologies and scaling up have been pushed over the years, a rebound effect has been observed across the studies; (ii) incentive in terms of increasing price of electricity could be another measure; however, it is found as more inelastic given absence of substitute options; (iii) previous studies pointed out that it would be difficult for a democratic nation like India to implement Pigouvian tax to correct market distortion from a political point of view; and (iv) nudge-like interventions such as goal setting, commitment, information, peer-group comparison, appliance-specific information, and smart meter are found as effective across the studies. Given these reflections, this study advocates for adoption of nudge-type interventions in the developing and market economies to reduce household energy use, and it should be treated as complement to the innovation of technologies and incentives.

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# Urban Water Management: Reviewing the Changing Patterns

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The recent decades have seen an evolution of various urban management concepts such as integrated water resource management (IWRM), sustainable urban drainage systems (SUDS), green infrastructure (GI), and water-sensitive cities (WSC). All the concepts, promoted in different capacities, lack a clear definition and interpretation. Interestingly, most of these concepts converge in several instances. This paper reviews the use and applicability of the urban water management concepts like IWRM, SUDS, GI, and WSC. It maps the origin, definition, and integral elements of these concepts. The study of the selected topics is done by reviewing academic literature and policy documents. Through this dialogue of observing the changing paradigms and debates around water management concepts, the study aims to identify points of convergence among these concepts. Thus this research provides an empirical foundation for further engagement on a fit-to-purpose implication of such concepts among water professionals, academicians, urban planners, and researchers interested in urban water and systems.

*Keywords:* Water Governance, Water-Sensitive Cities, Urban Water Management

## Introduction

Should we consider water a 'good servant', mastered by the engineering, hydraulic, and planning expertise to flow through networked pipes, or a 'cruel master', attributed to the aqueous chaos created by water-borne and water-dwelling vector-borne diseases (Bell, 2014)? The water in cities has always been a subject of social and political control to enable financing and governance of infrastructure. Today, urban water resources are under serious threat with the rapid growing urbanisation, climate change, and declining freshwater reserves. Cities around the world, either strained due to severe water crises or motivated by societal reforms, have begun fostering sustainable changes in the water sector (Ferguson, Frantzeskakib, & Brown, 2013). Urban water, being interdisciplinary, multi-knowledge driven, omnipresent, and a common property resource, has of late been considered as a wicked problem (Freeman, 2000). The growing concerns over water resources have led practitioners and scholars to develop conceptual alternatives to cater to the dynamic nexus of urban water systems. These conceptual frameworks study water from different perspectives such as equity (Zwarteveen et al., 2017), scarcity (Woodhouse & Muller, 2017), or decision-making, use, and management (Wilson et al., 2019). Contemporary discourses have expanded the scope of urban water systems, considering not only the opportunities of stormwater as

a resource but the contribution that resilience and microclimate can offer in the overall maintenance of an ecosystem (Fletcher et al., 2015).

Technical advances in the areas of sustainable urban water management have made little contribution towards achieving the desired returns for developing a sustainable alternative to urban water usage. Over the past few decades, there has been a significant change in the dialogues, debates, and discourses around urban water—developing its scope from narrowly focused, service delivery approach to multiple objective approaches like that of resource conservation and sustainability and participatory decision-making process. Consequently, a plethora of concepts and terminologies have been developed, intending to provide newer horizons to cater to these challenges. Concepts such as integrated water resource management (IWRM), sustainable urban drainage systems (SUDS), green infrastructure (GI), and water-sensitive cities (WSC) are examples of a few concepts developed as a transition towards sustainable approaches (Fletcher et al., 2015). Recently, ‘water-sensitive cities’ have been envisaged as one of the fundamental building blocks for the sustainability of cities (Hering et al., 2013; Wong & Brown, 2009). These concepts were developed with the idea to provide additional or efficient services compared to the previously used concepts in the city (Chocat et al., 2007). All these concepts, however different, did connect on two specific grounds. First, each of these concepts claimed to effectively utilise and manage urban water systems, and second, to achieve their claims, they mentioned the use of water governance as an ‘element’. Thus, ‘water governance’ could be attributed as potential sources of overlap among the numerous contradictions and confusion within these urban water management concepts. This paper proposes to analyse the various existing concepts of urban water management. The paper hypothesises that these urban water management concepts, however different, hold a common ground and thus coverage on several positions. The research reviews the evolution of various discussed concepts in urban water management. In this process, it takes references from the pool of existing literature to identify the concepts and definitions. The paper would conclude by discussing the points of convergence of all these concepts. More broadly, this research provides an improved understanding and sound conceptual footing to explore the nuances of urban water management concepts for facilitating the goal of achieving sustainable urban water management.

### **Concepts of Urban Water Management**

The concept of urban water management, even though being practised for more than 3000 years, has been ever evolving and dynamic. During the mid-19th century came the engineering approach to deal with urban water. The initial engineering model of urban water suggested to bring water to the urban settlements and to dispose of the stormwater and wastewater outside these settlements. Time was a decisive factor for the efficiency of the systems, that is, quicker the engineering model better the system.

The period of 1960s to 1980s saw a change in the discourse of urban water management due to the following reasons (Chocat et al., 2001):

- mainstreaming of sustainable development as a concept;
- quality issues of the wastewaters on the receiving systems;
- rethinking water resource management from the ecosystem approaches; and
- advocacy towards consideration of an integrated approach to deal with urban water and drainage systems (i.e. fresh water supply, drainage, stormwater and receiving waters).

There has been a substantial cultural shift in the perception of urban water systems. The opportunities that it processes are now widely acknowledged instead of the previously assumed problems and challenges (Ashley et al., 2013). Hence the decision-making, design, and concept of urban water management have shifted from confining to a specific issue to a multi-objective approach (Wong, 2006). The urban water management concepts have emerged out of the contextually (local and regional) experiences, resulting in a convergent ideology among many of them (Fletcher et al., 2015). This section aims to understand the different concepts of urban water management that are being discussed in the contemporary literature and identify their principles.

A comparative drawn from the basic understanding of all these urban water management concepts congregate towards a bricolage of overlapping domains in urban water management. Several overlapping structural components suggest the similarities among them. It is important to note that however similar may these concepts seem, their origins and emergence are contextually different.

To summarise the discussion of various urban water management concepts, the uncertainty, complexity, and variability concerning the conventional water planning and urban water availability in the future are inadequate. This gap was well supported by the global agendas and initiatives of sustainability, and resilience had given way to the development of a plethora of concepts in the field of urban water management (Brown, Keath, & Wong, 2009, Ferguson, Frantzeskaki, & Brown, 2013; Fletcher et al., 2015).

Several pieces of research also claim that irrespective of the name, these concepts hold on to the central idea of sustainable systems while referring the catchment, watersheds, water hydrology, and the actors involved in the same (Poletto & Tassi, 2012; Srishantha & Rathnayake, 2017). Also, the steady mention of the advantages of landscaping, socio-environmental gains, wastewater treatment and reuse, catchment mapping. and quality of run-off can easily be traced in different capacities throughout these concepts. Thus, it can be deduced through both this study and supporting literature that though terms

like integrated water resource management (IWRM), sustainable urban drainage systems (SUDS), green infrastructure (GI), or water-sensitive cities (WSC), and many more (for example, low-impact development (LID), water-sensitive urban design (WSUD), etc.) have evolved at different places, through different advocacies and have different nomenclatures, and share a unified agenda (Barbosa, Fernandes, & David, 2012; Fletcher et al., 2015; Srishantha & Rathnayake, 2017). Hence, the study of urban water management concepts should focus on the elements that the concept specifically focuses rather than concepts as a whole. Such domain-specific research could result in developing a healthy and streamlined dialogue and discussion in academic literature.

## Discussion

This review demonstrated that the various concepts of urban management evolved as a response to the context of specific challenges and prevailing global discourses. Nevertheless, all these concepts advocate for the converse, a bottom-up led initiative where a shared vision among the actors are prioritised in defining the policy and norms. The movement towards achieving the self-sustenance and reliance in terms of water resource in a holistic manner has led to the development of numerous commentaries, concepts, and theories. While these theories may differ in commission and context, their phraseology and purpose remain common—to provide a unified vision and framework of integration, sustainability, and resilience. The recent discourses on the concept of WSC emerge as the most inclusive concept among others. However, all these concepts converge in several instances. These concepts particularly rely on the term water governance as a tool for the successful implementation. In such a case, it becomes essential to define the tool that has been extensively used in literature.

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# Ownership Status and Housing Quality in Urban India

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This study analyses effect of homeownership in urban India on the consumption of multiple housing attributes. We establish a causal relationship between ownership status and consumption of housing attributes by addressing the endogeneity related to ownership status using an instrumental variable approach. Using data from the 69th round of National Sample Survey (NSS), we find that the ownership status of the household is related to a larger dwelling area and having more number of rooms in urban India. However, higher consumption of these housing attributes also comes with a cost such as lower structural quality and inferior microenvironment of owner-occupied dwellings compared to what the same household could have achieved as a renter.

*Keywords:* Homeowner, area, rooms, quality, India.

## Introduction

Homeownership aspiration, a desire to become a homeowner, is an empirical regularity of household behaviour. In many cross-sectional studies, homeowners typically have higher housing consumption as compared to renters. This correlation is often taken as a manifestation of underlying causation that homeownership leads to improved housing outcomes. This implicit assumption serves well for policymakers who want to encourage homeownership for the associated positive externalities it can have.

Homeownership in Indian cities has increased considerably since the 1980s. From 1981 to 2011, the Indian urban population has recorded a compounded annual growth rate (CAGR) of 2.9% (Table 1). The number of urban households in India registered a CAGR of 3.4% during the same period. The number of households living in owned dwellings grew by 4.3%, while those living in rented homes grew by 1.7%.

	1981	1991	2002	2011
Homes Owned	53.1	63	66.8	69.2
Homes Rented	46.2	34.1	28.5	27.5

Table 1

Despite being a process of considerable magnitude and significant welfare consequences, the process of acquisition of homeownership in India remains considerably understudied. Understanding the determinants of homeownership and welfare consequences will have important policy implications, especially when the

government has been actively incentivising homeownership through credit subsidies. In this study, we attempt to understand the effect of homeownership on the consumption of various housing attributes. We disentangle the two products—income effect and homeownership effect. Homeowning households are more likely to be in later stages of lifecycle than renter households. Household income is generally higher in later stages of lifecycle. Higher housing consumption of owners can be thus associated with their higher income (associated with later stages of lifecycle) or their homeownership.

It is possible that homeownership has a negative effect on housing consumption. Homeownership in urban region is typically obtained through a housing mortgage. Mortgage repayment requirements, along with maintaining a standard of living, can limit the homebuyer's housing consumption. The effect will be severe when mortgage repayment requirement accounts for a large fraction of household income. Thus, a household will increase their housing consumption when they become homeowners compared to their housing consumption as a renter. But their housing consumption would have been higher had they stayed renters with income and expenditure same as what they are having as a homeowner.

More specifically, homeownership can be associated with lower consumption of certain housing attributes. Since owners tend to stay in their dwellings for a longer period than renters, owners will choose a dwelling that has a high level of unchangeable (or difficult to change) attribute like floor area or the number of rooms. The owners may compromise on the other attributes, which are qualitative aspects of dwelling in their initial phase and perhaps choose to improve them only over time.

### **Data and Variables**

We consider the 69th round of the National Sample Survey (NSS) data for the year 2013. We specifically consider 33,746 non-slum urban households for our analysis. We consider various aspects of housing quality, including the dwelling area, number of rooms, water, sanitation, and hygiene (WASH) outcomes, structural features, and environmental factors. Structural features consist of wall material, roof material, floor material, quality of the structure (good, satisfactory, or bad), ventilation, separate kitchen, and electricity. WASH outcomes consist of access to water, sufficient water availability during the year, safe drinking water, separate bathroom, and separate toilet. Environmental aspects consist of access to motorable road, no flooding, no flies in the vicinity, and covered drainage.

We develop an index of attainment for each of these housing attributes, except floor area and number of rooms. The maximum value for an index of WASH outcome, structural features, and environmental factors will be 5, 7, and 4, respectively. We will consider the z-score of each of these measures in our regression analysis. The

ownership status is a dummy variable taking the value of one for owners and zero for non-owners (who are predominantly renters as well as those with undefined tenures) in the sample. We also control for socio-demographic characteristics, including the gender of the household head, religion, caste, highest education attainment among adult members, household size, and monthly average per capita expenditure. Monthly average per capita expenditure excludes the rent paid by the renters, to avoid the systematic underestimation for owners whose expenditure on housing is not reported. We also control for NSS region dummies in our analysis.

## **Methodology**

The relationship between ownership status and housing attributes of residents in non-slum urban households is analysed using a multivariate regression framework after controlling for other socio-economic characteristics. The ordinary least square (OLS) estimator of the coefficient of ownership variable can be biased if ownership choice is endogenous. It is possible that more motivated households end up being owners and stay in better quality houses. In the presence of such an important omitted variable in the system, the OLS estimator will be biased and inconsistent. To address this endogeneity, we consider an instrumental variable (IV) for the ownership status. An IV to address the endogeneity associated with ownership status has been used in several housing studies (Aaronson, 2000; Lanjouw & Levy, 2002; Mohanty & Raut, 2009).

We consider the share of hospitals in the district and the share of places of worship in the district as instruments for ownership dummy. We obtain the share of hospitals and the number of worship places in the urban part of each district as per Census 2011. The higher share of hospitals and a higher share of worship places can be positively correlated with the probability of households staying in an owned dwelling. Households are more likely to buy a home in areas with better health facilities satisfying the relevance condition. Places of worship will be higher where residents have greater socialisation, which in turn is likely to be associated with presence of homeowners. However, there is no reason to believe that the share of health facilities in the district or the share of worship places will directly affect housing outcomes, hence satisfying the exogeneity condition. Further, in our analysis we also report the over-identification test results to provide statistical evidence in favour of exogeneity of our instruments.

## **Results**

Table 2 presents the second stage coefficients of the few important variables from two-stage least squares (2SLS) IV estimation of aspects of housing attributes. The key variable of interest, homeownership, is positively related with floor area and number of rooms and negatively related to structure quality and environment. In the case of WASH, an owned dwelling is statistically insignificant while it is statistically significant for all other housing attributes. The positive relationship of homeownership with space in

the dwelling (floor area and the number of rooms) and negative relationship with quality of the dwelling (structure, the environment in which dwelling is located) should be understood together. Floor area and number of rooms are the attributes of the dwelling, which are either unchangeable (for dwelling in multidwelling building) or considerably expensive to change (for independent dwellings). The structural quality of the dwelling can be improved by the household over time. Owners typically buy the dwelling with the help of housing mortgage. When household transitions into homeownership from being a renter, the household budget undergoes a massive shift. The owner's budget must accommodate the investment value of the dwelling, while renter's budget needs to accommodate the consumption of use-value of the dwelling.

The non-rent per capita expenditure, which represents the purchasing power of the household, has a positive relationship with housing attributes. This is a very intuitive result where higher purchasing power translates to a higher level of consumption. Similarly, the household size variable has a positive association with housing attributes. Larger households will require more space, hence, the association with floor space and number of rooms is again not unexpected. The positive relationship of household size and structure, environment, and WASH variables is perhaps not very direct and will require more nuanced analysis.

The investment valuation of the dwelling is higher than the consumption valuation, even due a negative externality associated with renting (Henderson & Ioannides, 1983). As households living in a rented dwelling becomes the owner, they have to sacrifice greater part of their budget for their housing consumption (for the duration of their mortgage) than what they could have spent for the same dwelling as a tenant. Since owners expect an increase in household size or already have a larger household, they cannot compromise on space in the dwelling, nor can they alter the dwelling or space in the dwelling. Hence, owners make a trade-off of quality aspects of the dwelling with floor space. They choose a dwelling with higher space than what they could have chosen as a renter. Over time, with improvement in household income and end of mortgage repayment, owners will improve the quality of dwelling. But in the initial year of being an owner with mortgage repayment requirements, owners will end up living in a dwelling different than what they could have chosen as a renter. The first stage *F*-statistic values suggest that the IVs are not weak IVs, and the relevance criteria of IV estimation is satisfied. Further, our Hansen test statistic does not reject the null of exogeneity, indicating that our instruments are uncorrelated to the errors of the housing quality attributes. Our main results suggest that ownership status is related to housing outcomes in urban India.

The negative effect of ownership is mainly the effect of mortgage repayment. If the information on mortgage repayment had been available, the ownership effect could

have been explained further. In the data we have used for estimation, such information is not available. Hence, it is likely that a large presence of households under heavy burden of mortgage repayment among households living in owned dwellings has influenced the ownership effect estimation. Such a possibility is not far-fetched. As indicated in Table 1 and discussion around it, homeownership in India has been rising rapidly. Hence, there are likely to be many owners who are under tighter budget conditions due to ongoing mortgage repayment. More recent homebuyers, in the last decade and a half, also had to buy in the housing market with high prices, which could have added to the mortgage burden.

Table 2: Results of second stage IV model for housing attributes

VARIABLES	Housing outcome – non-slum households				
	(1) Area-IV	(2) Rooms- IV	(3) Structural index-IV	(4) Environment index-IV	(5) WASH index-IV
Owned dwelling	<i>0.866***</i>	<i>1.198***</i>	<i>-0.284***</i>	<i>-1.430***</i>	<i>-0.200</i>
	<i>(0.103)</i>	<i>(0.321)</i>	<i>(0.083)</i>	<i>(0.246)</i>	<i>(0.187)</i>
Per capita monthly non-rent expenditure	0.240***	1.101***	0.448***	0.487***	0.433***
	(0.019)	(0.057)	(0.015)	(0.042)	(0.033)
Household size	0.073***	0.286***	0.052***	0.080***	0.097***
	(0.006)	(0.019)	(0.005)	(0.014)	(0.011)
Controls	Y	Y	Y	Y	Y
Hansen J-stat	0.326	0.454	0.575	0.328	0.330
Wald F-stat	91.22	91.22	91.22	91.22	91.22
Observations	33,644	33,644	33,644	33,644	33,644
R-squared	0.429	0.491	0.363	0.066	0.281

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Conclusion

Due to the mortgage burden, homeowners are likely to make a peculiar choice of dwelling attributes where they choose dwelling with higher dwelling space and lower dwelling quality than what they would have selected as renters. This choice results from certain empirical regularities associated with housing consumption. First, the investment value of the dwelling is often higher than the consumption value of the dwelling due to the negative externality of the renting. Second, space in the dwelling is often fixed while quality can be improved over time. These results are in contrast to the results in developed markets where the average housing quality for owners are superior to the renters. Our study intends to add to the urban studies literature in India by understanding a causal relationship between ownership status and housing outcomes using large scale representative data.

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Panel 11

# Planning and Urban Imaginations



# Role of Urban Green Spaces in Health and Well-being in Jaipur: Implications for Urban Planning

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*Keywords:* Urban Green Spaces, Public Health Benefits, Wellbeing, Urban Planning, Novel Coronavirus

## Introduction

The growing urbanisation has induced negative impacts on public health due to urban externalities, particularly in large urban agglomerations. These externalities are managed to some extent by the urban planning projects, though often costly, by providing the urban green spaces to minimise the impacts on public health and social well-being (Lee & Maheswaran, 2010). The urban green parks and public gardens provide enough evidence of reducing the public stress and offer health benefits to all the age groups. The importance of the urban green spaces (UGS) in providing the benefits of health and well-being of the urban population has been established by the available literature on urban greens and urban planning (Ayah, 2016; Bratman et al., 2019; Lee, Jordan, & Horsley, 2015). UGSs are often part of the public places in the city even though a considerable amount of them come under the private domain. Public spaces offer great cultural, economic, and social values in restoring the identity of cities and enhancing the lifestyle of its citizens, giving them opportunities for new experiences. (Ghel, 1987).

However, the literature lacks in identifying the direct linkages of availabilities and uses of urban greens to provide the benefit of health and well-being at various urban planning scales. This study assesses the extent of availability, quality, and accessibility of UGSs in the city of Jaipur, the capital city of the state of Rajasthan in the western part of India. It further investigates the purpose of visiting UGSs, the health and social benefits that the visitors experience, and the role of these in sustainable urban planning in the selected neighbourhood, zones, and city-level UGSs.

## Data and Methodology

The study has mapped the spatial distribution of UGSs using geographic information system (GIS) techniques at the neighbourhood level taking ward as a spatial unit. It has also analysed the zonal and city-level distribution using available data on land use and UGSs from the Jaipur Development Authority (JDA). The UGS distribution has been assessed by calculating the following indicators: (1) percentage of UGS area (PUGS); (2) urban green space patch density (UPD); (3) per capita availability of UGS area (UPI); and (4) mean area of UGS patches (Area\_MN), in each ward of Jaipur City. The UGS has also

been assessed in terms of per capita availability and the gap identified in the availability of UGS in each ward following national and international standards prescribed for sustainable urban living.

A survey of 141 users of public green spaces (Parks & Gardens) across different age groups and gender has also been conducted. The users were interviewed with structured questionnaires on various aspects of their perspectives such as the purpose of visiting UGS and the kinds of physical, mental and social well-being that they experience as a result of their visit. The users have been interviewed while visiting the parks and gardens randomly during the morning, afternoon, and evening time. The survey also captures the user's views on improving the quality of available UGSs for more sustainable use both from the short-term and in the long-term planning perspectives.

### **Results and Major Findings**

The distribution of UGSs in Jaipur metropolitan city is sparse and isolated and needs to be integrated for a larger benefit. Some of the zones are completely devoid of UGSs and they are historical heritage zones. The entire city lacks adequate UGSs; however, some of the planned neighbourhoods have required green spaces in terms of per capita availability as per the prescribed national and international standards. This study has considered Greater Jaipur (275.2 sq. km.) and Heritage Precinct (109 sq. km.) with a total area of 7.65 sq. km under UGSs. These UGSs are part of the recreational zone and are public gardens, clubs, golf course, playgrounds, racecourse, sports centres, stadium, swimming pool, and zoo.

Figure 1: Per capita availability of urban green spaces, Jaipur.  
Source: Jaipur Development Authority, 2020.

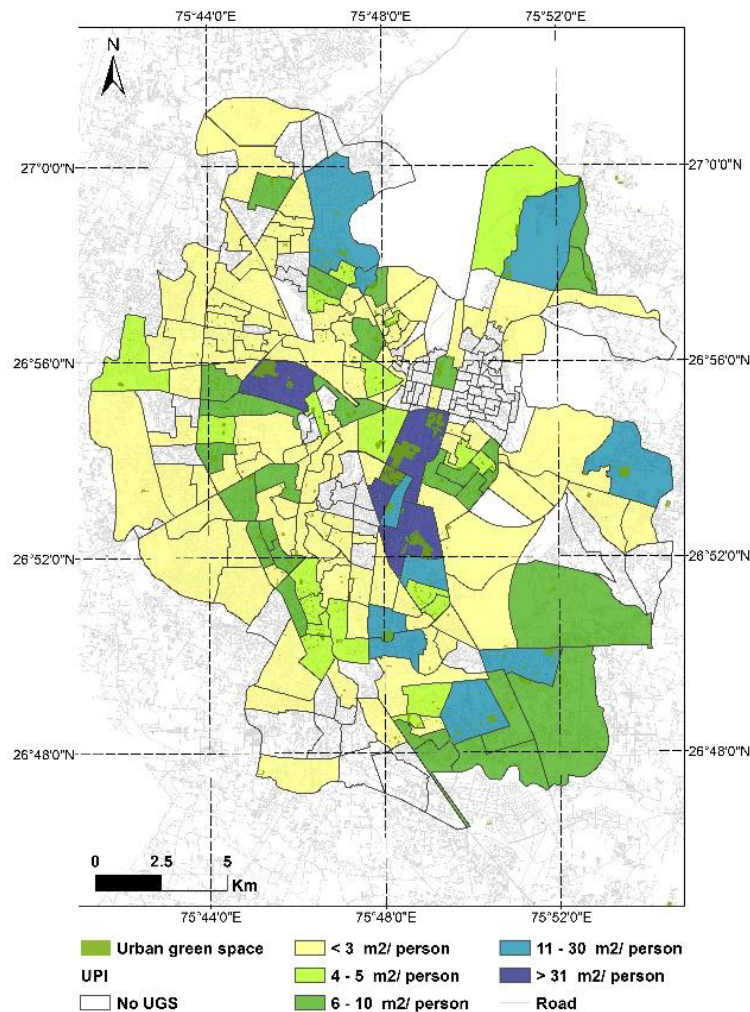


Figure 1 shows the ward-wise per-person availability of UGSs in Greater Jaipur and Heritage Precinct put together. There are 849 UGSs identified under the recreational zone in the city. Majority of these spaces are in the central zone of the city. The intensity of green space decreases towards the fringes and is extremely low in the Heritage Precinct.

Majority of the visitors were men in the age group of 25–55 years. Elderly people (13%) and adolescents (20%) were also visiting the parks and gardens. Out of the total 141 visitors, 69% belong to the working group of self-employed people, daily wage workers, and sales personnel. About 19% were students, and the rest were retired persons or housewives.

Majority of visitors reflect that UGSs are important for health and well-being of the citizens in Jaipur. The health activities include exercising, yoga, absorbing sunlight, breathing pure air, playing at swings, sitting, feeding birds, and visiting the temple. The social activities include participating in group yoga, laughing club, lunching, picnicking, meeting associates, volunteering at medical camps, and for cultural or leisure activities.

They emphasised the environmental benefits associated with these spaces. They suggested that the city is facing natural threats such as rising temperature, heavy rains, and hailstorms, which may be a result of low availability of green cover and water bodies. Apart from this, they held the view that the aesthetics of a UGS contributes to lowering stress levels and enhances well-being (Kaplan, 1989). The visitors also stressed on its social values. A neighbourhood with parks commands higher property rates depending upon the visitor count. They believe that a city with good UGSs attracts more people. Hence, restoration among the citizens can only be achieved if urban planning in Jaipur turns its focus on urban green spaces, its accessibility, connectivity, and physical qualities.

### **Implications of COVID-19 on UGS**

Though the initial objective of this study was not focused on the COVID-19 pandemic, however, while conducting the user's survey before the nationwide lockdown, it was decided to capture some of the pragmatic urban planning issues and challenges that they pose for urban livings vis-à-vis role of urban green spaces. This pandemic comes with associated health, economic, and social costs that are expected to affect humankind to a large extent. Amid this crisis arises an uncertainty about the future and rational fear that our sense of space (private and public both) may be reimagined (Fitbit, 2020). Thus, the question of how this will alter people's relationships with UGSs naturally arises. Will it transform the perception of the people about the access, use, and restoration of urban greens in the city?

This study also finds that UGSs bestow direct benefits to mental and social health and well-being of citizens of a city. The post-pandemic measures call for a holistic approach towards urban greens so that its positive impact on public health continues. This can be ensured by proper maintenance and regulation of parks and public gardens and at the same time designing and landscaping to facilitate social distancing while using these spaces. To maintain social distancing inside these spaces, soon the UGSs will witness enhanced involvement of ULBs in designing of parks with creative concepts that will ensure the required two-metre distance between the people. The post-pandemic landscape architecture of urban greens may have furniture and equipment installed to enable social distancing.

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## The Spatial Distribution of Public and Common Mobility Resources in Mexico Valley Metropolitan Zone

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Infrastructures are the means through which societies generate their wealth, but at the same time are the most visible fruits of a society's collective labour. This paper explores the spatial distribution of collective wealth investment in the form of mobility resources across the Mexico Valley Metropolitan Zone. By analysing their level of rivalry and excludability, the paper proposes a methodology to further explore the public and private nature of mobility resources. Specifically, the spatial distribution of public and common mobility resources is mapped, as the provision of these mobility resources relies exclusively on the public sector. The methodology proposed in this paper allows answering the following questions: Which territories are successful in attracting collective wealth investment in the form of mobility resources? Which territories fail to attract a share of the city's collective wealth? The results of the study show that out of the 5550 census tracts that comprise the Mexico Valley Metropolitan Zone (MVMZ), only 702 (12.6%) have a level of public and common mobility resources above the metropolitan region average. Nevertheless, the distribution of these mobility resources is excruciatingly unequal, as 99.6% of those 702 census tracts are located within central Mexico City while only 0.4% are located in outer rings of the metropolitan area. The census tracts that have a salient provision of public and common mobility resources are clustered in three agglomerations. Two of them overlap perfectly with the existing employment subcentres, while the third is located outside of the main hub of economic activity.



# Ecological Perspectives in Spatial Planning: Critical Review of Master Plans for Delhi

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The urbanising world poses a plethora of challenges related to the development of land impacted by various cross-sectoral issues of climate change, ecological disruption, exploitation of natural resources and biodiversity, and changing demographic and socio-economic trends (Müller & Munroe, 2014). Thus, the continuous dilemma of obtaining economic, ecological, and social benefits through land development for sustainability (Campbell, 1996) becomes both ambiguous and complex. This is particularly relevant in the context of urbanising and sprawling Indian cities where there is a predominant discourse on land development versus environmental conservation.

Adding the ecological perspective in spatial planning makes the notion of spatial scales crucial for ecosystem services due to the fact that the boundaries of natural systems such as catchment or aquifer often differ from the political or administrative remits of cities or regions (Taylor, 2017). Thus, ecology prioritises the 'spatial scales' above any 'urban' or 'city' scale. It can certainly be derived that the ecological perspective in spatial planning deals with the set of planning approaches (such as land development tools), that preserve and foster the delicate relationship between humans and their built and natural environment (Steiner, 1999) by providing or regulating the necessary ecosystem services beyond any rigid remit.

With this background, this research positions itself to look at the larger discourse on ecological consideration in land development through spatial (land use) planning by critically reviewing the case of first three Master Plans for Delhi (MPDs)—MPD 1962, MPD Perspective 2001, and MPD Perspective 2021—for their ecological considerations. It attempts to answer its primary research question—What has been the trajectory of ecological perspectives in spatial planning in Indian context?

To compare and understand the extent of ecological inclination of these MPDs, the Millennium Assessment (MA) Framework for Ecosystem Services (2003) has been used. This is a widely used framework, established to achieve the United Nations (UN) Millennium Development Goals (MDGs) and to implement the 2002 World Summit on Sustainable Development (Alcamo, Bennett, & Millennium Ecosystem Assessment (Program), 2003). It presents the conceptual and methodological approach for assessing the decision-making options for ecosystem services to enhance the well-being of people (Alcamo, Bennett, & Millennium Ecosystem Assessment (Program), 2003). The MA framework provides linkages among four types of ecosystem services: provisioning,

regulating, cultural, and supporting ecosystem services. Hence, this research has critically reviewed the three MPDs for the inclusion (or exclusion) of these ecosystem services.

Due to the political importance of Delhi, the national capital of modern India, planners had given special attention to its planning by also bearing in mind its surrounding regions. As Vidyarthi (2018) says, “this was perhaps best exemplified by the adoption of South Asia’s first-ever statutory master plan that they notified in 1962”. All these Master Plans have laid down planning guidelines, policies, development code, and space requirements for various activities for socio-economic development to support the city’s population during the plan horizon period (Delhi Development Authority [DDA], 1990). Prior to the MPD 1962, an interim general plan for greater Delhi was prepared by the Town Planning Organisation (later merged with Central Regional and Urban Planning Organisation to form TCPO, i.e. Town and Country Planning Organisation) in 1956 (DDA, 1962). In 1962, Delhi Development Authority (DDA), in consultation with the Ford Foundation, prepared the first Master Plan for an estimated population of 5 million envisioned in 1981 (DDA, 1962). Then onwards, the later Master Plans were prepared by the DDA by consulting various other agencies such as the National Capital Region Planning Board (NCRPB), Government of National Capital Territory of Delhi (GNCTD), and New Delhi Municipal Corporation (NDMC) (Dewal, 2006) to frame policies for urban development.

The comparative assessment of MPDs present the trajectory of ecological considerations of these statutory plans. The evidence shows that, while the first two MPDs showed limited inclination towards environmental aspects and ecosystem services, the third MPD explicitly documented the vision of sustainable development and strategies for environmental conservation.

The consideration of ecological needs and ecosystem services was least in the first Master Plan for Delhi (1962) as the focus then was to foster economic development (Nallathiga, 2006) and provide basic minimal utilities as provisioning, regulating, and recreational (cultural) services. Also, the consideration of supporting ecosystem services in MPD 1962 was very limited, unlike the other two plans. This was due to the fact that Indian cities were experiencing the phase of industrialisation and urbanisation post-independence. Economic development was a priority for cities to cope up with poverty issues (Nallathiga, 2006), as it was also observed in the objectives of the first MPD (DDA, 1962). However, due to the lack of efficient regulating mechanisms, cities continued to urbanise and sprawl, rapidly creating new concerns regarding ecological disruptions.

The problem of environmental and ecological disruption was realised by Indian planners and policymakers during the late 20th century when master plans started

including 'environmental conservation' as one of their objectives as observed in the case of MPD 1991 (perspective 2001). The second MPD (perspective 2001) augmented the strategies of MPD 1962 and added a couple of new services. An important novel aspect of this plan was the provision and regulation of stormwater management due to the increasing pollution levels in river Yamuna. Another significant addition was the emphasis on ridge preservation (supporting ecosystem services). Both second and third MPDs identified two major natural features and ecosystems of Delhi—the river Yamuna and the Aravalli Range (ridge). Thus, both these plans recommended conservation strategies for these vital natural features. Nevertheless, the strategies were not enough and the implementation mechanism lacked efficiency. Hence, issues related to air, water, and land pollution increased and ecologically sensitive areas continued to be at a loss.

The 21st-century master plans, such as the third MPD (perspective 2021) suddenly increased emphasis on retaining the ecological balance through micro- and macro-level planning interventions. The assessment of MPD perspective 2021 shows maximum inclination of the plan towards fostering essential ecosystem services. The plan explicitly considered conserving important natural features (ridge and water bodies); regulating urban activities to reduce pollution levels (water, air, noise); tapping the potential of water cycle by harvesting rainwater and recharging groundwater; integration, rehabilitation, and augmentation of water-related infrastructure; recommending a variety of open spaces based on different needs, among others. Furthermore, the plan also explicitly discussed the modern notions of blue-green infrastructure, parkways, integrated water management, rainwater harvesting, and zero run-off drainage. This has been a much constructive development in the spatial plan-making process for Indian cities. However, issues related to the governance, implementation, and monitoring are the major barriers for achieving the desired goals of ecologically sensitive development. However, the plan has been critiqued by various authors (Dewal, 2006; Puri, 2012) for its overambitious vision and challenging implementation process, which is out of the scope of this research.

This has limited these plans only to a mere tokenism stage, as the strategies remain symbolic only on-paper and not on-ground. While the gap of need for ecologically sensitive development strategies is now gradually being addressed by planners, the real challenge lies in its implementation. There is a strong need for planning and implementation processes to synchronise with each other, as it is currently lacking in most Indian cities.

The case of Delhi Master Plans represents most 'fast' growing Indian cities that rely on the 'slow' implementation of strategies of the statutory spatial plans. Hence, we can conclude that the dilemma of land development versus environmental conservation not

just requires the integration ecological perspectives into the spatial plan-making process, but it also urgently needs an efficient implementation framework in harmony with the plans for sustainability. Hence, this research contributes to the larger discourse on land development versus environment conservation, relevant for urban planners, designers, and decision-makers.

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# Missing in Action: In Search of an Integrated and Pragmatic Planning Information Framework in India

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*"A significant development in India's structural transformation is that metropolitan regions are being created by default and not by design."*

—Ahluwalia et al. (2014, p. 6)

India's urban planning system exhibits a chaotic and fragmented decision-making environment (Sarpotdar, forthcoming). Chaos in planning is best understood in its relation to chance, randomness, and incomprehensibility (Hillier, 2010). In this case, it emerges from a range of paradoxical factors that co-exist; a liberal democratic polity, an elite-driven multiactor planning system, and information asymmetry (Sarpotdar, forthcoming), which perversely affect effective urban management. From the current debates in planning, it is clear that despite the usefulness of systems and data-informed approaches in providing technocratic solutions to ameliorate the tensions within such a chaotic system, they seldom work in practice (Gunder et al., 2017). On the other hand, critical planning theory (CPT) that stresses on increasing communication and collaboration in the planning process is excessively idealistic in serving as a pragmatic solution for improving decision-making (Mäntysalo, 2002; Tewdwr-Jones & Allmendinger, 1998). These theoretical debates are sufficient for understanding the problems and failures of the current planning paradigms; however, their capacity to produce solutions to the problems recurring in planning practice has met with only partial success (Bhan, 2019; Mäntysalo, 2002), which is one of the key aims of urban planning. To clarify, none of the theoretical concepts can be easily put into practical action; however, their effective realisation requires a different form of communication and integration that is currently absent in the discussions on planning information systems that support decision-making.

An upcoming suggestion to support decision-making in planning is that of an urban information system (UIS) that responds to fluid, dynamic, and fuzzy context and involves a range of urban themes. Urban information systems are envisioned and designed to mediate diverse types of spatial urban data for producing knowledge and improving decision-making in spatial planning. These have their origins in the early work of Hearle (1968) who observes that in a fluid and wicked context, often encountered in urban issues, a holistic or 'total' urban information systems is redundant. He advocates for a UIS that focuses on jurisdictional units important for governments such as cities or

counties rather than specific issues. The advancement in technologies has renewed interest in this concept as both the fundamental challenges of chaotic urban management and jurisdictional issues are possible to be ingrained into a single system (Babelon, 2020).

The development and application of information systems within an urban context such as planning support systems or public participatory geographic information systems in the Global North have a long trajectory of more than two decades (Brunsdon et al., 2019; Geertman et al., 2015; Klosterman, 1997). In the avalanche of big geo-spatial data, this has found a renewed interest in the debates, with some old problems resurfacing and some new challenges created as discussed earlier. In countries within the Global South, the trickle-down, which was initially slower, has accelerated with the increasing entrenchment of Big Data (Heeks, 2002, , 2019). Moreover, the extent to which new planning information support systems are developed by researchers to the point of adoption but are never implemented in planning practice or policymaking has remained low (Geertman et al., 2015).

A single theoretical lens is limited in entirely discerning the development of an urban information system for a chaotic and fragmented context such as India. In the absence of a generalisable theory and a robust methodology, a conceptual approach that transcends the dichotomies of technocratic and critical planning theory (CPT) is proposed in this paper. Furthermore, the ideal values of participation, communication, and collaboration have to be integrated alongside a sound, technical evidence-based system. Combining these aspects is critical for developing a conceptually sound and practically relevant planning information system that is sensitive to the institutional context and power relations. The approach suggested here, therefore, avoids the grand claim of resolving problems of collaboration and communication within the planning process. This proposed framework is developed on the basis of a set of established principles that are derived from a plurality of desirable values, with emphasis placed on an understanding of planning practice that translates into action. In order to make sense of the practical realities of the planning environment, there is a need to achieve an accurate balance between theoretical rigour and pragmatic realisation. The framework proposed here should be seen as a transitional step and a gradual incremental approach of moving towards achieving the 'ideal scenario', rather than attempting and failing to achieve the ambitious theoretical concepts.

India, with its paradoxical planning system, is a suitable test case for the proposed information framework because its political set-up has been designed to ensure participation and inclusion within the planning process to mirror the democratic culture of decision-making (Chatterji, 2012; Roy, 2009a). Although such efforts have been made to create the façade of a democratic and inclusive planning process, information



asymmetry and perverse power relations between institutions have undermined the practical manifestations of ideal policy prescriptions (Sarpotdar, forthcoming). This 'implementation' gap between the state visions and policy outcomes has characterised the planning practice in the Global South (Watson, 2016). This is starkly visible in India and has previously been conceptualised as failure in planning (Bhan, 2013; Roy, 2009b) or planning violations (Sundaresan, 2019) that has become a central tenet of the reality of planning practice. A critical requirement is, therefore, to conceptualise and ameliorate these 'practical-realities' (Healey, 2006) of urban management.

The paradoxical features of urban planning system in India include: top-down technocratic approach with participatory characteristics; legitimised by multiple stakeholders but elite-driven; and information-rich but solely reliant on expert knowledge (Banerjee, 2005; Chatterji, 2012). Even though planning theory has attempted to synthesise these dualities and their relationships, most of the concepts are often studied in silos and an integrated conceptual and methodological approach is conspicuous by its absence. In this paper, a conceptual framework and methodological strategy is developed to bridge this gap. The proposed framework developed here rests on the interface between research and practice, where the relationship between systematised research knowledge and practical or experiential knowledge is interactive (Healey, 2008). Evaluating this interactive relationship is possible only through a practice-based understanding, which illuminates the 'soft characteristics' of the urban information system. Therefore, analysing the interplay of these concepts in practice and evaluating their interactions is necessary to provide means of learning through reflexive practice (Schon, 1983), which is significant for its improvement.

In the absence of any systematic method that caters to answer these questions, an innovative and improvised mixed methodology approach is proposed. The proposed methodology relies on document analysis, a baseline data audit, spatial analysis, and the development of an online interactive thematic map. Urban analytics, which combines traditional modelling approaches and new data-driven tools to generate data-informed evidence for possible policy alternatives such as 'what if' scenarios, is the best practice approach (Engin et al., 2019) commonly adopted.

However, this requires sophisticated and granular spatial data. Whereas a compulsory footnote of most urban studies scholarship of India is to underline the dire state of urban data, especially for granular analysis (Bhan, 2013; Jain & Korzhenevych, 2020; Kundu, 2014). Nair (2005), in her study on Bangalore, remarked that there may be no accurate cartographic representation of the extent of the urban territory. In some cases, the failure of development plans is attributed to the inconsistent information that drives and underpins the evidence within them. A corollary of this is that the amount of

information used in the plans illuminates the real value of India's spatial data infrastructure. However, the issue is more complex than simple quantity of information. The multi-scalar and cross-sectoral methodological strategy proposed in this paper therefore unbundles some of these complex issues and aims to start a discussion around the quality of spatial data infrastructure in India. The paper contributes towards enhancing existing geo-visual methods for analysis of city-regions with complex administrative and functional geographies and in countries with chaotic spatial data infrastructures. The method proposed here demonstrates the potential of India's urban spatial data and contributes towards a future understanding of using 'Big Data' in urban planning.

The need for an integrated inclusive planning information framework for improving decision-making in planning is increasingly relevant as the sustainability and digital agenda permeates planning practice at variegated scales. It is imperative that any such information framework addresses the changes towards sustainable management of resources. Gupte (2020, p. 63) summarises this plight accurately: "there continues to be a fundamental gap between the types of technological solutions being proposed to enable data-driven urban governance, and whether these solutions, and the manner in which they are being implemented are necessarily promoting inclusivity, resilience, and sustainability." These comments are most relevant to this paper. However, this thesis engages with the question 'how' such solutions can be designed that promote inclusivity and sustainability rather than the question of whether. 'How', 'what concepts', and 'which methods' can be used to inform planning for an inclusive and sustainable urban imaginary are some of the critical questions that this paper aims to answer.

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Panel 12

# Perceptions of Difference: Identities in the City



## Between Heterotopia and Utopia: Indian Queer Urbanism in the *Tranquebar Book of Erotic Stories*

Swati Palanivelu Vijaya; Ohio State University

Sexuality and gender actively impact how we imagine and practice urban futures. Our sexual subjectivities and gendered bodies routinely move in and out of ambits of normativity often disrupting spatial codes they impose. This paper explores the forms of expression these inventive aspirations and experiences of the city find in erotic fiction. I critically survey two short stories from *Alchemy* (2012), an anthology edited by Sheba Karim, which is the second volume of the *Tranquebar Book of Erotic Stories*. The discourse analysis I present concertedly follows queer spatial narratives enunciated in the text and extrapolates how normative spatialities are ruptured in heterotopic practices and restructured through utopic visions.

The first story 'Abandon' by Shrimoyee Nandini moves through spectral townships of unfinished apartment buildings across the peripheries of an unnamed Indian city. The narrative follows a young heterosexual couple as they search and situate abandoned buildings as spaces of pleasure, only to discover a very queer universe that inhabits the very orbit of these infrastructural vestiges. The duo soon crosses paths with transwomen searching for spaces of sociability, young gay men seeking sexual partners, sex workers meeting up with clients, and many others escaping the moral surveillance of the cityscape. Thus, 'Abandon' explores a universe which is not just an erotic escapade, but a substantive space of belonging, affirmation, sociality, and to some extent, safety. I proximate this spatial microcosm to what Michel Foucault describes as heterotopia—a concept that emerges from his lectures between 1966 and 1967 denoting certain cultural, institutional, and discursive spaces inhabited by the 'other'. Thus, heterotopias can be understood as worlds within worlds, reflecting and yet altering the society that surrounds it. 'Abandon', in its narrative arc, illustrates a similar space, which is effectively disruptive, and potentially transformative in how it reimagines the cityscape.

The subsequent story 'Mouth' by M. Svairini is both a juxtaposition and an extension to the heterotopic narrative posed by the former. It constructs a futuristic city a century from now, which inhabits the underground following an environmental catastrophe faced by the earth's surface. The city is now governed by the Feminist Pleasure Party (FPP), which abolishes the binary system of gender assignment, rather organising this new society around the idea of choice between four genders. These gender identities impinge upon sexuality and pleasure rather than biological constitution. All gender pronouns are phased out, and everyone is now addressed as 'she'. Thus, 'Mouth' comes

to represent the utopia that realises an aspired post-gender society built upon near-perfect ideals. However, as the plot progresses, we realise all the four genders are not equal. The characters are expected to perform gendered morality as they navigate urban publics. Workplaces still discriminate against one gender over the others. Thus, this utopic universe begins to emulate the gendered society it was conceived in contrast to. In confronting these complex contradictions, 'Mouth' creatively engages with the politics of imagining vis-à-vis practising urban futures.

In reading 'Abandon' and 'Mouth' together, I explore the distinct narrative lens heterotopia and utopia enable in reimagining the city. The foundational distinction between the two categories is the fact that a heterotopic society is embedded within the material realities of the contemporary society, while a utopic universe is a complete abstraction from it. While the former is a spatial assemblage we physically participate in, the latter is an aspirational exercise towards a radical future. Nevertheless, creative reflections around queer futurity requires an intersection of both. In engaging with this critical overlap, some questions the paper poses are: How do queer heterotopias culminate spatially around us? How do they build and blur boundaries in the city? How do queer and trans people negotiate belonging and safety within heterotopic spaces? What discursive importance does utopia hold in imaging queer futurity? How does queer utopia deal with other spatial inequities such as caste, class, and language? Through these inquiries, the paper attempts to explore heterotopia and utopia as mediums of urban imaginaries and the specific meaning they hold for queer lives.

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# A Muslim Feminist City: From Girls at Dhabas to Shaheen Bagh

Tara Atluri; University of Toronto

*Drawing on interviews with #GirlsatDhabas in Karachi, Pakistan, and secondary research and participant observation in #ShaheenBagh, I discuss the possibilities, precarity, and necessities of Muslim feminist, transgender, and queer urbanisms in South Asia. This paper examines transnationalism as a way of thinking, creating, and practicing politics in cities that allows for the alignment of queer and transgender urbanisms with Muslim urbanisms in the creation of artist residencies in occupied Kashmir, and the creation of urban pockets that allow policed bodies the space to exist despite constant threats to citizenship.*

The anti-CAA (Citizenship Amendment Act) protests in New Delhi, India, and the 2020 Delhi riots against Muslims occurred after the writing of this manuscript and continues today. The protests have largely been against the Citizenship Amendment Act and the National Registry of Citizenship (NRC), which dissenters worry will be used to deny the citizenship rights to Muslims due to the discriminatory and bigoted Hinduisation of India. Simultaneously, Hindu nationalists began agitating against Muslims in hideous ways, reflective of how national policy can spurn public violence. The anti-CAA protests are deeply important as they capture the reality of xenophobia, Islamophobia, and bigoted nationalist ideology that haunts India and perhaps many other nations. The time of writing is finite, and the incomplete nature of all philosophical and political inquiry is really the purpose of this one small set of ideas that will hopefully continue to be voraciously debated and change over time. The feminist movement is not an unchanging doctrine and the schisms of meaning and political discourse that arise across time and space are reflective of movements that sustain themselves, due to constant critique and flexible positionality.

Rahul Rao describes the CAA and its connection to citizenship. As Rao writes,

The Act offers a fast track to citizenship for non-Muslims fleeing religious persecution in predominantly Muslim Pakistan, Afghanistan, and Bangladesh. Its opponents argue that in introducing a religious qualification for Indian citizenship for the first time, it strikes at the root of the constitution's commitment to secularism. (Rao, 2020, 17)

The Delhi Riots of 2020 were a response to anti-CAA protests in the capital city of India. The intensity of violence reflects these bigoted and unconstitutional ideas in a time of transnational Islamophobic violence. As authors report,

The 2020 Delhi riots, or North East Delhi riots, were multiple waves of bloodshed, property destruction, and rioting in North East Delhi, beginning on

23 February and caused chiefly by Hindu mobs attacking Muslims. Of the 53 people killed, two-thirds were Muslims who were shot, slashed with repeated blows, or set on fire. The dead also included a policeman, an intelligence officer and over a dozen Hindus, who were shot or assaulted. More than a week after the violence had ended, hundreds of wounded were languishing in inadequately staffed medical facilities and corpses were being found in open drains. By mid-March many Muslims had remained missing. (2020 Delhi Riots, Wikipedia, Oct. 2020)

The attacks against Muslims were gendered in heinous ways that demonstrated the will to ethnically cleanse the population and to build a future Hindu citizenry by interfering in Muslim bodies in deplorable ways. There was an active effort to make Muslim lives into unsustainable, unliveable, and ungrievable lives. As witnesses describe,

Muslims were marked as targets for violence. In order to have their religion ascertained, Muslim males—who unlike Hindus are commonly circumcised—were at times forced to remove their lower garments before being brutalised. Among the injuries recorded in one hospital were lacerated genitals. The properties destroyed were disproportionately Muslim-owned and included four mosques, which were set ablaze by rioters. By the end of February, many Muslims had left these neighbourhoods. Even in areas of Delhi untouched by the violence, some Muslims had left for their ancestral villages, fearful for their personal safety in India's capital. (2020 Delhi Riots, Wikipedia, Oct. 2020)

The riots took place at the end of February 2020, after the announcement of the Citizenship Amendment Act (CAA) and the protests against discriminatory citizenship policies on the grounds of religion. The normalisation of Hindu nationalism and the current national leadership of the Bharatiya Janata Party (BJP), led by Prime Minister Narendra Modi, corresponds with the hideous rise of white nationalism, and global Islamophobic realities that draw strength from paranoid metaphors of belonging and exile.

Rahul Rao discusses the tenacity of Muslim feminist protest in this time of casual genocide. The author argues that the anti-CAA protests are an act of anti-nationalist nationalism, organised and led by women. As Rao writes,

On 26 January 2020, thousands of people cheered as four women hoisted the Indian flag in Shaheen Bagh, a predominantly Muslim locality in New Delhi, which had become the epicentre of protests against the highly controversial Citizenship Amendment Act (CAA) that was passed in December 2019. (Rao, Online, 2020, 17)

Rao describes how older Muslim women organised sit-ins that became popular in Delhi and spread throughout the country. They were joined by leading Dalit feminist activists,

such as Radhika Vemula, the mother of Rohith Vemula, a Dalit student who committed 'suicide' while trying to complete a PhD and being abused by administrators, bureaucrats, and students in the university system. Vemula's murder triggered demonstrations against casteism in the educational system. The protests were large in number and enduring, despite police efforts to curb its mobilisation. The outbreak of the COVID-19 pandemic finally caused police to disband protestors, and yet many still lingered in the streets and online. The CAA also exists in the context of a contemporary moment in India in which Narendra Modi, Prime Minister of India, and the BJP have risen to power. Rahul Rao describes the CAA and its connection to citizenship. As the author writes,

The Act offers a fast track to citizenship for non-Muslims fleeing religious persecution in predominantly Muslim Pakistan, Afghanistan, and Bangladesh. Its opponents argue that in introducing a religious qualification for Indian citizenship for the first time, it strikes at the root of the constitution's commitment to secularism. (Rao, 2020, 17)

There have been constant attempts to change the once Muslim names of cities, monuments, and streets to Hindu names. The rise of Hindu nationalism has also created instances of mob violence against Dalits and Muslims throughout India. The Shaheen Bagh protests offer waking dreams of a Muslim feminist public sphere that creates striking occupations of urban space after years of efforts globally to quarantine Muslim women to the realms of the domestic sphere through the banning of veils and the rise of Islamophobic violence. This erasure of Muslim urbanisms in South Asia has often been supported by conservative, heteronormative middle-class familial discourses that make Islamophobic states and patriarchal parents allies in ways that are reminiscent of colonial rule. Shaheen Bagh like the Pakistani non-binary, transgender, queer, and feminist collective Girls at Dhabas is an expression of an imaginative future of Muslim feminist urbanisms. The violence of state power and the violence of patriarchy constructs Muslim queer and feminist claims to occupy public space as pathological and unintelligible. New visions of city spaces as those of nationalist anti-nationalism and gender transgressions that intersect with transgressions of heteronormative domestications of bodies frame this paper. I am interested in how the creation of Muslim feminist urbanisms articulates claims to citizenship in confrontational ways. In a time of 'love jihad' paranoia regarding the right to desire, I am also interested in how the presence of politically active Muslim women in the public sphere unsettles expectations of class and caste reproduction by allowing desire to unfurl in city streets, like unlikely flags and ornate veils that challenge what cities and what feminism looks like.

### **#GirlsatDhabas: Prophetic Visions**

The borders of Pakistan and India were drawn in the blood of women. The gruesome rape and abduction of women across man-made borders, because of man-made borders, defined the making of the modern South Asian nation-states. Pakistani feminists such as the inventive and courageous collective #GirlsatDhabas politicise space in ways that defy masculinist cartographies of empire and nation. Public feminism in urban Pakistan echoes through city streets, reciting new prophetic visions of and for cities where feminine bodies can and do belong. In this paper, I discuss the impassioned feminist activism of #GirlsatDhabas. #GirlsatDhabas is a collective that reclaims spaces haunted by the enduring ethos of masculinist violence that colours the most intimate crevices and public spaces of Pakistan.

This paper is framed in the interstices between space and time. The space of city streets in Karachi and Lahore competes with the crowded roads of Hindustan, where mobs gather to lynch Muslims in ways that defy all description. A monstrosity beyond words. The treatment of Muslim women in India has become consistently worse, and yet often unremarked upon in a country of increased religious violence and the rise of the Hindu right-wing. The current Prime Minister of India, Narendra Modi, who was elected to the position of Prime Minister in 2014 is often described by feminist thinkers as a Hindu nationalist. Many argue that Modi is connected to religious fundamentalist groups that have been consistently eroding the rights of Muslims, Dalits, and other religious and ethnic minorities in India. Writing in *The New Yorker*, Eliza Griswold discusses the rise of racist violence against Muslims in India since Narendra Modi assumed office as Prime Minister in 2014. As Griswold writes, "Under Modi, incidents of communal violence rose twenty-eight per cent between 2014 and 2017" (Griswold, 2019).

The vicious attacks against Muslims by Hindus have focused on the body. The body that is imagined to eat beef, the body that is imagined to trouble the racist dream of a future 'pure' Hindu nation-state. Murders of Muslims are narrated in tones of terror. Young Muslim men recite stories of being beaten and watching family members be killed by militant Hindu nationalist groups, while trying to transport cows from a cattle market. Narratives of death also involve love stories that end in merciless death. The term 'love jihad' has become popular among Hindu right-wing ideologues who beat and murder young Muslim men who have relationships with Hindu women. The violence that Muslim women experience has received less media and scholarly attention. The absence of Muslim women in public space in contemporary India is perhaps a result of Hindu nationalism, and the moral policing of women's bodies in Muslim areas of urban India by male religious leadership.

I live in a predominantly Muslim neighbourhood in the city of Bangalore in South India. This book is written between the time of an increasingly aggressive Hindu nation-state

and the space of a Muslim enclave. Women grace the streets in dark veils, signifying religiosity and commanding the public sphere as religious subjects. And yet, it is only in this one small area that hangs on the edges of the city, in which one often sees Muslim women occupying public space. The women who do venture will most often veil. As Fatima, who works at her family's store, tells me, "It is not just because of religion that I veil. It is because of safety. If you show that you belong to the community, men will leave you in peace, most times" (Atluri, unpublished interviews, 2019). Muslim women in India and throughout South Asia are subject to constant scrutiny from the internal, private, religious discipline of families and the external violence of Islamophobia. As Fatima further remarks,

I don't wear the full veil when I go to University. There, it would be worse if they saw it. It is a strange thing. If I wear it here, I am good. If I wear it in another part of this city, I am bad. I have to think all the time, who is going to look at me and then I try to control how they see. I know I am still the same person, but I am just something they see. (Atluri, unpublished interviews, 2019)

A minority among a minority, Muslim women in an increasingly aggressive Hindu country are often subject to familial violence and the external violence of religious persecution. Young Muslim women like Fatima must negotiate the small counter public sphere of Muslim religiosity in India, and the public sphere of a wider Hindu majority in an increasingly aggressive Hindu nationalist country. As she states, "I am supposed to hide that I am a woman. I am supposed to hide that I am a Muslim. I do these things to feel safe but more and more, I won't hide either" (Atluri, unpublished interviews, 2019). Fatima argues that the rise of Internet access and usage among young Indians has allowed for the politicisation of young English-speaking Muslim women. "I can use the Internet and not hide anything there. I think women of my generation are more educated and we can use the law and also shame people on the Internet. It will happen more and more here" (Atluri, unpublished interviews, 2019).

### **Disappearing Brown Women and An Excess of White Tears**

#GirlsatDhabas, a feminist collective that is based in Pakistan, has become popular throughout South Asia and globally for politicising the rights of Muslim women to occupy public spaces. The collective uses "the dhaba," a roadside teashop and café that is found throughout urban Pakistan as a symbol of the overpresence of masculinity in the public sphere. The bodies of men crowd the streets of Karachi, of Lahore, filling roadside dhabas with male bodies that are offered space and sustenance in city spaces. Women disappear from public view and from a world that offers selective empathy. White women of the Global North cry tears that the whole world will hear. The Fatimas of the world simply disappear. #GirlsatDhabas is a dynamic group of feminists who politicise gender and public space in cities such as Karachi, where many of the key

organisers are based. Zoya Rehman describes the dynamic presence of Girls at Dhabas in urban Pakistan,

Girls at Dhabas is one of Pakistan's most well-known feminist collectives that owes its popularity primarily to online spaces. The collective focuses on the reclamation of public spaces by women and non-binary individuals. What started as a picture posted of one of the members sipping tea at a dhaba (roadside café) soon became a movement that began to define the right of women and non-binary individuals to enjoy Pakistan's public spaces. (Rehman 2017, 153)

Drawing on the wonderful words of Amna, Sadia, and Shymla, key organisers of #GirlsatDhabas, I discuss this collective of urban feminist provocateurs and their significance at a time when public feminism in South Asia is gaining recognition. #GirlsatDhabas fight for the creation of spaces of gendered dissent not found etched on any colonial map. Yet, these spaces are found everywhere in the spirited will of feminists who materialise utopian enclaves such as roadside cafes, to make a world that can be tender for all of us.



# Dalit Settlements during Early-20th-Century Delhi: Pandemic and Its Variegated Impact<sup>1</sup>

Jatin; Jawaharlal Nehru University

## Introduction

With the shift of century and the transfer of British India capital to Delhi, the fate of the medieval city in terms of its built environment and socio-physical space changed drastically. The transition took place in the midst of a number of important events including the pandemic of plague, World War I, separate electorates and the politics of numbers, emergence of socio-political organisations based on identity politics, and construction of the adjoining new colonial capital New Delhi, among others, that influenced the socio-spatial structure of the city. Dalit settlements and their housing prospects were no exceptions.

As the transfer of the British India capital to Delhi took place, there was a population boom in the capital. Apart from political and bureaucratic representatives of the state, several groups of population moved into the new capital primarily with hopes of economic upliftment. In case of Dalit communities, it combined with the prospects of anonymity and therefore social amelioration and emancipation as well. This paper aims to investigate the period of early 20th-century Delhi. It will examine how the prospects of amelioration of Dalits came to be recognised and was linked with the aspect of proper housing and settlements within the city. The paper will analyse primarily the factors of pandemic, missionary works, and identity politics in this context. Apart from analysing the major factors, the paper aims to look at their cumulative degree of impact on Dalit housing and settlements within the city of Delhi and its environments.

The research project focuses mostly on the initial decades of the 20th century and tries to put forth the tension and alterations that arose with the period of 'transition' in a number of senses as stated above. For the themes of this paper, I have not included the impact of important factors like the World War, which was significant in terms of Dalits and their settlements in the city. In terms of missionary activities as well, the paper would mainly focus on those activities of the missions and its organisations that were inspired by the trope of insanitation. The work will also take into account the initiatives taken by missionary organisations in the course of or as measures to tackle with plague pandemic within the city. Finally, in the epilogue of the paper, the analysis of the present scenario as well as the post-COVID-19 imaginaries will be presented.

## Pandemic and Dalit Settlements

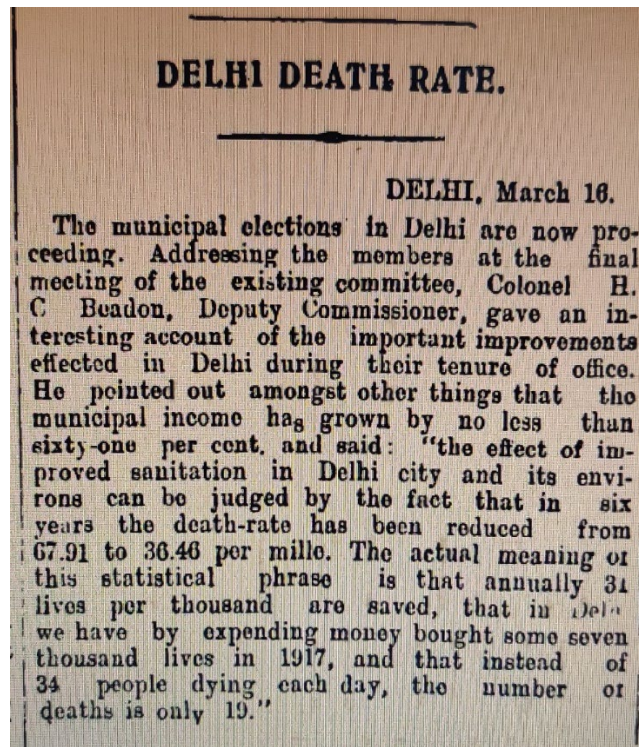
Throughout history, the devastating and disturbing impact of pandemics in the settled areas are well known in a broader understanding. However, a closer inspection and

analysis of the effects of epidemics are required to understand the degree and gravity of varied impact of epidemics. From the studies undertaken and data analysis, it has been highlighted that the impact of pandemic varies significantly in different spheres of life and on different areas as well as set of populations.

In context of the current spread of novel coronavirus (SARS-Cov-2), preliminary data studies reveal the diversified impact and therefore establishes the fact of the subjective effects of the pandemic over different sets of population even in the same region. In the Indian context, a recent report by economists Ashwini Deshpande and Rajesh Ramachandran propounded that as a result of the pandemic and the measures undertaken to tackle it in India, the consequential distress in India has concretised pre-existing structures of disadvantage based on social identity (*The Hindu*, 22 August 2020).

Deshpande and Ramachandran argued that out of the four enumerated levellers, 'pandemic' was very loosely described, since preliminary data and early indirect evidence from many parts of the world hint that contraction of the disease is not neutral: poorer and economically vulnerable populations are more likely to contract the disease as well as to die from it (ibid.). In another article, Shreehari Paliath has highlighted the economic drift created among different caste populations as a result of the coronavirus pandemic. The article emphasised that those belonging to Schedule Caste (SC) were unemployed thrice as compared to the rest of population (*Scroll.in*, 8 September 2020).

This section of the paper argues that pandemics in the early 20th-century Delhi, for example, cholera and particularly plague are no exceptions given their worst impact on Dalits. A scrutiny of the historical records puts the fact bare that the Depressed Classes and their 'insanitary' residential quarters were the worst affected group and areas during the pandemic in the initial decades of the 20th century. In fact, the trope of sanitation was instead used by the state authorities to siphon off the rights over the city from the marginalised sections and caste groups of the city's population.



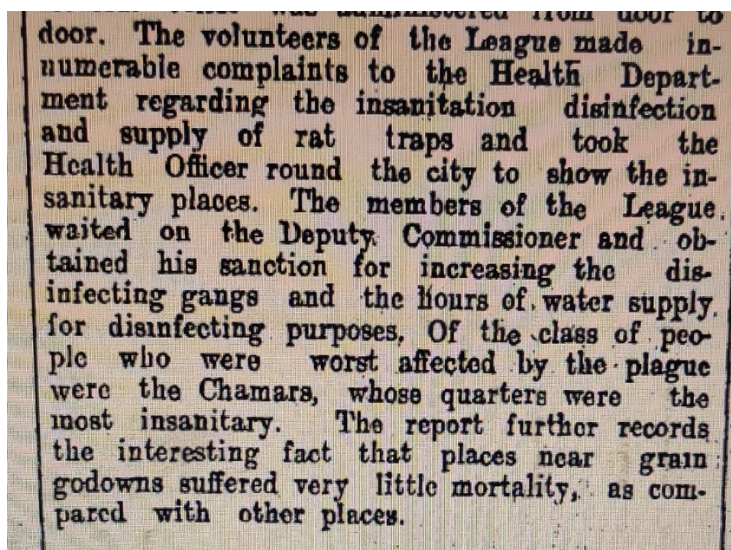
Source: ProQuest, *Times of India Archives*, 18 March 1918

There exists a set of work from scholars who have highlighted the role of state in the city, which provides us a glimpse of the nature of state actions in the name of sanitation towards Dalits and their settlements in particular. Indian Marxist historian Vijay Prashad has worked on the engagements of a Dalit community in the city's sanitation regime. Prashad has focused on Mehtar community and their status as 'sweepers' in the city along with analysing the role of Delhi Municipal Committee, the state body established in 1863 for the purpose of maintaining sanitation of the city and manage it economically to make it a profitable business rather than a state expenditure (Prashad, 2000, pp. 2–24).

Narayani Gupta has discussed that the plague, particularly during 1898–1900, had devastating effects not just on the city's population but for the city's built environment, since the colonial state used it as an excuse to execute large restructuring projects. However, sanitation of the whole city was not a grave concern for Europeans back then, prior to the transfer of the capital (Gupta, 1981, pp. 136–139).

These works have although discussed the plague and the colonial response to it. However, how the pandemic had a variegated impact over different groups of population within the city was not covered in any study. Research had been limited to the indigenous–European dichotomy. The proposition is that rather than looking at the pandemic as a general devastating event, a closer look at its differentiated impact over different sets of population within the same area would substantially add to the depth of knowledge about its impact.

In a report published by the Social Service League, a body supported by public as well as state, we get a glimpse of the variegated impact of the pandemic. Within this report, the organisation reported about the worst affected group of population amid the plague spread. League stated that the untouchables, particularly the 'Chamars', were the worst hit by the pandemic. The residential quarters of Chamars, the report mentioned, were 'the most insanitary' (*Times of India*, 29 June 1923). It also highlighted the "interesting fact" that places around grain storages had comparatively experienced less mortality rates as compared to other places (*ibid.*). We shall see the role of missionaries in context of Dalit housing further in the next section.



Source: ProQuest, *Times of India* Archives, 29 June 1923

This was not an isolated description where the inhuman conditions of Dalit settlements and their housing conditions were expressed. Rameshwari Nehru also made an identical description.<sup>2</sup> A similar description of the Harijan Bastis came from Mahatma Gandhi, who also could not find words to define the filthy and inhuman condition of Dalit bastis in Delhi. His visual experience was expressed in his newspaper *Harijan* and it was also published by Bharat Sevak Samaj's report on the slums of old Delhi. This establishes the fact that the inhuman conditions and lack of basic amenities like access to potable water and proper housing had rendered the Dalit communities of the city as the most susceptible and vulnerable group during the pandemic.

### **Missionaries and Dalits**

The Christian missionaries who came to the colonies primarily for the work of proselytisation dealt with a number of social issues during their course of work. In the Indian context, a number of marginalised groups, including Dalits, were attracted towards the missionaries due to the benefits offered by the latter in return of affiliation. In order to attract Dalits, the missionaries also provided them with housing prospects. Revered G.A. Lefroy from Cambridge Mission to Delhi expressed in his works and correspondence to his colleagues the works done by the mission among the Dalits in

Delhi. The Dalit community among which the mission particularly worked was the 'Leather Workers' or the 'Chamar Christians' of Delhi (Lefroy, 1884). Lefroy explained to Westcott how his work among the Chamars was justified within the jurisdiction of the mission. The explanation was needed since they were supposed to be working among the 'upper classes' and the 'more thoughtful heathen' (ibid.). What is relevant as per the scope of the paper is the work Lefroy explained regarding the settlements of Dalit Christians. Lefroy highlighted the works done by the mission in providing a separate settlement for Chamar Christians in Daryaganj, Delhi (ibid.). He also explained the reasons why a separate settlement for Christian Chamars was necessary.

### **Political Organisations and the Tussle for Dalit Representation**

The emergence of various political organisations who contested for the representation of Dalits proved both boon as well as bane for the Dalit lot of Delhi. The socio-political organisations which emerged at the helm of identity politics engaged in a fierce tussle to take charge of improvements of Dalit settlements via the state sanctions.

Politics has been involved in the allotment and implementation of housing schemes meant for Dalits. The involvement of state and its agencies, particularly Delhi Municipality, Ministry of Health, Delhi Improvement Trust, and in the postcolonial period, agencies including Ministry of Rehabilitation and Delhi Development Authority in the allotment of housing to Dalits highlight different aspects of caste politics. The state and its agencies dealt with Dalits through the mediation of organisations for Dalits like Depressed Classes Association, Dalituddhar Sabha, Salvation Army, Harijan Sevak Sangh, Harijan Welfare Board, Displaced Harijan Rehabilitation Board, among others. The terms of mediation were not free floating. Scholars like Vijay Prashad and Anish Vanaik have pointed to the interplay of caste politics within Gandhian and nationalist mobilisations and Hindu politics. In context of housing, this Hindu intervention in Dalits' issues led to involvement of agencies like Dalituddhar Sabha, a unit of Hindu 'militants' in colonial attempts of housing Dalits.<sup>3</sup> In August 1925, the Commissioner of Delhi gave the charge of making recommendations and allotments of plots in a proposed basti for Depressed Classes to Dalituddhar Sabha, which had applied for the sanction of the lease. However, in 1931, All India Depressed Classes Association rose in protest against the mediation that it is a 'caste Hindu' Arya Samajist organisation' and accused the organisation of wrong distribution of plots of land meant for the Depressed Classes (Vanaik, 2019, pp. 203–204).

This was not the sole case when charges of wrong or illegitimate allotment of lands meant for Dalits were levelled. In case of Shraddhanand Basti, another basti proposed for Depressed Classes in the colonial period, the irregularities in allotment schemes were quite sharp. The basti was proposed for the Depressed Classes by the colonial administration around 1925. However, the scheme and its implementation caused a



wide rift and the issue was raised in the legislative assembly in 1940 by Bhai Parmanand.<sup>4</sup>

In the history of Dalit settlements in most of the cases mentioned before, the concern for settlement and housing did not come from state's or others' response to dire inequality and social evils in the society. Rather, settlement from above were carried by state and its agencies for its own needs, necessities, and political legitimacy.

## Conclusion

The early 20th-century is fit to be recognised as a transitory period not just in context of the city of Delhi in general, but also for the Dalit settlements in Delhi and its environs. The period experienced a combination of factors which proved to be 'transitory' in the socio-spatial history of the city: shift of the capital, population boom of the city along with migration of Dalits to the city, plague pandemic, emergence of identity politics based on numbers, World War I, evangelical missions and their engagements in the city, and building of a new colonial city. All these factors added to the transformation of the built environment of the city.

This paper highlights how these factors in different combinations had an impact on the Dalit settlements and the prospects of housing of Dalits within the city. It noted how the plague pandemic hit the untouchables worst in the city given their inhuman residences devoid and deprived of basic amenities including water and sanitation. The role of the institutions like the Social Service League and other Christian missionary institutions helped the Dalits gain attention in the history of denial of rights in the city. Dalit amelioration in the city increasingly gained attention primarily because of the emergence of identity politics in the country. The contestation for Dalit representation by socio-political organisations including caste Hindu organisations, in turn, proved to be facilitating for Dalit groups in multifaceted manner. However, as discussed in the case study, many of the ameliorative programmes became the scapegoat of political apathy and denial.

## Notes

1. A note on 'Dalit' terminology:

Dalit, originating from Sanskrit root *Dalita*, fundamentally means 'oppressed' or 'downtrodden'. According to Anupama Rao, this term was first used by Dr B.R. Ambedkar in 1928 in his newspaper *Bahiskrit Bharat* (Rao, 2006, p. 34). Later, this term was revived during Dalit Panthers movement by Dalit activists and intellectuals in 1970 to refer to the 'untouchable' castes collectively. I have employed the term to collectively refer to and make general conclusions in context of the untouchable castes in Delhi. However, in examining a particular context, I will pay close attention to the terminology of the time, so that the particular kind of power coiled in it, is not flattened out. As per

1925 report by Mr Abott, then Chief Commissioner of Delhi, there were 19 untouchable castes identified as Depressed Classes in the 'primarily untouchable' communities. The list mentioned Bawaria, Chamar, Chirimar, Khatik, Koli, Chuhra, Dagi, Dhanak, Kurmi, Lodha, Rehgar and Sansi in the primary category. Secondary untouchable castes included Nai, Teli, Julaha, Dhobis, and others who were engaged in low-status work.

2. An eminent social worker who worked for Dalit upliftment and also served as the President of Harijan Sevak Sangh unit of Delhi from April 1959 to November 1965.

3. 'Militant Hindus' or 'Hindu militants' were terms used by Vijay Prashad to address to the group involved in political upholding of Hindutva and asserting communal aspects in politics favouring Hindus. For details, see Prashad (2000, pp. 67–69).

4. F.1(80)/40 Local Bodies; File no. B. 64, 1936, Education; File no. B. 28, 1928, Home, Chief Commissioner Records, Delhi State Archives.

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## Fractured Geographies, Cornered Communities: Shaping and Reshaping the Urban

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India is among the many countries of the world that has, of late, been swept by a pressing tide of hegemonising majoritarian politics and overt centring of religious identities. In the midst of bitter political contestation, growing ascendancy of right-wing ideologies, increasing intolerance and discord, and their, often, violent manifestations, it becomes necessary to take note of the myriad negotiations that inflect lived experiences of excluded and targeted communities in different parts of the world. Our expanding urban centres serve as ready sites, where these negotiations are played out. Urban life, together with its tussles and challenges as well as real prospects of moving up the ladder, differently impacts diverse resident communities. It spells differential implications for their everyday existence. In this study, I direct my gaze towards Bhopal, a burgeoning city in central India and a key politico-cultural node of the region. I discuss the gradual processes of hardening of socio-spatial boundaries in the city and persistent efforts made by its Muslim residents to work out tenable modes of being, in the face of this unavoidable reality.

In the present fraught environment, Muslims, who make up a fairly large and conspicuous religious minority group in India's population, feel increasingly isolated. With the rise to power of a right-wing majoritarian regime that preaches an aggressive brand of religious politics, rejects the principle of secularism as an imported Western construct, envisions the creation of a Hindu *Rashtra* or Nation, and misses no opportunity to disparage members of the Muslim community, the latter inevitably find themselves pushed to the wall. They have to routinely contend with grave security concerns, given a marked rise in "incidents of violence against minorities" (Khan 2007, p. 1527) across the country and "increasing influence of the Hindu Right" (Kirmani, 2013, p. 123). Their socio-economic vulnerabilities, political marginalisation, and potential threats to physical safety have been examined over the years through a range of prisms by different agencies, scholars, and civil rights activists.

Basing itself in Bhopal—a thriving Indian city and a stronghold of Hindutva (Hindu Right) politics—the present paper sets out to explore lived experiences and inhabited worlds of a wide spectrum of Muslim residents. The paper tries to uncover their everyday realities, dilemmas, and life choices. It attempts to study prevalent patterns of spatial arrangement and intercommunity dialogue in the city, and a variety of ways in which these play out in the lives of city Muslims. In doing so, it provides an important window to survey the local and, at once, go beyond it to interrogate the wider processes of production of fractured urban geographies and breakdown of social relations.

The study brings together the archival and the empirical, relying on a combination of written records and oral narratives. This two-fold engagement unravels competing constructions of space—both physical and social—along with one's place in it. Thereby, it helps to concentrate attention on multiple ways of remembering, experiencing, and imagining the city as a site of everyday interface and exchange. For framing this inquiry, I have pieced together the written and the oral. In addition to consulting relevant records, press reports, and existing scholarship, I approached and interviewed a wide array of Bhopal's residents. In-depth interviews were conducted in several batches in the course of successive field trips to the city. The informants were of different age groups, residing across different neighbourhoods, drawn from varying socio-economic backgrounds, occupational categories, and the like.

I made a conscious endeavour to map their proximate living contexts, social configurations, and generalised interactions. Crucially, this line of inquiry can extricate their everyday modes of being and engaging. It can retrieve "layers of experience" (Ross, 2001, p. 270), which might otherwise remain unvoiced and unacknowledged. For discerning these embedded layers, it is, of course, essential to be cognisant of the spoken word and the narrated account. Equally, a sensitivity to implicit gaps and silences is also required, for it can significantly deepen our understanding of the emergent issues.

The study takes note of Bhopal's local specificities, unique historico-cultural legacy, and political trajectory, focussing especially on prevalent patterns and practices of intercommunity engagement. The evolving fortunes of the city, its rapid expansion (Jaffrelot, 1999), transition from a subordinated princely state in colonial India to a sprawling provincial capital in the postcolonial context, gradual fragmentation into discrete zones and unmistakable hardening of socio-spatial boundaries constitute key themes of exploration.

Here, a few words about the chosen field setting are in order. Bhopal ranks among the principal cities of central India. It serves as the capital of Madhya Pradesh, the second largest state in the country that has registered a consistently poor performance on most indicators of socio-economic development. Its steady surge and widening expanse aside, Bhopal continues to be defined as the city of lakes. It has a rugged and hilly terrain, interspersed by flat plains. Encompassing a host of hills and lakes, it has expanded from north to south. In patches, the city still retains the scenic natural beauty with which it was blessed (Buch, 1993), although large parts have, with time, been weighed down by increased expansion and construction. Presently, it is grappling with "growing pressure of up-gradation and densification of activities" (Bhopal City Development Plan, 2006, p. 20). The basic infrastructural and transportation scenario of

Bhopal leaves much to be desired. Existing infrastructure across many sectors is inadequate and often poorly managed, while available public transport facilities are, at best, erratic and in need of due maintenance. Marked opulence of certain areas and sections, resulting from new capital inflows, slides in neatly with the stagnation, deprivation, and daily struggle for sustenance that frame the lives of large masses of the city's residents.

The city of Bhopal, as it stands today, has expanded and surged forth as distinct, and often disjointed, fragments, rather than developing as a composite whole, bound by underpinning symmetry and cohesion. Its rugged and uneven topography, characterised by "a combination of hills, valleys, and lakes" (Shrivastav and Guru, 1989, p. 11), together with inexpedient planning, undertaken without much heed to existing physical and cultural specificities, partly explain the emergence of disparate zones. But these explanations are insufficient in themselves—they need to be supplemented and problematised further. And this is precisely what the present study sets out to do.

The city's spatial discontinuity and dissonance have been inscribed and overlaid by yet another sinister layer of differing community affiliations. The identification of north/old Bhopal with Muslims and of south/new Bhopal with Hindus has been etched in popular consciousness. In recent decades, this distinction has been impressed upon with growing force and immediacy in dominant representations and imaginings of the city. From my fieldwork, it can be clearly discerned that north (old) Bhopal readily comes to be labelled as a Muslim block, while the southern (new) part of the city stands implicitly identified as a Hindu zone. Rather than developing as integrated parts of a unified whole, the two segments appear to be locked in a strained and uneasy relationship. The pace of development in these two sectors of the city has been markedly different. Most prominent government offices, commercial centres, and health, educational, and other institutions have gradually come to be housed in south or new Bhopal to the clear neglect and detriment of the northern or old part of the city that had formerly been the hub of administrative and economic activity (Jaffrelot and Wülbers, 2012).

In resident narratives, old and new Bhopal bear the signature of and get identified with Muslim and Hindu communities, respectively. Misguided official policies and dictates have further cemented such ascriptive associations. Continued division of housing and neighbourhoods along religious lines has only served to bolster and reinforce the image of a fragmented city. By engaging with a textured mix of narrated experiences and impressions, my work brings to light diverse processes and practices that have accentuated this fragmentation and generated divided cityscapes.

Considerations of religion and community have become unduly important in determining people's housing decisions, their degree of access and availability of

possible options. Tellingly, Bhopal's Muslim residents, who represent about 26% of the city's population (Census of India, 2011), have been hit hard by this and their narratives take note of the biases involved in house-hunting. They have to contend with constant suspicion and scrutiny, adding decidedly to their share of worries. The tightening constraints on Muslims with respect to residential preferences and their confinement to certain, usually, ill-equipped and poorly serviced areas within Indian cities have been well documented (see, for instance, Chatterjee, 2015; Jamil, 2014; Kirmani, 2008). Facing similar odds, Bhopal Muslims too report feeling increasingly constricted and cornered. Across different categories of age, class, gender, occupation, and the like, they reflect on the volatility of their immediate environment and their own precarity.

Tapping into these reflections, the paper seeks to extricate a web of ongoing negotiations that frame their everyday existence. In doing so, it brings forth routinised experiences of exclusion, discrimination, and spatial segregation that they have to typically contend with. It further plots the multilevel insecurity that they often wade through and endemic mistrust that they encounter. Recurrent efforts of local Muslims, slated to overcome deepening insecurity (Baseline Survey of Bhopal District, 2008), prejudice and presumptive hostility get examined, while their withdrawal or internment within specific neighbourhoods, in the face of steady emergence of communally segregated housing, comes to be flagged. Growing segmentation of city spaces and reification of boundaries figure as key planks of discussion here.

Set in Bhopal, this paper maps the production of exclusivist urban imaginaries and intimidated social communities. It examines different interventions, designed to carve out disaggregated community-specific spaces, write off the city's collective cultural memory, and forge a sharply polarised present. In the final analysis, it demonstrates how these interventions—led and conceptualised by both state and non-state actors—inevitably strike at the roots of established forms of social dialogue and contribute in producing urban geographies of fear, overlaid by invisible, yet often impermeable, mental borders.

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Panel 13

# Looking Forward: The Agenda of New Urban Science: Invited Plenary



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**Jose Lobo**; Clinical Associate Professor, School of Sustainability, College of Global Futures,  
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**Luis Bettencourt**; Professor of Ecology and Evolution, University of Chicago

**Debra Roberts**; Co-Chair, Working Group II, IPCC

**Aromar Revi**; Director, Indian Institute for Human Settlements

**Abstract:**

The panel reflected on the challenges and opportunities that new urban science provides academics, educators, and practitioners across the world to recognise, engage with, and begin to develop a collective 'scientific' approach to more equitable and sustainable urban futures in a highly diverse and dynamic environment.





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