ARCHITECTURE, RESILIENCE AND THE ARTICULATION OF URBAN DILEMMAS

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This paper views the City as the product of a complex web of ongoing social and cultural developments. It bases its understanding on the premise that a City and its landscapes, act as agents of historic transmission and documentation that are bound together by the varying degrees of elasticity embodied within them. It proposes that when an engagement with the past happens through the insertion of catalytic programs posited against the historic artifact it creates an episodic urbanism. Collectively viewed these, “episodes” which place the individual at the center of a negotiated urban experience pushes the elastic limits of a city’s resilience and hence acts as both an agent for continuity and change.

Keywords
Architecture, Palimpsest, Resilience, Thirdspace Urbanism, Urban Episodes

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INTRODUCTION

Architecture is the product of the conditions and dilemmas that bind it. It represents not an absolute but constructs a terrain wherein that which is construed and imagined can be en-acted. Through its materiality and spatial configuration it not only structures thought and action but also situates a work within the greater crucible of cultural production and consumption. Collectively seen, along with the spaces in between, architecture’s greatest contribution to civilization is undoubtedly the City.

Between 1990 and 2015, the world’s population grew from 5.3 billion to over 7.3 billion people. Fifty percent of this population is currently residing in urban areas. This figure is projected to grow to 9.7 billion by 2050.1 With much of this growth coming from Africa and Asia, it becomes imperative to form an understanding of the city as both a conduit and a receptacle for a notional past as well as an imagined future.

The imagined terrains and the negotiated geographies that determine an urban imagination and inform the experience of a city is a condition based on the existence of a large heterogeneous population, a physical terrain that has evolved in response to social and cultural conditioning and the means of communicating an urban experience. Collectively, these act as an impetus for the city’s population to create new futures.

This paper views the City as the product of a complex web of on going social and cultural developments. It bases its understanding on the premise that a City and its landscapes acts as agents of historic transmission and documentation that are bound together by the varying degrees of elasticity embodied within them. It proposes that when an engagement with the past happens through the insertion of catalytic programs posited against the historic artifact it creates an episodic urbanism. Collectively viewed these, “episodes” which places the individual at the center of a negotiated urban experience pushes the elastic limits of a city’s resilience and hence acts as both an agent for continuity and change.

The text is divided into four sections. By way of an introduction to the Indian city some key types are identified and their histories briefly described. This would serve to lay the groundwork for an understanding of the contemporary metropolis as a heterotopic amalgamation. The palimpsest as a metaphor and a plane of occurrence is examined as a socio – spatial field and is discussed in the second section. Resilience and elasticity are examined thereafter, and finally by way of a conclusion, the material articulation of the dilemmas that the conditions of difference produce is proposed as a possible form of / means of articulating our current urban condition.

FIGURE 1 Chandigarh Manhole and City Plan.
THE INDIAN METROPOLIS: FROM CITY TO MULTIPlicity

Multiple ideas, rooted in the social and spatial structure of an ancient society contributed to the development of the Indian city. However, these multiplicities were often manifested in a predominantly singular form and in a particular place. This was especially true of the pre-colonial Indian city. For example, the spatial structure of temple towns such as Varanasi or Madurai were very different from the political and administrative towns of Delhi and Agra. Likewise, Ahmedabad, Surat and Cochin were representative of the sub-continent's commercial hubs. The East India Company in the seventeenth century brought with it two new types of cities – the trading outposts of Bombay (Mumbai), Calcutta (Kolkata), Madras (Chennai) and subsequently the cantonment towns of which over one hundred and fifty were built as instruments of governance, law and order. Against the backdrop of Lutyen's and Baker's Imperial Delhi (1911), the grand colonial capital, was built Prime Minister Nehru's nationalist city, Chandigarh (1952).

During the early part of the twentieth century, the Indian city became an instrument of expression for both state power and subjugation on the one hand, as well the locale where Nehru's faith in democracy and the "modern project" could be scripted and subsequently disseminated (from city to village) on the other. This dichotomy brought with it very differing views on how to engage with the city as both a tool in the freedom fight and a vehicle to transform India from being an ancient civilization to a modern nation.

Mahatma Gandhi for example, saw the city as an object that was foreign to the intrinsic mechanism of the country's traditional villages. Habitats that were informed as much by the complex social structures of class and caste, religion and tradition, had developed a spatial structure that responded to it, and its immediate confrontation with the landscape through both local material, cultural and craft practices. In it, there was little space for the abstract geometries of the colonial city or the homogenizing grids of the modern city.

Gandhi saw the city as an instrument of nationalist subjugation and in it found an opportunity to use the image of the city and its spaces as agents of protest. He for example, appropriated the spaces of the colonial city and used it as a stage set against which his protests or morchas were posited. For once, crowds of people saw themselves as a collective mass against the symbols of subjugation. The street instantaneously became a theatre, a space that could be occupied and from which a message could be broadcast. It ceased to be solely the conduit to a destination but in fact in years to come became the space wherein the practice of everyday living was routinely enacted.

The establishment of the Indian Railway system in 1853 and its subsequent knitting together of the Indian sub-continent, along with the depiction and propagation of the city through Bollywood cinema, and the employment opportunities of a modern nation being built in the decades following Independence, made the City an object of both desire and destination. With growing migration from rural India to its cities, not only did the city see a greater demographic mix but with it came new and different imaginations that inhabited it differently and brought with it a social and spatial structure that was otherwise foreign to it.

Apart from Independence, two other events in Modern India's history had a lasting impact on the cultural landscape – the imposition of Emergency and the suspension of civil liberties between 1975 and 1977 by Prime Minister Indira Gandhi and the liberalization of the economy in 1992 by Prime Minister PV Narasimha Rao.

While the former was short lived, the latter gave architecture in India and its cities a new impetus. With liberalization came global capital and global images. Their instantaneous production and consumption meant that one no longer resided within the single city urban agglomeration but now on a trans global temporal terrain. The materiality of its construction shifted from the concrete of the Nehruvian socialist imperative to the ephemerality enabled by media, communication devices and the widespread availability of the internet.
FIGURE 2  Mahatma Gandhi, Jawahar Lal Nehru and Mulana Abdul Kalam Azad.
The fragmentary coalescence and amalgamation of traditional and new city and building types, were made possible by the construction of the different utopias that began to migrate to and inhabit the contemporary city. The secular imagination that formed as a result of this had little or no place for a city conceived of as the embodiment of a singular idea or form. In its transformation, the terrain, “where the construed and imagined can be enacted”, came to represent a multi-tiered heterotropic amalgamation of past inscriptions and contemporary imaginations, a place wherein social and cultural ceremony were routinely enacted.

**PALIMPSEST: LAYING THE GROUND**

Commonly understood, a palimpsest is a sheet of parchment on which narratives were written, erased and written over. It enabled the readers to situate themselves within either the most recently inscribed piece of writing or between the various layers of texts thereby enabling them to construct new individualized texts and readings. The palimpsest recognized that it is the material universe that gives to human awareness a sense of time extending beyond individual lives and perceptions. ⁵

The Indian city when viewed through the lens of critical distance offers varied and differing meanings to otherwise commonplace objects and occurrences. Simultaneously conditioned by the cognitive and symbolic representations of time and place, the palimpsest becomes a field of interplay between acts of inscription and erasure. The accrual of time, material agglomeration on an object and the social engagement with its fragments enabled the city to be individually constructed.

Divorced from their original contexts, the material remnants serve as agents of past narratives and histories that through their current day engagement serve to blur an arbitrary boundary between past and present landscapes. Within themselves, palimpsests represent a displaced field of engagement with differing material histories residing on different temporal scales juxtaposed with each other. Collectively seen, the cumulative whole represents a level of complexity and opportunity that is greater than its constituent elements.

Buildings and their associative urban plans are culturally situated and situating. However, with the development of modern media and its associative means of information reproduction and dissemination, historical memory is no longer either stable or absolute. ⁶ The question, “what does the instant availability of ever more pasts do to our system of temporal and spatial perception?” ⁷ takes on great significance especially when we view the role that globalization, with its dispersed national traditions and historical past(s) plays (has played) in depriving physical remnants of their geographic and political groundings, and thereby creating a notion of memory as being borderless. ⁸

The pre-occupation with the moment, its transitory nature and the simultaneous availability of multiple pasts along with a decentered and displaced image of oneself, has led to the creation of a place wherein an unknown territory is mapped on to what was otherwise outwardly familiar. The consequent development of a peripheral consciousness that negotiates between these real and imagined spaces, differs sharply from a consciousness that understood space as either the reproduction in physical form of a set of social relations (as manifest in an organic city) or the utopic / visionary idea of a city imposed on an otherwise unsuspecting landscape.

By virtue of encompassing the physical, the construed and the represented, the urban palimpsest acts as a meta-metaphor through which the existence of multiple, simultaneous and varied recorded histories reside on the singular material plane of the everyday. As a field of occurrence within which difference is enacted, the palimpsest acts as a medium of exchange wherein selectively particular “pasts” are rejected in favor of others and layers of meaning and action are further inscribed by the social invention of relationships set within the physical remnants of past histories. The palimpsest thus serves as a metahoric coupling device that “reifies
and aids an understanding of the other concept (in this case the relationship between individual and the multi-tiered transhistorical city), and that concept enables a reinscription of the palimpsest that sophisticates our understanding of its complex structure and logic.9

The city as a social instrument thus manufactures through its terrain and its inhabitants a series of mutually constructed and negotiated microcosmic urbanities or episodes that constantly erupt within the outward structure of the city. The “hybridities” that the temporal juxtaposition of these urbanities create, together challenges the limits of a city’s elasticity and in doing so pushes the limits of its resilience.

RESILIENCE: ELASTICITY IN THE CITY

Commonly understood, resilience is the ability of a system to, “bounce back” to an original state or form after the occurrence or subjection of a force that is otherwise foreign to it. Resilience seeks to develop an understanding on the source and role of change across dynamic spatial and temporal cycles.10 Drawing on social memory as a stabilizing factor in the return of a system to its original state and the convergence and coalescence of multiple “micro urbanities” on to a singular plane as a means of inventing the new, they collectively have a de-stabilizing and transformational effect on the system and on each other. Understood together, Gunderson and Holling have termed this theoretical framework “panarchy”.11

While resilience theory seeks to develop an understanding on the source and role of change across dynamic spatial and temporal cycles12, it also acknowledges the heterogeneity of key adaptive elements in it. These elements need to be flexible enough to react and adapt to evolving physical and social contexts.13

The Indian metropolis with its heterogenous population residing within the crucible of multiple and fragmentary pasts are infused with levels of resilience that operate as episodes both at the scale of the immediate and present as well as well through ceremonies, social and faith based cultural practices on a trans historical notion of time.

In identifying key features of the system, Holling and Gunderson, state that change is neither consistently chaotic, nor continuous or gradual but rather episodic. The “accumulation”, through both erasure and inscription, of “urban capital” is punctuated by the re-organization of legacies of the micro urban encounter. Additionally, the associated spatial and temporal attributes are not uniform but dis-junctive and discontinuous, and hence the resilient system has multiple sets of referents and hence states of equilibria. The de-stabilizing forces within it are important for inculcating diversity and flexibility in the system while the stabilizing forces are important in the creation of a collective social memory. And lastly, fixed structures and rules designed to achieve consistent yields independent of scale and context, erode a systems levels of resilience.14

With the legacies of such encounters forming the ground for future interventions and engagement with the city, the articulation of “the conditions and dilemmas” that bind it simultaneously inscribe within the system new levels of resilience – the capacity for the city to embrace change both as a stabilizing factor and as an agent of invention and re-invention.

As a field of intervention the insertion of catalytic programs that empower people to either individualize an urban experience or engage in a collective experience of it becomes an agent for building urban capital. Often located within the intersitial spaces of the city or a region, these programs establish a rapport with their physical context based on the immediacy of the present. With limited material trace and an agility that contrasts sharply with the stoicism of the static city, these programs propel future growth by pushing the elastic levels of a city’s resilience.
Urban resilience exists within a series of linked dynamic cycles, across spatial, temporal and material environments that are invested in each other through a system of networks of exchange. These networks through social and cultural ceremony, view the transient and dynamic nature of the historical setting as an urban artifact that is recontextualized through a displaced socio temporal field. Individual necessity and a collective impulse have for cities necessitated a form of adaptive governance and adaptive urban programming that has led to either legislative action or opportunities for private entrepreneurship within these spaces.

CONCLUSION: INSCRIPTIONS AND ERASURES IN THE CITY

The Gazette of India in a March 5, 2014 announcement through the Ministry of Law and Justice, legalized vending in certain designated zones in the city by decrying that a street vendor is defined as, "a person engaged in vending of articles, goods, wares, food items or merchandise of everyday use or offering services to the general public, in a street, lane, side walk, footpath, pavement, public park or any other place or private area, from a temporary built up structure or by moving from place to place and includes hawker, peddler, squatter and all other synonymous terms which may be local or region specific, and the words “street vending” with their grammatical variations and cognate expressions, shall be construed accordingly."

The temporal nature of these activities as a form of urbanism is recognized by the state through its legislature. By providing essential services at locations within the city which is otherwise found wanting of them, they, create a “third space” of invention through their inhabitation and juxtaposition with the planned city.
Other examples of episodic urbanism can be found in Shaunak Sen’s film, “Cities of Sleep”, which identifies in New Delhi, a sleep mafia who, “controls who sleeps where, for how long, and (of) what quality of sleep”. With government unable to provide adequate affordable housing, the privatization of sleep both fulfills a primordial need and thrives in a space where the government and the real estate industry have failed. Located on pavements, under fly overs, and in alleyways, sleep vendors rent out blankets for the night and for an additional sum of money would screen a Bollywood movie – entertainment for some, white noise to block off the sound of the city for others. Come daylight, the quilts are returned to the sleep vendor and the street to the city.

While the occupation of intersitial spaces within the city may find precedent in the Gandhian idea of appropriating space for individual action, it also finds resonance in the transformation of elements of the landscape into grounds for faith based cultural practices that exist on a trans historical notion of time.

The Peepal tree for example is a part of the religious narratives of Hinduism, Buddhism and Jainism, and acts as a catalyst for the establishment of initially a spot of worship and thereafter a temple. Its location and intent as a place of congregation and worship was never part of the planned city but as a manifestation of a collective social belief, and a natural landscape has come to be so. The transition from tree to temple on the cityscape demonstrates a shift from a temporal to a more permanent inscription on the city’s palimpsest. The appropriation of symbols of the natural landscape in the city and their use as the protagonist in the occupation of the spaces around them challenges a city’s levels of resilience through its subsequent material intervention and social inhabitation. In doing so it represents both continuity of belief and change in the city.
The ephemerality of the act and its recurring engagement with the physical landscape can be seen in most parts of the India, however, taken to its extreme is the festival of the Kumbh Mela, an occurrence once every twelve years on the flood plains of the holy rivers Ganga and Yamuna at the cities of Ujjain, Nasik, Haridwar and Allahabad. Rahul Mehrotra and Felipe Vera in their essay on the Kumbh Mela, described it as, “The Ephemeral Megacity – A City with an Expiration Date.” 18

Describing it as the, “most densely populated and rapidly urbanized spaces on earth”,19 the 2013 Allahabad Kumbh Mela covered an area of 23.5 square kilometers with an additional fifteen square kilometers available for a temporary tent city to be constructed once the river receded post monsoon. The fair with an initial population of about 5 million people grows to 10 to 20 million people on the auspicious bathing days. In addition to the regular bridges that cross the river, 18 other pontoon bridges are made, 150 kilometers of temporary roads, 90 parking lots, 5 bus stations, 7 temporary train stations and an additional 3500 buses are employed to run on the main bathing days.20 The quantum of civic infrastructure constructed, deployed and subsequently removed takes on an urban scale.

Unlike in other temporary settlements such as refugee camps or natural disaster shelters, the infrastructural grid at the Kumbh Mela does not seek to homogenize either the terrain or the individual but provides open areas within it where independent religious communities can construct and design environments as expressions of their own structure and identity. The grid thus forms a framework within which difference occurs, with the final form of the city being the result of a number of intertwining dynamic cycles. For example, the shape and size of the flood plain once the river recedes is an uncertainty that is dependent on the duration and strength of the monsoon.
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The number of people visiting the Mela is a constant act of approximation with its numbers swelling greatly on the auspicious days. At every stage in its development, the ephemeral city embraces uncertainty in its design process through the distribution of risk amongst its infrastructural sub components, as a strategy to build system resilience. Resilience redundancy thus becomes a tool in addressing a dynamic physical and social context.

The spatial, cognitive and cultural differences of the inhabitants of the city, from being an attribute of segregation and compartmentalization, have with urban mobility became a unifying factor in the city of fragmented wholes. The coexistence of multiplicities united through an idea of difference and its consequent hybridity, the juxtapositions of which along with their amalgamation gives rise to a dynamic form of urbanism.

The third-space as a proponent of this form of urbanism thus pushes the boundaries of resilience in the city and in doing so builds “resilience redundancy” into the system. Collectively, the “negotiated” space constructed out of this ontological process forms a social memory of a place that ensures a symbiotic relationship between the creation of new boundaries of resilience and the physicality of the place. This relationship begins to view the city as a self-organizing open system based on the symbolic social interactions between people, buildings and the spaces in between.

As a form of urbanism the third space necessitates the need for new types of interventions within the city. Projects that view a city’s resilience and heterogeneity as materials through which to blur boundaries of the city inevitably engage with the democratic impulse of a people, ones right to the city, its imaginations and its representations. Such urbanism shares an inextricable relationship with a city’s palimpsest by drawing on both the physicality of past as well as the accumulative social and cultural capital of its histories.

The ground for such an urbanism lies in the space of the threshold, the intersitial spaces, that zone of inhabitation where fissures in the formal city erupt. These points of intervention that articulate the dilemmas and locational inadequencies offer opportunities for invention and create episodes that collectively push the elastic limits of a city’s resilience and hence act as an agent for both continuity and change, erasure and inscription.

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Endnotes
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11 Ibid. 3-24.
14 Ibid. 25-62.
15 URL: http://www.indiacode.nic.in/acts2014/7%20of%202014.pdf
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Fig. 1. Chris 9, Chandigarh Manhole Cover – Le Corbusier, September 6, 2014.M http://flickriver.com/photos/301202/3020152/15866034346/
Fig. 3. Sandeep Chetan, Sandeep Chetan's Travels, January 21, 2013. http://photos.sandeepchetan.com/keyword/portrait/i-G687pPj/A

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Fig. 7. Jiva Gupta, Constructing The World's Biggest (Disassemblable) City. https://dgprhlufdt76.cloudfront.net/assets/Articles/60/Images/_resampled/SetWidth1200-1785910.jpg