PLANETARY GENTRIFICATION, THE NEW MIDDLE CLASSES AND THE "URBAN QUESTION": STUDY OF A NEIGHBORHOOD IN THE PATNA METROPOLITAN REGION

A Dissertation Submitted to the University of Hyderabad in Partial Fulfillment of the Requirements for the Award of

DOCTOR OF PHILOSOPHY IN SOCIOLOGY BY

YASHWANT SINGH 14SSPH03

SUPERVISOR PROF. N. PURENDRA PRASAD



DEPARTMENT OF SOCIOLOGY SCHOOL OF SOCIAL SCIENCES UNIVERSITY OF HYDERABAD HYDERABAD, TELANGANA- 500 046

JANUARY 2021



DECLARATION

DEPARTMENT OF SOCIOLOGY UNIVERSITY OF HYDERABAD

I hereby declare that the research embodied in the present thesis entitled, 'Planetary Gentrification, the New Middle Classes and the "Urban Question": Study of a Neighborhood in the Patna Metropolitan Region' is carried out under the supervision of Prof. N. Purendra Prasad, Department of Sociology, School of Social Sciences, University of Hyderabad, Hyderabad, for the award of Doctor of Philosophy, is an original work of mine and to the best of my knowledge no part of this dissertation has been submitted for the award of any research degree or diploma at any university. I also declare that this is a bonafide research work which is free from plagiarism. I hereby agree that my thesis can be deposited in Shodhganga/INFLIBNET.

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Prof. N. Purendra Prasad Prof. C. Raghava Reddy Prof. Arun Kumar Patnaik

Research Supervisor Head, Department of Sociology Dean, School of Social Sciences



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Part of this thesis have been:

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- 1. (2018). 'Neoliberal Urban Governance and the Political Economy of Housing: Growth Processes of Patna City', at 44th All India Sociological Conference (AISC), on Reconstructing Sociological Discourse in India: Perspectives from the Margins, December 27-29, 2018.
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Prof. N. Purendra Prasad Prof. C. Raghava Reddy Prof. Arun Kumar Patnaik

Research Supervisor Head, Department of Sociology Dean, School of Social Sciences

Dedicated to the loving memory of my Nanaji, Sri Chandradeep Singh.

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Abbreviations

AHCS: Ashiana Housing Cooperative Society

AI: Artificial Intelligence

AIIMS: All India Institute of Medical Sciences

BCCL: Bharat Coking Coal Limited

BCD: Building Construction Department

BRDA: Bihar Regional Development Authority

BSBCC: Bihar State Building Construction Corporation

BSEB: Bihar State Electricity Board

BSHB: Bihar State Housing Board

BSPCB: Bihar State Pollution Control Board

BUIDCo: Bihar Urban Infrastructure Development Corporation Limited

CBD: Central Business District

CBSE: Central Board of Secondary Education

CD Block: Community Development Block

CEBR: Center for Economy and Business Research

CEPT University: Center for Environment Planning and Technology University

CIL: Coal India Limited

CPWD: Central Public Works Department

DISE: District Information System for Education

DMRC: Delhi Metro Rail Corporation

DMS: Distribution Management System

DVC: Damodar Valley Corporation

ECR: Eastern Central Railway

EMI: Easy Monthly Installments

EPW: Economic and Political Weekly

ESA: European Space Agency

EU: European Union

EWS: Economically Weaker Sections

FCI- Food Corporation of India

GPRA: General Pool Residential Accommodation

GPS: Global Positioning System

GSDP: Gross State Domestic Product

HDI: Human Development Index

IMF: International Monetary Fund

ICT: Information and Communication Technologies

IoT: Internet of Things

IT: Information Technology

JD: Janata Dal

LCT: Landing Craft Tank

LQG: Loop Quantum Gravity

MADA: Mineral Area Development Authority

MCMR: Multi-Centered Metropolitan Region

MIT: Massachusetts Institute of Technology

MLD: Millions of Liter per Day

MPC: Metropolitan Planning Committee

NAFTA: North American Free Trade Agreement

NCEI: National Centres for Environmental Information

NCRB: National Crime Records Bureau

NDA: National Democratic Alliance

NEP: New Economic Policy

NGO: Non-Governmental Organization

NGRBP: National Ganga River Basin Project

NOAA: National Oceanic and Atmospheric Administration

NRW: Non revenue water

OBC: Other Backward Class

OHE: Overhead Equipment

PCC: Plain Cement Concrete

PFC: Power Finance Corporation

PHLG: Pahleja Ghat Junction railway station

PIL: Public Interest Litigation

PIT: Patna Improvement Trust

PM: Particulate Matter

PMC: Patna Municipal Corporation

PPA: Patna Planning Area

PPTA: Patliputra Junction railway station

PRDA: Patna Regional Development Authority

PSU: Public Sector Undertaking

PUA: Patna Urban Agglomeration

PURA: providing urban amenities in rural areas

RJD: Rashtriya Janata Dal

RMU: Ring Main Unit

SC: Scheduled Castes

SCADA: Supervisory Control and Data Acquisition

SCC: Smart Cities Council

SOC: Social Overhead Capital

SSB: Sashastra Seema Bal

STP: Sewage Treatment Plant

TDR: Transfer of Developmental Rights

TOD: Transit Oriented Development

TPS: Town Planning Scheme

UD & HD: Urban Development and Housing Department

ULB: Urban Local Body

UNDP: United Nations Development Programme

UNO: United Nations Organization

UP&DB: Urban Planning and Development Board

URDPFI: Urban and Regional Development Plans Formulation and Implementation

VVIP: Very Very Important Person

WHO: World Health Organization

WMM: World Magnetic Model

WTO: World Trade Organization

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Introduction

The Present Times: After the 2007-08 global financial crisis, that badly hit some of the largest finance corporations and banking institutions of the World, particularly, in the global North, the World economy also went into the worst recession ever since the Great Depression of 1929-33. Today, because of the Coronavirus, (COVID-19) Pandemic, the World is, again, starring at a global recession that may break all previous records. During the 2007-08 financial crisis, however, some of the large developing economies in the global South, particularly, the Chinese, not only found ways to stabilize themselves, rather swiftly, through timely state-financial stimulus, but also raised domestic consumption and didn't let demand for imported goods and services go spiraling down or plummeted. At least, these economies in the East and the South East Asia did not contribute in the manner that may have compounded the recessionary pressures globally. The scale of the "meltdown" in the global North and the anticipated role reversal of the globalizing economies in the global South was an unprecedented situation. Recently in a report, the Center for Economy and Business Research (CEBR), a UK based consultancy group, has recently projected that after combatting the COVID-19 pandemic better that the West China is heading to surpass the U.S.A as world's largest economy in dollar terms by 2028, half a decade earlier than previously estimated. By the same report, India is slated to become the third largest economy by 2030. (World Economic League Table 2021, 12th Edition, CEBR, Dec 2020, pp.8).

The global economic system, as was understood till the 2007-08 financial crisis, also, similar to Immanuel Wallerstein's (2004) "modern world-system", in terms of the North-South System, with built-in asymmetries and dependencies (Frank 1969), felt to be under serious deficiencies and inadequacies, and there were pressing needs for fresh perspectives. The deindustrialization and, also, the dismantling of the centralized forms of industrialization in the developed West since the 1970s onwards, and the growing industrialization of the regions in Asia and Latin America, signaled a critical shift/reorganization of the global distribution of long-term production capacities and supply/value chains. This shift, then, along with the pre-existing vertical dimensions, also opens a horizontal dimension to the expansion of the global capitalism. Whereas the multilateral organizations, agencies and institutions like the United Nations Organization (UNO), the World Bank, the International Monetary Fund (IMF), the World Trade

Organization (WTO) and the trading blocs like The North American Free Trade Agreement (NAFTA) were shaped in the image of the North-South dependencies and vertical asymmetries, and were functioning without any serious reforms. (Power 2003).

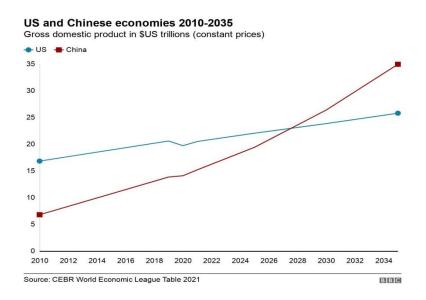


Figure 1. Graph image: US and Chinese Economies 2010-2035

Source: https://www.bbc.com/news/

With the 2007-08 financial crisis, as the trust in the global economic system went down, not only the investors and the leaders, but also the economists and the scholars, were in search of clarity on the nature and direction of economic change. Many developed economies were struggling with the rising unemployment and inflation that were unprecedented in several decades. The pace of technological advancements and the scale of capital concentration in the advanced technological sectors leading to a faster output of automation, transportation and communication technologies created social and political challenges that were not experienced before. The indeterminacies of the capitalist production and social relations became much severe than was previously thought or imagined. In this sense, the financial crisis was, also, the crisis of the existing patterns and modes of the mainstream scholarly practices.

From the social geography's point of view, a fresh perspective meant a reassessment and revaluation of the prevalent methodological approaches. The competing theories of spatialization of global, neoliberal capitalism, as understood in the existing literatures, either liberal-social ecological or Marxist-conflictual or critical, seemed to reopen the existing fault-lines much more

sharply, as the various conceptions of physical space, be it the Newtonian-absolute or the Einsteinean-relative, or the relational, began to work more and more against each other, and contrary to the existing frameworks that generally used them in the mixed, mutually complimentary roles, for the socio-spatial or economic-spatial analyses. The methodological challenges were accentuated by the definitional problems for the key conceptual categories, such as globalization or urbanization.

From the urban sociology's point of view, the financial crisis was both an invitation and an opportunity, to muster the social theoretical knowledge of all kinds that the discipline of sociology is privy to, to provide a much richer and sophisticated explanations of the workings and the crisis tendencies of the present day capitalism, from a range of perspectives. It has been little over a decade now and we are confronting even bigger and severe crisis in the form of an ongoing global Coronavirus pandemic. But, the inflection of the Marxist and critical geographers' perspectives to the functional and the institutional fields of the urban sociology, apparently, have been stronger and deeper and, because of these inflections, the new perspectives on theory and methodologies are slow to emerge. However, these inflections need not be viewed as encroachment by other disciplines, as Tim May et al. (2005:344) pointed out. Highlighting this existing nature of interdisciplinarity in urban sociology, May et al., notes:

"Interdisciplinarity per se does not constitute a crisis for urban sociology, which continues to pose pertinent questions within the expanding field of urban studies, even more so as cities assume increasing importance in economic development processes. (May et al. 2005:344).

Linear or Circular: The Growing Indeterminacy: We broadly agree, that the 20th century global economic history of the domination of the Western capitalism, together with the preceding histories of the colonialism and imperialism, is marked by the uneven geographical development, and the processes has only intensified, and assumed several overlapping or competing, evolutionary, mutating forms, across variegated regions and geographies, in the 21st century. Also that, the use of the relative-space frameworks by the urban and economic geographers and Marxist political economists allowed for critical evaluations of the operations of the capitalist power-relations across different geographies, either from: (a) the global workers movement's or (b) the weaker, low productivity, low-income region's perspectives, or (c) from the other structural deterministic perspectives with respect to the notions of value/value-forms- such as, the dominant role of the Western powers' mediated financial arrangements in the

(de/re)valuations of currencies and the terms of exchange in the economies of the Global South resulting in the reproduction of the skewed, uneven resources distributions. These studies, put together, have enriched our knowledge.

However, at the same time, it also needs to be understood, that all regions of the World, irrespective of their relative positions, are experiencing increase in the levels of differentiations, inequalities, segregations, exclusions, violence and environmental degradations. In today's World, not only the physical spaces come alive in the multi-layered, differentiated social relations, but the social relations themselves are understood or experienced through a variegated and differentiated techno-instrumental and time-referential frames. The spaces of social relations resemble more as the spaces of flows, experience, movements, rhythms and oscillations than the spaces of beings and things. The technologies of transportations and communications, along with the expanded industrial base, almost unto the later decades of the 20th century, worked as great leverage points for the already-developed regions and countries in the North, but in the present times these factors no longer work towards the re-production of similar outcomes of relative and aggregate advantage. New technologies like Internet or advanced computing have brought new geo-spatial dynamism. And, therefore, even as the relative-spatial frameworks remain, at least, in the foreseeable future, an important explanatory framework, one should also look for alternative explanatory models for the spatialized-capitalism or the capitalist-urbanization frameworks. As the indeterminacy of the causal relation, whichever ways, between the technological developments, and, the social and the political changes, become more and more apparent, any alternative frameworks need go beyond the deterministic theoretical paradigms based on the 19th century notion of scientific inquiry involving, above all, a linear, absolute notion of time, that also remained dominant for much of the 20th century.

For large part, the understanding of the otherwise interdependent nature of global economic system, as linear and unidirectional, and, therefore, predictable, was result of a non-relational spatial thinking that, simultaneously, also resulted in the utter disregard of the questions of inequality and sustainability in the high-population, high-density, multi-centered global-financial/mega/metropolitan cities, suburban districts, and urban agglomerations. Air and noise pollution, ground water depletion and scarcity, rampant commodification of potable water, recurrent urban flooding and hours long traffic jams and encroaching of commuters'/pedestrian

spaces, loss of green covers and wood-patches, over-crowded public transports and ever receding open spaces and playgrounds, and myriads of old and new problems in cities and urban areas have, in the most cases, only increased with the passage of time, even more so, in the populous, developing countries, like India.

The ongoing debate on the crisis-nature of the urban sociology, as academic and research discipline, has explicitly recognized the need to, further, problematize and complicate the ways the cities are approached and studied for analyzing and deciphering the changes and transformations across different regions and countries.

The Space: Towards an Appropriate, Scale-based City-theoretical Model: In my understanding, the crisis of urban sociology, in large parts, has been associated with the difficulties in identifying and developing an appropriate theoretical model or framework, based on or around what we generally perceive or identify with a generic expression, the "city", or the "polis". The cities are more than merely settled spaces. They are mutable, unstable, changing, fluid ensembles of the myriads of multi-nuclei, multi-centered, networked, tangible and intangible socio-spatial coordinates- connecting, trespassing, superimposing, encompassing, overlapping or cross-cutting at their several points of interactions, in order to manifest the nature, operation and contestation of cultural, economic and political power. And yet, depending on the questions raised, there may be a combination of the socio-spatial coordinates, or nodes that display superior or greater potential for the explanation of urban processes than the other coordinates. These potential combinations of coordinates spelling out different socio-spatial realities also confirm to the simultaneous existence of widely separated and segregated realms of social lives and practices within a city or a metropolitan region.

Based on the degrees of heterogeneity and differences of racial, gender, sexual, social class, religious, family status and other important social variables and parameters, no two cities are same, and, therefore, directly comparable, and yet, in the broader contexts in which they are inscribed together, such as the "neoliberal capitalism" (Portes 1997; Taylor et al. 2002:11-12; Routledge 2002:315; Power 2003:149; Wallerstein 2004:86), the actual existing forms of "globalization" (Rodrik 1997; Power 2003:143; McMichael 2017; Marcuse 2018:68), or an ecological system or sub-system, or simply, the human socio-ethnic constitution, we may draw comparisons between cities (see, On cities and capitalism, Braudel 1984; Scott 2008:130-148).

But these comparisons need support of the appropriate theoretical-conceptual frameworks. Some cities surpass even nation states in terms of their respective gross income or productivity. Also, there are cities, ecologically more sensitive or vulnerable than the other. The processes at the local levels, as they unfold, therefore, cannot or need not be dispensed with, for broader, integrated level analyses. Even if bringing them together under some kind of theoretical umbrella may prove difficult, both should be theoretically developed with equally rigorous fashion, and also inform each other.

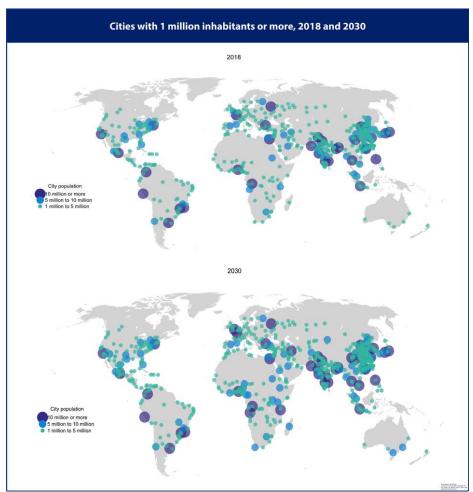


Figure 2. Cities with 1 mn inhabitants or more, 2018 and 2030;

Source: United Nations Data Booklet (2018).

A set of perspectives on the neoliberalism suggests, that it offers, or, claim to offer, the freedom of choice, by undercutting the red-tapism in the functioning of an efficient, competitive, free-market economy. If a neoliberal economy gives the freedom of choice, why do people choose cities or those urban areas/regions- which many would love to call home, with the associated

levels of vulnerabilities and risks that they themselves no longer have account or grasp for? Isn't this an indication of a larger, systemic, social and intellectual malaise? The present state of our faculties, thought process, sense of judgment and perceptions in the current scenario, point towards some kinds of regimentation, disciplining and control processes by which our desires, emotions, aspirations and hopes are getting molded, attenuated and striated to serve the market, than our own interests. For the resilience of neoliberal workings of economy to persist through recurrent crises, show that these processes must be thriving on the slow, insidious, culturally assimilative and flexible processes of *subjectification* (in a Foucauldian sense).

"Subjectification refers to the procedures by which the subject is led to observe herself, analyze herself, interpret herself, and recognize herself as a domain of possible knowledge: "the way the subject experiences [her]self in a game of truth where [s]he relates to [her]self" (Foucault, 1998, p. 461; gender inclusion added)." (Stewart and Roy 2014:1877).

Unless the society under investigation is governed under the forms of military dictatorships or totalitarianism where these processes of subjectification may acquire more dissociative, violent uprooting of the pre-existing ways of life, in the liberal, democratic political orders, both the associative and the dissociative elements in the creation and maintenance of newer subject-orientations can be observed.

Observations play important role in generalization and theorization, and with the help of theories we can expand on the ways of approaching the social worlds. So, there is a back and forth relation between theory and observation and that is how theories evolve and mature. The crisis of urban sociology has been part of numerous approaches to the study of the urban, especially since the urban upheavals of 1968-69, in the industrialized societies of the West European and the US. The Cites and university towns, key sites of the turbulences and currents of the time, played frontal roles in these social, political and the cultural mobilizations. However, in the large parts, the questions that tried to capture the essence of the crisis were related with the failure of market in delivering the greater good to the greater numbers (of people). An important aspect of the questioning of the market stemmed from the ideas on the nature of market mechanisms in (not)-ensuring fair and equitable distribution. So, in a sense, the entry-point into the understanding and the formulation of the crisis situation were greatly identified with the crisis of the economy and the concomitant forms of capitalist growth and expansion. It has seldom been the problems of the

cities, *per se*, and these included not only the economic but also the social, political, cultural and ecological problems.

While this decoupling of the cities and the urban were a welcome and an important conceptual-analytical invention of the 1960s intellectual churnings, this "divorce" didn't help much to our understanding of the problems and issues in our cities, especially in the underdeveloped and the developing regions of the World. The city-generated, city-focused, city-centered problems and issues, particularly the non-economic ones, were relegated to the background and became second order issues to the processes of theorization and generalizations. Henry Lefebvre's *second circuit* of capital (Lefebvre 1970[2003tr.], 1984[1991tr.]; Gottdiener 1993; Hutchison 2007) though helped in great deal in advancing our understanding of the role of the real estate sector, its supply and demand dynamics, and the underlying potentials for shaping and control over city-futures and the market-economy's expansion, the processes related to the subjectification or subject-formations were not addressed with equal urgency or vigor. Especially, how the individual and the collective forms of consumptions make for the mutually enabling as well as contradictory practices in the structuration and patterning of the urban forms? How the processes of individuation/subjectification negotiate the realms of the household and the family to reinforce one form of practice over other that, in turn, is detrimental to the working of the capital.

David Harvey (1989) noted the difficulties associated with Lefebvre's characterizations (the experienced, the perceived, the imagined) of the three dimensions of involved in the production of space, namely, the material spatial practices, the representation of space, and, the spaces of representation. He writes:

"But to argue that the relations between the experienced, the perceived and the imagined are dialectically rather than causally determined leaves things too much vague. Bourdieu (1977) provides a clarification. ... The mediating link is provided by the concept of 'habitus' - a 'durably installed generative principle of regulated improvisations' which 'produces practices' which in turn tend to reproduce the objective conditions which produced the generative principle of habitus in the first place." (Harvey 1989:219).

While it is understandable that a theory is always a theory of something, and, not everything, the general approach towards the theorizing itself require some attention. It is necessary to assess a theory on the basis of their groundings, if these are tilted more towards "foundationalism" or "processual-thinking." However, all foundationalism need not be essentializing or deterministic.

And, an overtly-stated processual theoretical approach may also end up being a modular framework of sorts. In these later reckonings of the theorizing and the generalizing process, it is, therefore, equally important to ask, how the *city* should be, epistemologically and ontologically, approached, that strives to find a balance between the forms and the processes. In this regards, one may always revisit those objections and criticisms that were raised in the 1960s and 70s against the city-centered urban theoretical approaches, but also need to be mindful of the present global and regional geo-political and economic transformations and the scale and nature of the technological and scientific advancements, together with the penetrations of the later in organizing of the social and cultural lives and practices.

The Individual Agency: A review of the key urban theoretical literature, suggests an excessive preoccupation with the economic, the material and the capitalist production/accumulation/growth logic and processes, and less engagement with the non-economic and the affective. The very meaning of *processual* in relation with the theoretical appears to be either misconceived or put to selective use. A genuinely processual theory of capitalist, neoliberal cities and urbanization needs to adequately account for the relational forms, structures, patterns and practices concerning the socio-spatial and the temporal. Above all, it needs to have a socio-spatial schema in which the role of agency can be theoretically illuminated and its working can be felt.

While doing urban sociology, the questions of the social and the ontological are as important as the theoretical-methodological or the epistemological. In this respect, the point of interface or interaction with the field of research investigation must be conceptualized in the manner that captures the dynamism and flows, fluidity and flux of the urban social and also of the sociable. A processual relational theory shall also relate to the ontological-being-becoming of the research-field on the plane of immanence, whereby both illuminate each other. In essence, the resultant framework need not privilege one frame over the other. The observer, also, has no privileged position, as the measurement is not foundational to this schema. The subjectivation and objectivation comes together or merge into one at the point of interaction, and with each successive interaction a wave, a pattern can be discerned. It may not be true description of the field, and, still, it may be the one of the probable, approximate descriptions, among many (potentially) others.

In order to sum up this introduction, I would like to make an important, central observation underlying the core argument of my thesis. It is that while I attempt to take the present "urban question" beyond the existing critical frameworks, in important ways my own framework, however, remains tied to that of Manuel Castells. In the 1980s, Castells' re-reading of Althusser's ideology, reproduction of labor and subject-formation helped in the framing of the "urban question", but it also created further logiams in the development of a kind of urban sociology, that may have, simultaneously, addressed the realms of the "affective" and the "agency". Castells' broadening of the scope of the capitalist production by the incorporation of the re-production of the conditions of production (most notably, of the labor), and combining the both in the spatial dynamics of the *urban question* presented yet another addition in the tradition of the Humanist/Critical Marxism. Nonetheless, his notion of "collective consumption", in my view, is one of his most insightful contributions, and, also that, it is a key methodological innovation that combines the theoretical with the empirical, in the study of the urban. It is by further exploring the relational *field* of "collective consumption", in the light of the other urban theoretical conceptualizations, like the "second circuit of capital", the "urban scale" and the "planetary urbanization", the multi-centered metropolitan region", the "risk society" and the "methodological cosmopolitanism", and, the "planetary gentrification", that we may open the urban question for the realms of the "affective" or the Bourdieusian "disposition" or/and "habitus".

Chapter 1: The Neoliberalizing Gangetic Region of Patna and the Current Challenges of the Urban Sociology

The Researcher's Background and the Field Settings

I am writing the following notes on myself not in an anticipation of or as a reflexive engagement with any privileged position as an observer/researcher/outsider in the matrix of power, exercised on the field (or, the object of the study), as also discussed in the social sciences and the field-work methodology debates. My substantial theoretical effort in this work has been precisely to go beyond relativism and observer-observed dichotomy, and not to develop some critical/reflexive engagements. Instead, I am writing this for two reasons. First, I feel this would bring richness and color to my work. And, therefore, a reader who is unfamiliar with the larger settings of the field of investigation, which is also an understudied area in urban sociology, may find these notes helpful in comprehending the same. Second, this back and forth motion of memory and recollection provided a much needed initial bedrock on which I could situate myself- the researcher, together with the field of investigation and the research questions.

Although I have lived and studied mostly in cities, I have closely experienced an Indian village life. Undoubtedly, there are clear, remarkable, qualitative differences in terms of experiencing a village-life, both within and across different regions. In fact, one can rightly assert that no two villages are same.

I am native, and also born, to a village that borders the Patna district of Bihar and is nearly 65 kms from the Patna city. The closest high-school, in a nearby village, where my father also studied, is located in the Patna district, whereas, my village is a part of Arwal district, the later carved out of Jehanabad district in the year 2001 for better local administration amid widespread underdevelopment and caste-class violence. In those days, one could hardly imagine of a more mismanaged region, anywhere in the World!

Although the region, being a fertile Gangetic Plains of intensive agricultural activities, surrounded by three rivers, two major ones (the Ganges and the Sone), on three sides, had some natural limitations with respect to access and connectivity and the occasional/seasonal floods added to that, the apathy of the State was far deeper and greater. The State didn't care even for the most unimaginative of the public infrastructures like a rail-road/river-bridge connectivity or a public general hospital, both being done only now. The region still doesn't have railway connectivity (the construction has started only recently and may take several years!) or an affordable cold-storage for the fast perishable agricultural produces.

A region where agriculture is the mainstay and the period following 1970s saw widespread Left-radical movements and violence, my village today symbolizes both continuity and change. Post-2001, indeed, peace returned to the region and public infrastructures began to improve, almost entirely based on the state-funding. Local markets witnessed increase in average foot-falls and, therefore, work-hours. The people, in general, seemed to leave behind the gloom and doom of the Naxalite insurgencies of previous decades, even though the structures of the feudal exploitative- as well as the Left insurgent- violence did not entirely disappear. In fact, both of these assumed newer forms and mechanisms.

As a consequence of the dissipation of social unrests, the non-farm economic activities, the traditional as well as the emerging ones, started becoming more visible, also beyond the pre-existing local markets, in newer zones. Some new agro-based small and medium scale industrial/processing units also appeared on the scene. Although the landscape is still predominantly agricultural, new structures, symbolizing the intensified public and private capital investments, are emerging all across the region, thanks to improved connectivities in roads and wireless-communications and also improved infrastructures and better availability of electricity.

All that I know from my own encounters with villages, as explained above, is anything but intimate. At times, some nostalgic reflections of my school-days summer vacations to my maternal grandparents' home, not very far from my paternal village, or, the fact that presently my parents, with no extended families or kins, live in the village, also the place of my birth, where I occasionally, particularly during festivities, go to meet and spend time with them, are the main anchors of my connection to a village. Any further efforts to excavate more details and/or intimate engagements are bound to land in jeopardy. However, the experiences that I

accumulated over these years through my sporadic and loose yet periodic and sustained interactions with the region became pivotal in the selection of my field for the doctoral research investigations.

Had it not for my interest in theory and theorizing, the choice of Patna as a field-investigation, might not have occurred to me. Patna never fascinated me. Partly due to my class and location-based ignorance of the multi-layered, multi-sited and networked constitution of a contemporary urban life and partly because of Patna-city being so close to my own native village, that I, unlike other school-goers tied with my "space-time", never aspired to go to Patna, then capital-city of undivided Bihar that included present day Jharkhand state, for further studies. The image of Patna in the 1980s and early 1990s, at least in my conception, was that of a provincial urban center/enclave/town/city and not of a modern, cosmopolitan, economically vibrating, multi-centered, multi-nodal urban agglomeration or a metropolitan city. This conception, even though not entirely correct, was not without basis.

I lived my formative years and also did my schooling up to secondary-level in a coal-mining district area of Dhanbad, Jharkhand. Dhanbad district is known as the coal capital of India, where in a publicly-held coal enterprise my father was employed as an office-clerk. I spent most of those childhood, schooling days in a coal-mining, working-class neighborhood (at a walking distance from my school), at the outskirts of Jharia, a relatively well-known market town in the Dhanbad district, in the erstwhile, united Bihar, and the present day Jharkhand state. The neighborhood where I grew up, though a working-class, public housing colony, had families belonging to diverse cultural and geographical/regional/linguistic origins and backgrounds. In those heydays of radical, Left-wing, coal workers-trade union solidarities in the region, the community life in our neighborhood was also "strong" and filled with fair degrees of trust and cohesion.

There was another remarkable contrast, part anecdotal, part reality, which made Patna appear not very exciting place and reinforced its provincial image. It was about the electricity supplies. In this respect, there were clearly two Bihars, regionally and also intra-region-wise. The South Bihar (presently Jharkhand) region had all the mines and minerals and also the most of the large scale industries and the Central government controlled public sector undertakings (PSUs). Due to its industrialized nature and also due to close proximity with some key hydro-electric and

thermo-electric power generation projects like the Damodar Valley Corporation (DVC), the South Bihar had better electricity supplies as compared to the agrarian regions of the central and the north Bihar. Patna, though relatively better placed as a state capital in the central region, was still very much part of the agrarian fold and, therefore, was depended mostly on the provincial-state (Bihar) controlled electricity supply and distribution utilities and networks.

Bihar, similar to its present day status, was a low per-capita income state, and, therefore, the financial and revenue conditions of the utilities' companies were not very sound. Despite the best efforts of the political and bureaucratic elites based in Patna city, as they might having their own personal/family interests, the region beyond the narrow confines of the City municipal boundaries, in those days, never had the same level of electricity in their homes that we in the South Bihar region used to avail. Intra-regionally, close to my neighborhood, for example, there were also localities and neighborhoods managed by the same provincial-state government controlled Mineral Area Development Authority (MADA), where situation of electricity supplies and maintenance were equally inadequate. Whereas, my and similar neighborhoods, directly owned and managed by the Bharat Coking Coal Limited (BCCL), a Central government controlled PSU, also a subsidiary of the Coal India Limited (CIL), used to receive supplies from the same source that catered to the mining and allied activities. This meant regular, less-interrupted, cheaper supplies.

The Dhanbad district region for its riches in coal, and, therefore, huge opportunities for non-agricultural forms of employments as well as the ill-gotten-money and the muscle-mafia-politician nexus, became part of numerous folklores and artistic and literary-media-film presentations. My native village in the agrarian Central Bihar and the mining neighborhood in Dhanbad district where I grew-up presented the two of the most contrasting life-worlds, the one having no imagination of the other, and yet, one could find striking similarities in individual stories, mostly of negative-kinds, of exploitation and violence. But, the defacing of the natural, mostly, green, landscape due to the incessant excavations of the earth's crust, with the help of both heavy machineries and underground chemical blasts, for coal-mining and the resultant pollution was the most striking features of my visual memories of formative years. And, therefore, when the opportunity came in, when I could go to some other place for further studies after completing my secondary-school studies, I choose not Patna, the obvious choice for middle

class families of the region in those days (the other being Calcutta, Varanasi or Allahabad), but a neighboring planned industrial town called Bokaro Steel City, or simply Bokaro or B.S. City. Although there weren't many prospects for good higher/college/university-level education in the city itself, yet this steel-city emerged in the 1990s as a hub for quality higher-secondary education and also for private coaching institutions for admissions into the engineering and medical studies institutions. Here I enrolled myself for higher secondary education but after having spent two years and without completing the school-course, ultimately, managed to land up in Delhi, a metropolitan city and the capital of India. Since then, my sojourn with cities, in the conventional sense of the term, has become a never ended journey. After completing my graduation from Delhi, I came to Bangalore, the "Silicon Valley of India", where I worked in some of the World's most renowned companies in the fields of software developments, online-media platforms, and electrical and automation technologies. After this brief stint of nearly two years of corporate jobs, I moved back to Delhi for further studies and lastly came to Hyderabad where I engaged myself with this urban research project.

Why Patna?

As a researcher two things merit equal considerations, while she/he gets his heads down to select a research topic: a. *One's own fields of interest* and, b. *What all one must avoid to ensure a coherent thought process to emerge*. At times these two get intermeshed and fuzzy and require critical reflections to make sense of their parallel and/or separate workings, but also, entanglements and interplays. Since the very start of this research project, I was very clear on one count, that my research focus would be theory-oriented. But an abstract theoretical engagement only gets meaningfully crystallized when it is posed against topsy-turvy of complex, diverse and multi-layered forms and processes of realities. Particularly in social sciences, this roller-coaster is difficult to ignore.

I find myself always at odds with the prevalent methods and modes of sociological research in India. While I readily share the dominant trend that a sociological research in India ought to have an empirical focus, I am unwilling to accept that one cannot apply divergent morphological characterizations or research strategies to the similar questions, problems and issues. One such theme is the role of "caste" in the study of the "social" in India. My own interest in the urban questions and the neoliberal processes of urbanization, based on my own sustained, diverse and

multiple encounters with cities and the ever-changing, dynamic, multi-layered urban-life and associated flows, networks and currents across the length and breadth of the diverse Indian Subcontinent, makes me conscious of the various forces and elements, perceived- either in full, partial or latent, that shape and direct things, externally or within, in ways they appear, or stay hidden, to us. The interplays of these forces and elements, instead of binding us to any path-dependent, one-sided-morphological understanding of social processes, should open us to new ways of analyzing and theorizing.

Patna, being the capital city of Bihar- a state ill-famed for caste-based socio-political mobilizations and everyday social practices, and also being in close proximities and surrounded by regions, which are known for feudal and Left-wing violence, including my own native district, made me realize its potential for newer ways of theorizing and theory-building. I soon began to sense that the disinterestedness that I carried all long my life towards this emerging metropolitan, urban agglomeration known as Patna, would offer me a field for research studies with minimum of the underlying mental or cultural fixations. Not that I hadn't any presumptions or biases towards this city, but those were not of the kinds that might have acted as hindrance or inhibition to how I wished to navigate, explore and engage with the land and its people. Later, to a great degree of satisfaction, my field-visits to the city bear testimony to all that I sensed in the initial phases of this project formulations.

However, not every single inspirational thought in path of my research project formulations had to come through these circuitous trajectories. There were some low hanging fruits as well. Patnathe city growth and its urbanization processes, was one of the most understudied areas in urban research on India. On sociological, theoretical issues pertaining to the Patna city or the Patna city-region, even a single standard, peer-reviewed monograph/research article, is difficult to find. For me this lacuna in existing studies worked out to be an opportunity and assurance, than insecurity and apprehension.

There were some other striking features of the city that I discovered in my preliminary research and which reinforced my sense of a potentially-stimulating urban theoretical engagement. For example, as per the Census data, the share of slum-population to the overall population in Patna is calculated to be lower than almost all Indian cities in the million-plus population category. Although this "official fact" might have its own, clear implications for how this city needs to be

investigated and research question be modified, yet, almost simultaneously, this gave a sense of flexibility with which I could bring the richness of empirical observations and issues and also multiple and non-conventional theoretical and methodological concepts and frameworks to the study-table. For example, the concept of gentrification under neoliberal capitalism, in my understanding, is as pervasive as it is differentiated or differently manifested/unfolded across different economic geographies, and yet, is seldom used in the study of the Indian cities or urbanization processes in India. Despite some objections to extending the concept, as supposedly tied, unwittingly, to the First World industrialized cities, some recent scholarships have made good use of the concept of gentrification for analyzing the neoliberal transformations of the Third World cities as well as the new urban spaces. For me this came as a form of reprieve from the apparent and ongoing submergence or collapse of, the otherwise empirically vibrant and theoretically stimulating, urban/city studies and the development literature on poverty, segregation and exclusion. I found a new impetus for theoretically engaging urban studies.

Urban Sociology: The Trends and Issues

The object of study of, what can be termed as, the 'urban sociology', arguably a sub-discipline within the broader field of sociology with which I am presently associated, is far from clear, as the sub-discipline itself lacks coherent or plausible theoretical foundations and methodological elaborations for the grounded, field, empirical investigations. Even as the study-field of the urban investigations are relatively new, little over a century old, the issues and the dilemmas associated with the urban sociology discipline are somewhat structural, to the evolution and the development of sociological study-fields, and also, to the emergence of the later decades' interdisciplinary approaches of the study of the urban. The 19th century's fascination with the industrial, scientific and capitalist forms of modernity and the associated processes of modernization and urbanization brought the city and the associated life-forms at the center-stage of socio-political contestations and the scholarly, intellectual as well as the artistic and performative disciplines. Even the critiques of various forms and literally, artistic and sociopolitical counter-movements were not far behind and made the city or the city-lives as their main focus of engagements. The city and its socio-spatial forms, came to represent all that was opposite, directly or invariable, to the feudal-agrarian, mercantile, religious amalgam of lives in the country-side. It is in this *opposition* to non-city, or the country-side, that the image of the city

and its forms assumed or represented an underlying unity or cohesion. First, this particular reification of the image of the city, and later, in the 1970s and 1980s, the near-divorce of the city and the urban, in the renewed urban social analysis focused on capitalism's expansion and uneven geographic development, made the discipline of urban sociology devoid of a clear disciplinary orientation or mandate.

The subsequent theoretical advances in urban research have underlined the importance of the socio-spatial *processes* underpinning the capitalist growth regimes and their penetration and expansion cycles. This, apparently, late realization was largely due to the relative domination of the Chicago School's urban ecological tradition of city-centered, city-focused studies approaches. While these advances are very much in accordance with the 'interdisciplinary-turn' in our learning and research methodologies, that evolved from the late 1960s and 70s, the relationship between the field of urban studies and the sociology have grown more ambivalent. The *processual*, that, implicates the socio, the temporal and the spatial, in both, their historical as well as ahistorical/anti-historical manifestations (scientific or humanistic or ethnographic), is too complex a theme, and can only be deliberated together-with specific combinations of objectives and methodological orientations. Despite the promise (particularly, Henri Lefebvre and David Harvey onwards), the field of urban sociology, it appears, was caught napping, as the spatializing/spatialized disciplinary orientations practiced under the name "urban sociology" oscillated in extremes, without the core-theoretical/foundational rhythmic vibrations.

Not that, there weren't studies that alerted towards the growing mystification or confusion around the discipline of urban sociology. For example, a paper titled, "Urban Sociology: A Trend Report", published in May 1989, that stated to "review the disintegration of urban sociology as a recognizable domain of study in the early 1980s and its development as urban studies- an interdisciplinary research field with global reference and infinite scope," towards its conclusion, maintained that, the "Urban sociology cannot disappear under the sociological umbrella, rather, the reverse. Sociology has to be alert to the issues of urbanization and, in particular, the routine appreciation of localities as conferring social power. Neighborhoods as well as towns 'become interesting as moments in a process of usurpation and defence, consolidation, appropriation and resistance'. Much political energy in the 1990s will be taken up in this process." (Mellor 1989:241-260).

However, the same paper also recognized some trends, whereby, "at the same time there was a re-entry of the 'local' and more specifically the 'urban' into the sociological mainstream as there was greater awareness of uneven development, the particularity of local experience and the possibility of mobilization around local issues." (ibid.) Therefore, it should be brought to notice why these trends did not incite strong theoretical response for urban sociology.

At this juncture, the debate on historicism that pervades the social theoretical field needs some elaborations. It has two aspects. One relates to the debate indigenous to or within, what can be broadly termed as, the Historical Materialism school. That is, between the humanist Marxists or loosely, the Western Marxism one the one hand, and the proponents of the deterministic interpretations of Marxism or the Scientific Marxists, on the other. The former's claim that overemphasizing historical deterministic views, especially since the late-Fordist and the post-Fordist era, or, "an overdeveloped historical contextualization of social life and social theory that actively submerges and peripheralizes the geographical or spatial imagination" (Soja 1989:15), has led to the silencing of spatiality of historical social developments, and, also that, the latter's claims of being custodian of the scientific Marxist status is justified by or pushed through the "spurious means", entails some merit and, therefore, demands attention.

But at the same time, this debate appears to be limiting and misleading. The second aspect, thus, corresponds to the exogenous or outside nature of the criticism of the Historical Materialism school. This outsider's view is open to and receptive of the various possibilities, including that of critical but productive engagements. For one, the manner in which Historical Materialism school has been practicing history itself may be deemed as ideological and, therefore, the accompanying "silencing of spatiality of historical social developments" evolved, to a great extent, as foundational. As a consequence, the dialectical interplay of space and time, though only a means, becomes an end in itself, and, somewhat surreptitiously, the humanist Marxists ended-up becoming its great champions. No great theoretical modifications or innovations of the theory of space/space-time have been offered by the later days critical or humanist Marxists, except for expanding and exceeding the scope for the same in the post-Fordist circumstances. The consequences have been further marginalization of the city-ward processes from the theoretical foundational considerations.

From the social geography's point of view, while discussing the philosophical issues in urban geography, David Ley (1983), in the book "A Social Geography of the City", also raised similar questions. He outlined how the "philosophical naiveté", that is, the limited formal contact with methodology and philosophy and, instead, a commonsense, fieldwork orientation of the discipline,

"made human geography extremely vulnerable to the enthusiastic surge towards logical positivism and its mathematical style in the 1960s. Positivism in geography established itself rapidly not so much as *a* philosophy as *the* philosophy of science, declaring all earlier work to be "prescientific" and, implicitly, unworthy of scientific status. However, if such self-confidence was initially disarming, more recently the weaknesses of the positivist program have become visible, not least to former advocates such as David Harvey, William Bunge, and Gunnar Olsson. The decade of 1970s was a period of developing philosophical sophistication in geography which is reflected in a stream of scholarly papers and in several books critical of positivist orthodoxy and presenting alternative perspectives (Harvey, 1973; Olsson, 1975; Gregory, 1978; Ley and Samuels, 1978). A number of key philosophical questions, formerly regarded as settled or else unimportant, once again appear now as problematic. These questions, covering such matters as the nature of man, the nature of environment, and the form geographic explanation should take, are critical to our task of constructing an urban geography that is a 'geography of human experience.'

The first issue to be raised queries the adequacy of inquiry that remains at the level of spatial form while largely neglecting discussion of underlying processes. The overriding commitment of spatial analysis in urban geography has been to uncover regularities in spatial relations and not to process studies. But this is to make prior assumption that there is something in some way significant about spatial form in its own right. A recent critique by both humanistic and Marxian writers has commented that urban form in itself is not as important a category as spatial analysts have claimed, for spatial form is not an end in itself but an expression, a consequence of something else- the prevailing forces in society. Thus inquiry that remains at the level of form cannot provide an adequate treatment of urbanism, for city does not contain its own explanation. In other words, adequate explanation should be concerned with the social processes and historical contexts that constitute and accompany urban development. Research should then shift from spatial relations to social relations, for the former is but one particular instance of the latter." (Ley 1983:7).

Moreover, these debates also tends to overlook those allied areas, such as, architectural studies, geology and environmental studies, housing and gentrification studies, war studies, planning studies, regional and area studies to name few, that are constitutively based on spatial-geographical thinking, and may have, indirectly, contributed to advancing knowledge on sociospatial structures and processes. Instead, they experimented with the concepts like "accumulation through dispossession," "regimes of accumulations," "precarity," "squatting" and "squatting rights," "homelessness" and so on, without reevaluating the meanings of their theories of temporality and spatiality that they employed against those of the people experiencing them.

Warf and Arias (2009) also underlined the fact that different disciplines used geography in ways that the very scope and the meaning of the spatial took multiple forms and dimensions based on the assumptions, languages, applications and other aspects of the disciplines using them. (Warf and Arias 2009:2). They also outlined that the attempts of the Chicago School of sociologists to insert space in the analysis of the urban though helped the understanding of migrant relations with the neighborhoods but other aspects such as power, class and gender were not given equal attention. (Ibid:3).

The Declining Sociological Status of the City and the Waning social

First the dominance of the town and country- *planning* disciplines and their dependencies-on, and proximities-with the Chicago School oriented, *city-centered*, urban-ecological, cultural-artistic and architectural *regimes*, operational within the spatial notion assumed as absolute/fixed; and later, the Marxian geographical-turn and its concomitant notion of the *relative* space, instrumentalized through the concepts like *time-space compression/distanciation* (Harvey 1989:260-307; Giddens 1984:181), in the social sciences disciplines, inhibited the systematic interrogations of the persistent meta-geographical methodological underpinnings of the otherwise divergent articulations of the spatio-temporal forms in the study of the urban and the cities. (On "the persistence of meta-geographical underpinnings", See, Brenner 2019).

For much of the 19th and the first-half of the 20th centuries, the term 'space' in the social sciences, particularly in the urban studies disciplines, came to denote an absolute, Euclidean, table-top like- Newtonian space. Under this notion, the space is understood as fixed, asocial and timeless. It is not the case that the other notions of space, the different ways in which distance is measured and conquered, were not known in those times. From Leibniz to Marx to Einstein, the idea of absolute space is systematically contested (see Harvey 2006:121-124). In Einstein, the idea of relative space found its most impactful, enduring expression. In contrast to the absolute space, the relative space "portrays geographies as fluid, mutable, and ever changing", that is, "space as socially made and remade over time". (Warf 2010:2402). "Relative space, however, remained subordinate to absolute space for many years, at least until the massive changes of the Industrial Revolution reworked the meaning of spatiality itself." (ibid).

Until the Marxist/critical geographers and political economists like David Harvey, Henri Lefebvre, Edward W. Soja entered the field of systematic urban analysis and theorizing, the object of study for the urban studies disciplines were hardly put to rigorous methodological contestations. These scholars and theorists worked through one of the early visions of relative space offered by Karl Marx (1973), in the *Grundrisse*, where he argued that, "while capital must on one side strive to tear down every spatial barrier to intercourse... it strives on the other side to annihilate this space with time, i.e., to reduce to a minimum the time spent in motion from one place to another." (Marx 1973:539).

In extending Marxist analysis into the discipline of geography, David Harvey drew on the works of Henri Lefebvre, and initiated a simultaneous spatialization of Marxism. Lefebvre argued for an understanding of space that is ideological, lived and subjective, and not simply as concrete and material. Harvey, elaborating on this understanding, "linked the construction and reconstruction of relative space to the endless search for ever-greater profits and outlets for surplus value. The need to "annihilate space by time" is thus fundamental to the operation and survival of capitalism on an ongoing basis, that is, its ability to reproduce itself at ever-expanded spatial scales and to accelerate temporal rhythms of capital accumulation." (Warf 2010:2402).

Amid all these developments, the sub-field of the urban sociology remained fragmented and without any rigorous frameworks of learning methodologies and theoretical foundations. Instead, all that went under the other rigorously spatialized, social theoretical models, with a battery of leading Marxists thinkers dominating the intellectual landscapes, looked more like a renewed/refashioned Marxist-political-economy or critical urban theory, than an urban-sociology. The "urban," *fabric* increasingly, came to be viewed as the socio-spatial manifestations of capitalist expansion, whereas, the "city", as reflection and site of modernity and modernization, came to be identified with their *rootedness* or moorings in the pre-Fordist and the Fordist industrial age. Cities came to be increasingly identified with just another stopover, in the forward march of the *capital*- seeking newer and newer avenues for accumulation of profit.

In these modes of urban inquires and investigations, the humanistic content, in the fullness of ebb and flow, and issues and problems, and expectations and aspirations, gets mired or reduced to economic factors, in which the individual actors as an atomistic, unitary entity, are perpetually

engaged in rational, selfish pursuits and self-preservation/re-production. The "ever-expanded spatial scale" and the "acceleration of the temporal rhythms of capital accumulation" captured the imaginations of the theorists so much that, the *processual*, not only got unwittingly entangled with, but also subsumed under, the rational, *scalar-theoretical* edifice, and as a consequence of that, the *affective*-social (the social-symbolic, the cultural), or the *sociable*, couldn't be adequately accounted for.

Besides, a host of studies emerged that advocated non-foundational approaches towards space and time in the study of urban. The common thread in all these approaches has been the continuous production of space and time through active material practices, pointing towards their multiple modes of existence and contextual social relevance. (Massey 2005, Cresswell 2006). However, there were different layers to their approaches. While, the geographers like Nigel Thrift (2001, with Jon May) and Doreen Massey (2005) insisted to hold space and time together as time-space/space-time, the others like Peter Merriman (2012) went even beyond and questioned this move to embrace 'time-space' and 'space-time' in social sciences. In order to proceed towards "a processual, post-structuralist and non-representational thinking to reveal how other primitive ontological constituents frequently erupt into being and emerge from events, ranging from movement, sensation and affect, to energy, force and rhythm", Peter Merriman (2012) questioned the continued usage of the category of space and time or space-time, even by those who seek to reformulate their all-pervasive disciplinary hold in the social sciences (Merriman 2012:24). He writes:

"Despite the intention of social scientists such as Doreen Massey not to venerate the conceptual arguments of physicists or mathematicians on space, time or theories of the world, I would suggest that the continual prioritisation and reification of space and time (or time-space) as nouns in the ontological musings of contemporary social theorists reflects the all-pervasive power of Western science and specific strands of modern philosophy on our theories of life and worldliness." (ibid).

As the above quote suggests, in order to expose the increasing analytical inadequacies of the mainstream (includes the Marxist) conceptual categories of space and time, a new direction emerged in the field of social inquiry that made a virtue of non-foundationalism and developed it further into several heterogeneous, cross-fertilizing, dynamic fields of research studies with their focus on anti-essentialist and post-structuralist thinking in interdisciplinary themes like mobility, movement, sensation, nomadism, migration and diaspora, and performance. This veneration of

non-foundationalism, though indispensable to our thinking and reflection of the dynamism and flows, multiplicities and networks and hybridity and uncertainties of the transmutable and everchanging techno-infrastructural relations of vibrant materialities, has, somewhat surreptitiously or unintentionally, posed further challenges to the amorphous, undefined, foundationless state of the discipline urban sociology.

Research Questions

- 1. Why are our cities growing? Is the expansion in terms of housing/residential constructions fundamentally tied to the neoliberal urbanization process?
- 2. Does the process of neoliberal urbanization contribute to social and ecological unsustainability of cities? Is this lack immanent to the neoliberal subjectivities? How this immanence is reached?
- 3. Did the oscillations of the spatial studies between the two extreme approaches that is, between the veneration of foundationalism and non-foundationalism, contributed towards the groundlessness of the discipline of the urban sociology? How are the theoretical notions of space and time implicated?
- 4. Can the two approaches- the foundationalism and non-foundationalism be conjoined in the manner that the resultant framework of the socio-spatial studies, adds to the renewed perspectives on the urban sociology, appropriate to the neoliberal times?
- 5. Against the binaries of spatial theoretical approaches prevalent in the social sciences, that is, the binaries between the absolute space and the relative/dialectical space, can the third, relational-space approach, that, importantly, doesn't preclude the affective social, be sufficiently developed into an urban sociology theoretical framework? If so, on what epistemic grounds?

The active framing of the relational-space approach, as a necessary groundwork, for the methodological churnings towards a reenergized urban sociology, invariably, would be evaluated and weighted against the visions of Marxian urban geographers and the critical urban theorists, as the later occupy canonical status under the "urban sociology" discipline. It should be a welcoming proposition. The creative use of the absolute-space and the relative-space, and, the

near marginalization of the relational-space (though they claim to use a mix of all three) in their works has been actively followed by the enthusiasts of the urban studies. However, the most Marxian theorists themselves create some sorts of bulwarks against relativism that may question the core assumptions of Marxist thought. As their own preferred methods and frameworks on spatial thinking are today confronted with the ever increasing relativism (a kind of internal dissension in the forms of the present growing dispersions and fragmentation of the geo-spatial economic development) and, also with an external, increasingly assertive scholarships employing the non-relative, non-absolute, relational spatial frameworks, it would be interesting to see how the mainstream urban thinking paradigms may unfold in near future. One can surely think of some possible convergences, but, will that unsettle the mainstream? is both a political and an academic question.

David Harvey, while explaining the tripartite division in the way space could be understood, writes, "So is space (space-time) absolute, relative or relational? I simply don't know whether there is an ontological answer to that question. In my own work I think of it as being all three. This was the conclusion I reached thirty years ago and I have found no particular reason (nor heard any arguments) to make me change my minds." (Harvey 2006:125). He further notes:

"I end, however, with some cautionary remarks. In recent years many academics, including geographers, have embraced relational concepts and ways of thinking (though not very explicitly with respect to those of space-time). This move, as crucial as it is laudable, has to some degree been associated with the cultural and the postmodern turn. But in the same way that traditional and positivist geography limited its vision by concentrating exclusively on the absolute and relative and upon the material and conceptual aspects of space-time (eschewing the lived and the relational), so there is a serious danger of dwelling only upon the relational and lived as if the material and absolute did not matter." (ibid:146-147).

Let's first try to approach the questions, raised above, by highlighting that the city-centered, foundational approaches to the urban studies, over the past half-a century, has further evolved into spatially diffused, polymorphic, multi-centered, multi-scalar, networked, globalizing and non-foundational, non-city centered study approaches of 'urban'. But, this shifting of study-approach raises a practical question. Despite explaining the workings of the contemporary capitalist and technological forces that transform the material and physical environments concerning human beings in useful ways, did the multi-centered, multi-scalar, networked, globalizing, non-foundational, non-city centered study approach, in any ways, diminish the importance of cities as social-spatial forms that organize and regulate human social lives?

Additionally, has the present-day capitalism itself grown as any less dependent on cities for profit-making and capital accumulation than the earlier decades? If not, what could be the implications of 'the return of the city' or, the renewed focus on the zones/regions of "concentrated urbanization" (see the dialectics of the concentrated and extended urbanization as non-foundational study approach to the urban in Neil Brenner 2019) for the non-foundational approach to the study of the urban, as has been fashioned in the recent decades?

Cities are important to human lives. It is here, that now more than half of the World's population lives. There is, now, a fairly established field of critical urban inquiry that emphasizes non-foundational, non-city centric approach to urban studies. The 'urban-rural continuum' frameworks, the 'networked' and the 'global cities' approaches, the politics of space, the 'planetary urbanization' approach and similar such spatially inclusively-encompassing, interconnected, extended and expanded frameworks with associated theoretical and methodological sophistications have enriched our understanding of the workings of the capitalist economic forces across vast expanse of geographical landscapes, including in the zones and territories not inhabited by humans, and also the regions that are covered under water/ice and seas and oceans. Nonetheless, ever since the ushering of the global urban-age, accompanying the scientific and industrial revolutions in the 17th and 18th centuries, the importance of the cities, both as the sites and locations of human habitations and their socio-cultural and economic-aspirational articulations and/or contestations, and as the socially made and remade territories and zones of concentrated forms of urbanization with all its associated sociabilities, flows, networks and dependencies, have only grown in proportion.

The above discussions open us to some interesting propositions. The field of urban studies, in all its recent, updated, advanced articulations, put emphases on the non-foundational, non-city centered approaches, that seek to pay greater or systematic attention to the dynamic, the multiscalar and the dialectical processes of socio-spatial transformations and change. At the same time, more and more people are looking towards the cities and the multiple and adjoining sites of concentrated urbanizations (suburbs, satellite towns, special zones, smart-cities, sprawls, outgrowth areas, shanty-towns, slums, and so on) for livelihoods, learning and habitations. Even if we make a separate account of the concerned mass of people, the mobile workforce, who are for a significant time in the state of movement and mobility, and hence, are 'neither here, nor

there', yet, the proportion of those, the young and the old, who have made to the cities from the hinterlands, or, are dependent on cities' physical and social infrastructures on everyday basis, constitute an ocean of humanity whose actions and reflexes are transforming the physics and the chemistry of the Planet, at much faster pace than ever in the history. What is alarming about this pace of transformation is that, far from being sustainable, this urban implosion and explosion, in the forms of concentrated urbanizations entwined with its hyper-metabolic tendencies extending and spilling into every direction and parts of the Planet, and also in the different layers of the Earth's environment, is fast making the complex biological lives, including the human lives, on earth insufferable.

We may now notice that the field of urban studies, metaphorically speaking, is 'running with the hare and hunting with the hounds'! That in order to explain the spatial logics of capitalist accumulation across variegated geographies of uneven economic development (Harvey 2006, Smith 2008, Brenner 2019), with ever greater theoretical rigors and sophistications, their study-matrix constitutive of the primary object/s of inquiry, strikes an unhealthy distance with the social, the *sociable* and the sociological. From the existing body of the critical urban theories' view-points, the contemporary questions of environment and ecology, equity and sustainability, exclusion and segregations and justice and freedom, appear to be the concerns of derivative kinds, and not something that should anchor the primary drive for the theorization and theorybuilding. The discipline of urban sociology cannot benefit from this situation.

The processual Reframing of Urban Sociology

On closer observation, it is noticed that the claims of the critical urban theories that seek to expound the *processual* modes of socio-spatial investigations have some serious issues. Firstly, the excessive focus on the economic-empirical and the 'rational' and the relative disregards of the symbolic and the cultural, or, the 'affective', raises questions on the manner in which the so called "processual" understanding of the *urban* finds articulations. Conversely, doubts are raised, if the existing critical urban theoretical studies end up offering modular approaches in which the *processual* is bound by the researcher's epistemic, political or existential presuppositions. Neil Brenner (2019) has aptly captured the difficulties associated with the urban theoretical *problematique* that he has expounded through the scale-attuned approach to the urban question:

"In doing so my goal is to put into clear relief the main intellectual concerns, conceptual orientations, methodological commitments, and research agendas that have animated my explorations of this *problematique*, and that continue to guide my work. Accordingly, I have selected texts that most clearly articulate the key elements of my evolving approach to issues in relation to specific terrains of investigation and arenas of conceptual experimentation. ...

...Consistent with the dialectical traditions of social theory in which I situate my work, I have never intended my contributions to debates on the urban question to "lock in" a fixed, complete, or comprehensive interpretive framework. Indeed, because they are thoroughly enmeshed within the contradictory, restlessly mutating sociospatial relations they aspire to illuminate, dialectical conceptualizations of urban questions are not, and cannot ever be, a definitive "capture" of an ontologically fixed condition. Rather, they represent dynamically evolving, partial, and incomplete efforts to decipher the endlessly churning maelstrom of capitalist urbanization in which theorists, like all social researchers, are ineluctably situated. Consequently, as Jennifer Robinson explains, urban theory "should be practiced and conceptualized as radically revisable," not least because its site and focal point, the urban, is "a political and practical achievement ... made through political contestations." In precisely this sense, my writings on scale and the urban question are intended as part of what Robinson has appropriately characterized as a collective endeavor to "destabilize the terms of the urban and set in motion conversations towards its ongoing reinvention." They offer no more than an exploratory theoretical orientation- a basis for posing and investigating a range of questions related to conceptualizations of the urban, and for tracking their variegated methodological, interpretive, and political implications across sites, contexts, and territories." (Brenner 2019:8-9)

Earlier, David Harvey (2006) made similar remarks on the ad-hoc, partial and provisional nature of the theory and theorizing practices of the spatial nature of the capitalist accumulation and development, and also, through graphic outlines of his own practice of theorizing, argued that, the case study work should internalize theorizing practices:

"If capitalism survives through uneven geographic development, if capitalism *is* uneven geographic development, then, surely, we need to search out an adequate theoretical framework to encompass this fact. These notes do not exhaust the field of possibilities. Theory can never provide a complete or definitive account of the world. Theory is, in any case, always something that is (or should be) in the course of formation. The elements I have here assembled are disparate, but this is precisely what makes their inclusion in the search for a pertinent theoretical framework both interesting and rich in possibilities. I also argued that case study work should internalize theorizing practices. (Harvey 2006:115).

The Objectives of Research

The Objectives of Research are:

1. To 'bring the *social* back' into the theoretical urban studies through an active, openended reframing of the *processual*, that may shape the contours of the "elusive" theoretical-foundational aspects (in a fluid, shifting, becoming, non-essentialist sense), of the field of urban sociology.

- 2. To explore ways in which the neoliberal urban growth and the socio-spatial restructuring in the housing and the built-environments are related, and assess the implications for the free, open spaces. The open spaces are an important urban commons, similar to clean air or water.
- 3. To analyze the newly emerged middle classes and the planetary gentrification in a neighborhood in the Patna metropolitan region.

The research strategy to 'bring the *social* back' is to create a new, theoretical study-matrix, overriding and transcending the earlier concerns and frameworks that emphasized the space over the time (since Lefebvre and other 'critical' Marxists), or the vice versa (those espousing the concepts like, Space-Time compression/distanciation or similar relative-space notions), and, to focus on the relational-space/field intersections of the following four elements: individual/sociable, neighborhood changes and community formations, spatial organization and urban spaces, and collective consumption/patterns.

A reflection of the research strategy employed here, in terms of mobilizing disparate tools, has found some similarities in Tim May et al (2005), *The Future of Urban Sociology*, through the following passages:

"Recent literatures have placed an increased emphasis upon interdisciplinarity within a 'Mode 2' of knowledge production which is said to characterize the 'new' knowledge economy. In Mode 2, justification in the context of application requires 'borrowing' from whatever disciplines might provide appropriate insights or tools for analysis, as well as requiring skills on the part of the researcher that are not normally seen to be part of the mode of social scientific knowledge production." (May et al. 2005:345).

Processual Thinking, Relational Space: The Philosophical underpinnings

At the philosophical level, the groundings of my theoretical propositions for the urban sociology research need not be viewed as neatly ironed-out propositions. Instead, they remain in the form of an evolving framework that may be approached in more than one ways.

As opposed to the one-sided veneration of foundationalism or non-foundationalism in the urban theoretical studies, I propose a new middle ground: the 'non-foundational foundationalism', as it may be called here, for the methodological framing of the urban sociology aimed at the study of the urban processes under neoliberalism. In order to adequately capture the broad essence of the

present-day neoliberal spatiality, that is a systemic expression of social, political, cultural, economic and technological power on the physical and the mental spaces, this methodological orientation employs the new, scientific notion of relational space that is potentially integrative of all three: the mental, the physical and the social. This notion of relational space allows for the human agency to be used at forefront of framing the socio-spatial in the study of the urban. However, a caution needs to be made here. The arising or derivation of the category of human agency from the theoretical, scientific notion of relational space is not a straight-forward, easy extrapolation. This is still an evolving science and, therefore, the present relations between them are, at best, only tangential or suggestive. However, for the social science inquiries, this evolving science holds a great potential for reimagining human agency in the analytical unit-level yet actively changing and reshaping social-spatial terms, such as *neighborhoods* or *commune*.

Philosophically, this new middle ground has a basis in the phenomenology of the German philosopher Edmund Husserl's (1859-1938) "Logical Investigations", published in two volumes in 1900 and 1901, that is geared towards the study of individual consciousness in understanding of the social phenomena. Due to the new, scientific notion of relational space (in Chapter 2) enabling to see through the concept of the *human agency – as a "social scientific imperative," encapsulating all three elemental spatial expressions- the mental, the physical and the social,* this middle ground appears to qualify two important requirements of Husserl's phenomenological investigations: 1. The epistemological basis to the scientific inquiry, and, 2. Finding a way to account for the diverse subjective experiences of the conscious human beings.

In this sense, my approach seeks to distinguish itself from the previous efforts of using the phenomenological traditions. For example, David Ley (1983) also framed the relation between urban geography and social theory through the phenomenological techniques. But he relied more on the "theoretical guideposts of social phenomenology (of Alfred Schutz and others), and, to a lesser extent, pragmatism in examining urban experience as a product of social and subcultural processes" (Ley 1983:10), in order to locate the social basis of urban life as "a socially defined reality" (ibid:201). I, on the other hand, recognize the quasi-independent or circular yet distinctive nature of the technological advancements and information flows, arising from the complex relations that the physical spaces have already entered into with the mental and the social spaces. And, also that it is through the active combination of all three that the present

neoliberal phase dominates the organization of human social relations, not merely as "a socially defined reality", but necessarily as "a socio-spatially defined reality".

Still, unlike Lefebvre's *sociospatial* notion that also seek to combine the mental, the physical and the social space (Gottdiener 1993:131), this "socio-spatially defined reality" is *grounded* in a new "scientific" notion of *spatiality*, i.e., the *physicality* aspects of the space-time. This new understanding of the physical space itself, no more of a relativistic-deterministic four-dimensional space-time, but of a three dimensional *probability cloud of relations of fields* (details in Chapter 2), provides for how all three may combine, not mechanically or hermeneutically or to "avoid reductionism" (ibid), but as a *becoming space* in which all three can be seen as having essence of their own only epistemologically, and not ontologically. Ontologically, all three, the mental, the physical and the social space exist, inseparably; not as things, but as relations or events.

With the help of the key concepts, such as, the "originary presentive intuitions" (or, the "originary givenness"), and, the "apodictic evidence" or the "apodictic insights", Husserl shows that the subjective acts are the ultimate source of justification and sense-bestowing and, also that, by achieving and acceptance of the apodictic insights, a form of epistemic elucidation, one can avoid the harmful consequences like relativism.

"Like visual experiences, however, apodictic intuitions are subjective experiences that gain their justificatory force from something internal (namely their originary presentive character). "Apodictic Evidenz, the consciousness of necessity, seen, actually experienced (and not just spurious and presumed) is, though, something subjective, a singular experience, and in it lie grounds for justification" (Husserl 2008, 120)." (Berghofer 2020:287).

Although understood as "a descriptive science", the Husserlian phenomenology, however, aims:

"to gain a priori truths about essential characteristics of different forms of originary givenness and how they relate to different forms of evidence. Hence, the descriptive methodology of Husserlian phenomenology must be supplemented by an eidetic methodology. Husserl's understanding of phenomenology as the "First Philosophy", the "science of the principles, namely science of ultimate elucidation, of ultimate justification and sense-bestowing" (Husserl 1984, 165), is fundamentally grounded in the study of consciousness that allows to investigate the carriers of justifications.

Phenomenological philosophy postulates that the subjective acts are the carrier of justification, and it is *internal factors*, concerning consciousness, that gives justification-conferring acts their justificatory force. However, only some mental states have justificatory force. These *internal factors* can be brought to the fore or made to appear only through descriptive and eidetic forms.

An internalist with respect to an epistemic justification, Husserl contends that it is the immanent qualities that makes the internal factors and give justification-conferring mental states their legitimacy. (ibid:285-286).

Having understood that the study of consciousness is the key to the inquiry of the social phenomena, the next challenge, however, remains towards the eidetic, descriptive enunciations of the mind-object/body relations, that is, corporealizing/objectivizing the consciousness or mind-acts through adequate phenomenological investigations; or, actualizing the simultaneous subjectivation and objectivation of the world.

Husserl's thoughts have also been approached form a perspective, called as, non-foundational realism, that, in methodological essence, appear similar to the one proposed here- the non-foundational foundationalism (See John J. Drummond 1990, "Husserlian Intentionality and Non-Foundational Realism"). However, I do not intend to use these terms interchangeably and what goes with the term, non-foundational realism, should be viewed in the manner the author himself has termed and expressed. However, for the purpose of drawing comparable grounds, let's look at a quote from Drummond that appeared under the subheading, *Essential insight without foundationalism*:

"Given this complexity in our experiences of the world, a unified eidetic insight into a particular kind of experience requires the blending of individual insights realized in different apodictic evidences. We must shift our focus to different features implicated by what is immediately and apodictically given in our original grasp of the living present and explore these features in new apodictic evidences. The combining of these separate insights into the unified intuition of an essence forms the eidetic insight in its concreteness.

This concrete intuition of an essence is further complicated by the facts that (1) each of the individual apodictic insights combined in the concrete eidetic insight might be grounded in variations which are insufficient, because they either fail to distinguish relevant factors or mistake irrelevant factors for essential ones, and (2) the complex of these insights might fail to take into account all the historically novel possibilities for the kind of experience under consideration. We must be open, in other words, to the possibilities (a) that we have erred in developing our individual insights and (b) that the facts of our historically changing experiences, e.g. the development of new physical theories, might pose problems for the view of physical science we have articulated in response to past and present theories, i.e. they might present new, previously unnoted variations, thereby necessitating a change in our view of the nature of physical science." (Drummond 1990:245-246).

Similarly, a contemporary Canadian philosopher and social theorist, Brian Massumi (2015), in his book titled, "The Power at the End of the Economy", talks of an evocative situation or a phenomenon, the "groundless ground", upon which stands the neoliberal edifice, which is not an

entirely solid ground of rational choice, instead, is enjoined or laced with the "concealed factors", "a rabbit hole", that plummets through it (Massumi 2015:1). He frames the term the "groundless ground", while elucidating the role of the "affects" in determining or shaping the system-wide, macro-economic outcomes. He further notes:

"In today's version of free-market ideology, neoliberalism, the affective commotion has become so insistent that something else surfaces as well: the creeping suspicion that it is upon the groundless ground of these now not- so- concealed factors that the edifice of the economy is actually built.

The implications of this groundless grounding in affective artistry are worth a look, not least for what it might say about "rational" self-interest as the guarantor of self-optimizing order, but also for the rethinking it might necessitate of the very concept of the rational in its relation to affect." (Massumi 2015:2).

Methodological Framework for Research

Working through the ways in which the modern forms of "sociability" (Bourdieu 1986), and the neoliberal "subject of self-interest" (Massumi 2015), actively relate to each other, they, in creative combination with Gilles Deleuze and Félix Guattari's kind of spatial thinking-process (see, 'Deleuze and Guattari: Space and Becoming' in Conley 2012), call for a relatively distinct *socio-spatializing paradigm*. Thus conceived, this paradigm is impregnated with the analytical as well as the discursive, the relational and the entangled force-field. Also, putting in juxtaposition to the dominant, oft-articulated, scalar-urban theoretical edifice, this processual, relational-space framework for urban studies/sociology employs the recently developed concept of the "planetary gentrification" and underlying dynamics (Lees et al. 2016) to analyses the urbanization processes in the Patna city region of Bihar, India.

My empirical study of Patna city region runs parallel to the theoretical undertakings on the urban transformations under the neoliberal capitalist development, as I, simultaneously, seek to assemble disparate theoretical advances on the *space-time* notion (the loop quantum gravity theory, discussed in Chapter 2), the social theory (Bourdieu's Field analysis and non-economic forms of capital), and the neoliberal urban processes (planetary gentrification) in order to reframe some of the basic spatial theoretical assumptions of the critical urban theory. However, the theoretical undertaking must be viewed as work-in-progress, as the synthesis cannot be achieved in a single work. At the most, the present work can provide a blueprints or the edifice for the subsequent empirical investigations under the frameworks.

This under-articulated, conceptually fragmented, and relatively neglected *socio-spatializing paradigm*, framed here as the "Learning-Skilling-Education paradigm (or simply, the *learning paradigm*)" shall be viewed in creative tension with what may be termed as the predominant "Labor-Wage-Work paradigm (or simply, the *wage paradigm*)". The latter paradigm can be broadly identified with the mainstream expressions of urban studies using the methods of political economy, while the former is attuned towards a mix of the network and the field based socio-spatial study approaches.

Taking a cue from Martijn Konings' (2018), Capital and Time: For A New Critique of Neoliberal Reason, the aforementioned 'one-sided' situation in the urban theoretical studies, I suggest, mainly occurred due to the inability of Marxist theory, which dominated the theorizing practices on the urban, "to disentangle itself from the essentializing legacy of substantivist understandings of value, money and labor", that, in turn, "has always served as a source of legitimacy for idealist perspective on economic life." (Konings 2018:9). In other words, the "reification" of the Marxist class analysis as the hegemonic intellectual impulse that, consequently, overshadows the non-economist perspectives to the quest of theorizing and analyzing, then, give rise to reactions in the form of idealism rooted in the metaphysics and the autonomy of the cultural (consciousness). In essence, this apparently irreconcilable theoretical divide, were unhelpful to the emergence of new insights, as Konings, further, notes:

"Often framing their (the Idealists) contributions as a critique of materialist determinism and looking instead to norms, discourse, and knowledge as alternative foundations, such perspectives place much greater emphasis on the idea that economic identities and structures are not materially pre-given but centrally dependent of the way people conceptually construct their world. In this way, the problematic of value has remained uncomfortably situated between materialism and idealism, between the poles of fetishized material labor and fetishized knowledge (Martin 2015).

This traditional division has been significantly rethought in autonomist approaches, which have sought to move beyond the opposition of labor and knowledge to foreground the ways these dimensions are imbricated in contemporary capitalism. Of central importance here is the emphasis on immanence, the impossibility of ontologically separating the material and the ideal-a move that subverts a conception of social forms, norms and standards as primarily representational and epistemic. In the era of immaterial labor, the assumption of an externality of reality and its representation becomes less and less tenable; the measure of value becomes more fully immanent. No longer simply a yardstick by which something else is assessed, measure is produced in and through the same process whereby the measure is constituted (Negri 1999). But the implications of the autonomist insights have remained somewhat ambiguous. The immanence of knowledge and value is often portrayed specifically as a characteristic of the post-Fordist era: it is the decline of Fordism and its standardized methods of factory production that is taken to have undermined abstract labor time as the organizing principle of capitalist production by giving

rise to immaterial forms of labor that are increasingly difficult to represent and symbolize. In other words, the immanence of value and measure is often understood by contrasting it to an externality that supposedly prevailed under earlier periods of capitalist development, when the labor theory of value was still valid (e.g., Hardt and Negri 2001; Marazzi 2007). ...

... The most notable implication has been a certain postmodern valence that associates the shift from Fordism to post-Fordism with the impossibility of economic standardization and order and so downplays the ways the measurement and valuation of labor remain at the core of capitalist life (Adkins 2009). To assess the operation of contemporary value against the model of external measure and passive, linear registration is to pay insufficient attention to the distinctive dynamics and paradoxically generative character of an immanently generated standard (Clough et al. 2007; de Angelis and Harvie 2009; Böhm and Land 2009). The standard principally never prevents the emergence of new forms of speculative valuation- and in that sense the development of capitalism is an *ongoing* crisis of measure and representation (Bryan 2012)." (Konings 2018:9-11).

Neoliberal Cities as a Sociological Conundrum

The ongoing crisis of measure and representation is not only for the development of capitalism, but also for the sociological meanings of the cities. Neoliberal cities are sociological riddles. Just like there are two aspects to the present day neoliberalism: one, a mutating, transforming, diffusing and expanding neoliberalism that extends economic opportunities to newer classes and, the other, a resilient, insidious, destructive neoliberalism, cornering disproportionate economic benefits in the hands of few, both processes blended into one; the present day cities while spatially expanding are also mirroring conflicting trends and attitudes. The urban sociological conceptualization of the cities, in order to satisfy the role of critical inquiry, need to re-orient itself in relation to the aspects of the present day neoliberal capitalism that makes it resilient, destructive and insidious, thereby also making our cities inhabitable and unpleasant for a large majority of the urban population. Whereas, the general trends in the urban theoretical studies suggest a completely opposite scenario. It is the mutating, expanding and diffusing neoliberalism in relation with the extended, expanded, multi-scalar, non-city-centered spatial forms and processes, that forms the bulk of the recent urban theoretical literature. This is what the present, ongoing "urban turn", for the most parts, came to denote.

The study of 'How social processes give rise to spatial forms?', are not new to humankind. This has been part of our broader as well as inner quest for understanding and meaning-making of the physical and the natural worlds. Today everyone agrees that different geographies give rise to different modes of understandings through which the relations between land and people are conceived. In the present advanced capitalist age, the technology-led accumulation drive of

capital has, both materially and conceptually, transformed the lives in almost all the regions of the world, and yet, the societies and communities have displayed resilience against homogenization and enslavement by valuing and reproducing non-economic forms of capital and promoting diversity.

In the human social context, the term 'resilience' should be viewed less as mere resistance and opposition and more as a description of the micro-social as well as infra-individual processes, that pertains to the zones of non-distinction between the affective and the rational, where the individual's relation to itself cannot be completely factored in. Particularly, in relation with the individual's associative and dissociative tendencies, that are ineluctably linked to the uncertainties of the future in a liberalizing economic system. (Massumi 2015:4)

The latest, dominant mode of the capitalist growth under the neoliberal economic regimes is making several innovations to penetrate into these resilient physical-social as well as microsocial *geographies*. These innovations are two-fold. One is, the competitive techno-financial *realm*, that in the past have undergird the colonial and the post-colonial social lives of subordination, control and dependencies, thereby sustaining the North-South divide, with the North commanding the critical and the latest know-hows and the regime of the intellectual-property rights. And, another is, the more insidious 'technologies of life', that includes control over education curriculums and research designs; instruments of knowledge circulation and dissemination, that is, the research publications, journals and periodicals; the health and biomedical practices; and monopoly over the standards of cultural, fashion, aesthetic, and architectural productions. What is called as non-economic facts of lives, that is the sites and the processes of the cultural and social reproductions, are as important as the economic aspects of the individual and collective lives. And, therefore, it is important to develop a systematic schema through which one can observe and understand the inner workings of the 'social', dialectically and processually ingrained into the spatial and the temporal.

As the societies and individuals display resilience, so do the present neoliberal capitalist regimes. While much is said and discussed on the growth and expansion aspects, both spatial and non-spatial, of the neoliberal capitalism, we do not hear much on how it has been resilient and insidious. Particularly, the socio-spatial understanding of neoliberal capitalism in the urban theoretical studies has been more focused on the growth/expansion aspects or on the "growth

machine," than on the resilience aspects. As a result, the asymmetries that entered into the urban theoretical studies, further affected innovations that might have balanced the study-fields.

Here, can we draw a relationship between the resilience of the neoliberal capitalism, from one crisis to another, and the ever deteriorating living conditions in our cities?

The City-Theoretical Field: the Third Urban Revolution or the Way of Life 2.0

There are many divergent ways in which we may approach a city today. First of all, it needs to be acknowledged, that the yesteryears' city-suburbs or inner city-downtown, or similar spatially closed arrangements have exploded into large urban regions with multi-nucleated centers and zones of different scales and types clustered over continuously expanding and imploding regions.

"This new form of settlement space is called the multicentered metropolitan region (MCMR), and it is the first really new way people have organized their living and working arrangements since the beginning of the industrial age. In contrast to the characteristics of the bounded city, this new form of urban space can be typified by two features: It extends over a large region, and it contains many separate manufacturing areas, retail centers, and residential areas, each with its own abilities to draw workers, shoppers, and residents." (Gottdiener and Hutchison 2011:5).

The sprawling growth of the multi-centered metropolitan regions (MCMRs) in the developing countries are, simultaneously, recognized with the advent of the neo-liberal economic changes and the concomitant/crisis-induced restructurings of the regional and the national economies of the developing regions from the late 1980s onwards, towards a greater integration into the global capitalist system. The phenomenon is, loosely, therefore, also recognized with the term, *globalization*. If we call the industrial age beginning the late 18th and 19th century as the First urban revolution, and the Post-Fordist urban developments of 1960s and 70s in the developed world as the Second urban revolution, the present neo-liberal urban expansion age marked by "the rapid growth and overwhelming sprawl of cities in the developing nations," termed as "hyperurbanization," may be called as the Third urban revolution.

This third urban revolution, as it appears, is not a linear process of territorial city-expansion but composed of the multitudes of conflictual and coevolving processes of growth and expansion together with implosion, degeneration and destruction. In the overall scheme though, the aspects of implosion, degeneration and destruction are collectively summarized as or subsumed under, "creative destruction"- endemic to the crisis-induced, capitalist spatial processes, leading

towards the intense transformations of the socio-spatial forms and practices. It is through these kinds of conceptual *naturalization*, the resilience aspects of the post-crisis neo-liberal capital, making persistent inroads into different and newer urban realms to embed and strengthen itself, are ignored, sidelined or bracketed towards a more expanded, hierarchized, multi-scalar, wider geo-historical explanatory modules and frameworks. In large parts, these naturalization and also neutralization strategies, in effects, taking the gaze away from the contextual (culturalecological), socio-spatial urban concentrations or realms and the action/contestation domains, are fundamentally necessitated by the demands put by the geo-relativizing spatial theoretical formulations. Because of the excessive focus to develop broad inter-regional comparative, relative frameworks of uneven geographical development, based on the notions of the space-time compression/distanciation, the localized processes of neo-liberal restructurings and interventions involving active intermeshing of the spatio-social organizations and institutions, I believe, are not given adequate attentions in critical and Marxist urban studies. For example, the processes linked with neighborhood clustering and differentiation, gentrification, social class-based graded schooling and learning outcomes, access to urban commons like open spaces, or the gendered spatial configurations didn't find sufficient attention in their theoretical schemes. Some of these themes are fundamental to the processual and contextual relational-space analysis, on which I will delineate in the next chapters.

However, Neil Brenner (2019), in delineating on the "New Urban Spaces: Urban Theory and The Scale Question", has captured and articulated the analytical intricacies and layers of these capitalist urban dynamics within broader historical geographies, and the necessary *bracketing* or the "relatively fixed, provisionally stabilized frameworks of territorial organization," required for navigating from one spatiotemporal scale to another, while simultaneously staying mindful of the conflictually coevolving contexts, within a broader "context of context." Explaining some aspects of his methodological underpinnings of the scale-attuned urban analysis, Brenner writes:

"By excavating the scalar analytics that are embedded within the writings of Harvey and Lefebvre, I have argued that the politics of scale cannot be analytically reduced to the strategic orientations, evolutionary pathways, and impacts of scale-making projects themselves. Instead, this analysis has suggested that the dynamics of rescaling must be embedded within broader historical geographies that are profoundly shaped by the spatiotemporal (il)logics of capital's fixity/motion contradiction- its fundamental reliance upon relatively fixed, provisionally stabilized frameworks of territorial organization and its equally powerful impulsion to promote sociospatial creative destruction. Insofar as both moments of fixity/motion contradiction are scale

differentiated, the politics of scale are directly ensnared within the (il)logics of capital's problematic relation to territorial organization. To be sure, contextually specific scale-making projects and rescaling strategies cannot be functionally derived from the fixity/motion contradiction or from any other abstract operations of capital. However, in broad geohistorical perspective, the establishment and dismantling of scalar fixes appear to have unfolded in close conjunction with successive accumulation regimes, modes of territorial regulations, and cycles of crisis induced restructurings. This suggests that contextually embedded forms of the politics of scales are themselves embedded within, and profoundly shaped by, a broader "context of context." This *metacontext* is a densely layered fabric of capitalist territorial organization that has been forged through the geohistorical interplay between provisionally stabilized scalar fixes and the successive waves of crisis-induced rescaling." (Brenner 2019:84-85).

Along with the excessive focus on the crisis nature of capitalism, and less attention to our cities-in-crises, another important but less articulated reason for the inadequate engagements with the contextual urban processes relates with the role of the nation-states.

This role of state or nation-state is conceived differently from the manners in which states are implicated, by the critical urban theories, in the active scalar-theoretical restructurings of the urban problematique. Basically, it is more methodological in nature. In large parts, the urban policies are inflected with the statist-national orientations aimed at the fixed or desired sets of social, political, economic national and sub-national outcomes. Therefore, the neoliberal economic policies framed at the multi-lateral forums only get implemented or see the light of the day after passing through the nation-state level adjustments and fine-tunings. Even if these toptown corporations- and market-friendly policies imposed severely, these statist inflections become almost unavoidable as the data collection- or the census- or other statistical-surveyexercises, relevant to the urban policy framings and implementations, are performed, generally, at the national or sub-national levels. Also, many developing nations, due to lack of adequate political will, or historical or ethno-structural or developmental or other reasons, lack decentralized functions of governance and social program supports and implementations. Coupled with these circumstances, no supranational authority or institution can mobilize human and other resources to perform these tasks of data collection without forging adequate, viable, justificatory multi-national, economic and geo-political integrations. To achieve the European Union (EU) like integrations of purpose and outcomes among the newly independent, spatially diffused and ecologically and ethnically diverse and plural, post-colonial, developing countries, though not an impossibility, are, perhaps, too much to expect of, in the present situations. The issues and problems in social theory comprising this methodological and theoretical challenge

emanating from the national orientations to the socio-economic policy implementations and concomitant outcomes are reflected by the term, *methodological nationalism*, defined as "the naturalisation of the nation-state by the social sciences." (Patel 2018: 96). Ulrich Beck (2005), in the light of the force of globalization that actively redefines the boundaries of the exercise of power, put forward a "critique of the national outlook" in social sciences, that is, a critique of the power of the nation-states getting superimposed on the practices of social sciences, in the following terms:

"Globalization, when taken to its logical conclusion, means that the social sciences must be grounded anew as a reality-based science of the transnational – conceptually, theoretically, methodologically, and organizationally as well. This includes the fact that there is a need for the basic concepts of "modern society" – household, family, class, democracy, domination, state, economy, the public sphere, politics and so on – to be released from the fixations of methodological nationalism and redefined and reconceptualized in the context of methodological cosmopolitanism." (Beck 2005: 50).

By ignoring these contextual, historical asymmetries between the category of states and their evolutions, and, instead, promoting a *naturalized*, historically unproblematized nation/state unit or entity, in the theorization of their relative-space notions based multi-scalar analysis of the variegated *urban* or the uneven geographical development, the critical and the Marxist urban theories have overlooked some of the important methodological concerns in their design of theorizing and generalizing. Methodologically, relativizing the historically contextual state-spaces across unstable, conflicting and relational-temporal frames against the economic *evolutionary structures* (Keynesian to Post-Keynesian, Fordist to Post-Fordist and so on) would yield to a different perspective than relativizing naturalized and unproblematized state-spaces against a neo-classical or a neo-liberal economic *processes* of crisis-induced geo-capitalist spatial restructurings.

Sociologically speaking, the urban scale of socio-spatial configurations, developed in the recent urban theoretical studies, need to be as self-referencing as based on the scalar-matrices of the capital's geospatial restructurings and the territorial gains for accumulations. It is in this self-referencing nature of urban scale of socio-spatial configurations that the present neoliberal capitalism structures its long-term leverage potentials for assured and steady accumulations, thereby, induce sense and predictability for investors and leaders and for the techno-managerial, middle-classes, in an, otherwise, volatile, risky system of endemic crisis tendencies. These self-

referencing aspects of cities, though appear similar to Lefebvre's second circuit of capital, and partly this comparison seems also tenable, are, conceptually, based on a combination of economic and non-economic factors. Abstract reasoning to the recurrent crises of global economy, like over-accumulation or over-production or housing-credit bubbles, are, surprisingly, equally common to urban theoretical studies as are to the neo-classical economists! For this reason, urban sociology needs to strike a balanced approach towards the internal working of cities, through the help of appropriate frameworks.

When Louis Wirth (1938) wrote his famous essay, "Urbanism as a Way of Life", in which he laid out a synthesis for a "sociologically significant definition of the city", it was a moment of high hopes, especially in the "New World", (i.e. the North America). The development of a distinct "urban way of life", constitutive of the urban social ecology, was seen as transformative of the human personality and socio-economic character. Although Wirth clearly accounted for the risks factors as the negative/weak emotional outcomes like anomie or loneliness, friction and irritation, nervous tensions and personal frustrations, yet he tended to see the broader city-life positively as fostering "a sense of toleration of differences which may be regarded as prerequisites for rationality and which leads towards the secularization of life" (Wirth 1938:15). These positive outcomes to him were the consequences of the simultaneous operations of both factors: density and heterogeneity.

The urban "implosion-explosion", "(a metaphor borrowed from nuclear physics) that occurred: the tremendous concentration (of people, activities, wealth, goods, objects, instruments, means and thought) of urban reality and the immense explosion, the projection of numerous, disjunct fragments (peripheries, suburbs, vacation homes, satellite towns) into space" (See, Brenner 2013), has proved Wirth's formulations as more a puzzle than a definitive markers. As humans have grown more tolerant with city-encounters, today it seems to be based more on the fear, suspicion, unreason and selfishness, and confusion and risk. As density and heterogeneity has largely been sustained, the social, environmental, political, and psychological problems have also grown to be endemic to the present urban or city life. Sectarian tendencies like populism, militant nationalism, protectionism, religious fundamentalism are on a rise all across the World. Amidst this enlargement of the conflictual socio-spatial patterns, the role of technology has created a whole new dimension that is structuring the human social interactions and organization.

This new dimension in terms of its reach, penetration and scale are both liberating and constraining at the same time, also liberating for some and constraining for many. Today's "urbanism as a way of life" may be aptly reframed as "techno-urbanism as a way of life", or to fit to the jargons of our times, the "way of life 2.0". The "smart city", a spatial expression of what is today called as platform capitalism is this new urbanism's most glaring example. It is designed, crafted and marketed as solutions to the "hassle-free" urban living by way of governing the interaction possibilities of the neoliberal subjectivities through the use of the raw-materials in data, techniques of algorithm and the principles of optimization. (see also, Krivy, Maroš. "Becoming-Platform, the Urban and the City", No. 4. Roundtables, Vol. 3/Oct 24, 2018). Moreover, these techno-urban expressions don't have fixed-static definitions as they are constantly evolving and changing, and each cycle of technological innovations are adding a whole new dimension of possibilities. It is this trope- an intermesh of the technology and the social/economic, that, I consider both an invitation and a challenge, for doing urban sociology today- as a theoretically informed disciplinary field of social inquiry.

Limitations of Research

This work while interrogate the aspects of Patna's planned development, the primary data source has been the planning documents, that is, the various Master Plans for the city of Patna, besides the neighborhood surveys, news-reports and the historical/archival reports and materials. Other data sources like City Development Plan or the Smart-City related plan or plan by other non-state agencies have not been brought into the discussions. Also the data on local governance have not been collected or assessed, though this could have been helpful in broadening the scope of discussion beyond what is permissible with the present data at hand.

Specifically with respect to the planning, the resources pertaining to the non-state agencies, or the activist networks that from time to time come out with their own views with respect to the urban planning and urban problems have not been made part of the discussions.

Chapter 2. The Relational-Space Notion and the Neoliberal Spatial Force-field: The Philosophical and Theoretical Elaborations

The Importance of the Epistemological Basis

In order to spell out the underlying philosophy of the science of space adopted for this work, I would like to begin by acknowledging, as an example, a basic fact of our social existence on which both the natural/physical sciences and the social sciences have no disagreements. Both agree that the Sun is at the center of the planetary system of which the Earth is a part. Today the social and the human sciences and the humanities make no great deal of this basic 'scientific' understanding, and, also readily base their analysis and inquiries against the backdrops of the similar 'undisputed' scientific discoveries, as these are, also, part of the everyday common sense. These basic, universal, scientific, undisputed facts of nature and life correspond to the Husserlian "apodictic evidence" or "apodictic insights," that are shared, subjectively, across different cultures and societies.

The framework of the phenomenological reflection/reduction of Edmund Husserl stands for an adequate epistemological foundation for the scientific investigations, and overcoming of the subjective/objective and mind/body dichotomies in the sociological studies.

"In other words, scientists take the world to be their axioms; and it is this axiomatic status that Husserl throws into question when he shows that the results of scientific investigation are a function of both the architectonics of scientific hypotheses and the psychological coloring of the investigating scientist. For this reason, Husserl says that if we are ever to be able to access the pure world so that it can act as a proper foundation, we must strip away both of these qualifications and return to the "things themselves" [die Sache selbst]. (Cogan, John., The Phenomenological Reduction, Internet Encyclopedia of Philosophy, https://iep.utm.edu/phenred/)

The quote suggests that Husserl's foundation of scientific investigation calls for an understanding of the intersubjective world of interconnections encapsulating the social, mental and physical aspects of reality and finding an appropriate method, not to raise the subjective to

the rank of science but to root the scientific practice, i.e., its starting point, in the totality of the *life-world* (Werlen 1993:214-215).

An understanding of the life-world as background to all our scientific explorations takes us close to the foundational presuppositions behind our objective view of the phenomenon, which are subject to change as per the changes in the understanding of the *background*. But this understanding of science of the social pehenomenon is not very easy to be eleveated at the level of common sense. Let's consider the Medieval Europe after the Copernican (1473-1543) revolution that established that the Earth revolves around the Sun and not the other way around. Even a century after this discovery, at the time of Galileo (1564-1642), many people continued to believe, almost like an undisputable truth, that the Sun revolves around the Earth or that the Earth is at the center of the universe. This example is to acknowledge that even after having the scientific research advanced our knowledge in many areas, these new findings may or may not become part of our common, everyday understandings for several decades or even centuries. In the most parts, the time-lags between these path-breaking scientific discoveries/findings and a generalized public awareness and acceptance of these *facts*, are in many cases due to the counterintuitive nature of these findings, with respect to the human sense perceptions.

Having acknowledged that there might be gaps at various levels in our understandings of the physical world, let's now ponder upon a couple of interesting piece of information that would serve as cognitive map, in order to unsettle our perceptions of space or space-time, that I, further seek to reframe in accordance with one of the leading quantum-theoretical visions, the *loop quantum gravity theory*, developed by an Italian theoretical physicist, Carlo Rovelli and his collaborators.

In the first piece of information, in December 1997, Paul Perreault, marketing manager for university and government research programs at Trimble Navigation Ltd., a manufacturer of advanced navigation systems, in an article titled, "Are the Earth's magnetic poles moving? How do navigators adjust to this change?", presents some of the basic insights related with the Earth's North magnetic pole and the modern navigation systems in the following words:

"Complicating this issue is that these pole positions are not static--for either magnetic or geographic poles. The location of the North geographic pole wanders in a small erratic circle-like path, called the "Chandler wobble." This motion is less than 6 meters per year on the surface; a

worldwide network of very precise global positioning satellite (GPS) receivers is used to determine this wander.

Modern navigators normally are not affected by the wandering of the poles because they can regularly determine their position from satellites and Earth-based observatories. The degree of difference between the position of these two poles when seen at various locations is called magnetic declination. These angles allow navigators to determine their actual geographic position. Charts and handbooks for navigation regularly update these values and are published by government agencies. (Perreault, Paul., Are the Earth's magnetic poles moving? How do navigators adjust to this change?, Scientific American, Dec 29, 1997).

Much recently, in early January 2019, Alexandra Witze, in an article titled, "Earth's magnetic field is acting up and geologists don't know why," reported, that the "Earth's north magnetic pole, the location where the magnetic field points vertically downwards, has been skittering away from Canada and towards Siberia" with unusually high, erratic, record-breaking speeds, that the scientists and the geologists don't fully comprehend (Witze, Alexandra., Earth's north magnetic..., Nature, Jan 09, 2019). It is important to state that while the pace of drift is unusual, the movement of the North magnetic pole itself isn't, as it has never been stationary, "driven by liquid iron sloshing within the planet's core" (ibid).

The Earth's Magnetic North

It is one of the three 'north poles' on our globe. First there is true north, which is also called the geographic north, the northern end on the planet's rotational axis.

"Then there's magnetic north, what your compass locates, which is defined as the point at which magnetic field lines point vertically down. Unlike geomagnetic north, this position is more susceptible to the surges and flows in the swirl of liquid iron in the core. These currents tug on the magnetic field, sending magnetic north hopping across the globe." (Wei-Haas, Maya., Magnetic north just changed. Here's what that means., National Geographic, Feb 04, 2019).

"Earth's magnetic poles exist because of its magnetic field, which is produced by electric currents in the liquid part of its core. This magnetic field is defined by intensity and two angles, inclination and declination." (Wilkes, Paul., What happens when magnetic north and true north align?, Phys.org, Sep 17, 2019).

A per the NOAA's National Centres for Environmental Information (NCEI), since its first formal discovery in 1831, the north magnetic pole has travelled around 1,400 miles (2,250 km). The slow wander, that allowed scientists to keep track of its position without much trouble, has quickened of late. In recent decades, the magnetic north pole accelerated to an average speed of

55 kilometres (34 miles) per year. (Livermore, Phil., Shift in Earth's magnetic north throws navigators off course., Financial Times, Dec 12, 2019).

The World Magnetic Model (WMM)

James Clark Ross first discovered the magnetic north in 1831 in the Canadian Arctic. Following this, the pole has changed its position towards the north. To keep an eye on this movement, the U.S. National Oceanic and Atmospheric Administration and the British Geological Survey (BGS) developed a system known as the World Magnetic Model (WMM), the mathematical system which explains the Earth's magnetic field and is the basis of all modern navigation, from the systems that move ships at sea to the Google Maps on wireless phones and the commercial avionics.

It is updated every five years, with the last update in 2015.

"Between each update, scientists check the model's accuracy against data from ground magnetic observatories and the European Space Agency's (ESA) Swarm mission—a trio of magnetic-field mapping satellites that zip around Earth 15 to 16 times each day." (Wei-Haas, Maya., Magnetic north just changed. Here's what that means., National Geographic, Feb 04, 2019).

The changes, as detected, were so large that experts decided to come up with an emergency update for the model. The latest version that was developed in 2015 was to stay in place until 2020. However, by early 2018, realization came in that the model may soon surpass the acceptable thresholds needed for magnetic-based navigation, and therefore, with the help the recent data, the scientists came up with pre-release of the updated version in October 2018, and the more widely used model of the version was released in mid-January 2019.

Except for its unpredictability, the scientists conclusively don't know much about the erratic movements of the magnetic north pole. It is difficult to predict accurately the rate of the shifts of the pole as the reason behid this is the changes in the fluid movement of the outer core of the planet, about which the scientific knowledge is limited. However, the gaps in our knowledge in no ways reduce the importance of the phenomenon of the Planet's north magnetic field.

What do the aforementioned information and events leading up to the latest update, against the original schedule falling on a later date, of the World Magnetic Model, suggests for our understating of the constitution and the working of the social world?

The Everyday Workings of the Magnetic Models

Let us consider the question of 'location' or 'position' that are central to the everyday workings of these models.

Our physical positions or locations on earth, what may also be understood as the geo-spatial identification of positionality/location, are based on differently worked-out static and/or relativistic 'field' coordinates, and therefore, are not determined solely by a single unified principle. It is our actual working relationships with the immediate space, in which we want to locate, would give meaning to the methods applied, which in turn, points towards the socialtechnological embedded-ness of our whereabouts. For example, a tourist who has just landed in New Delhi, India, may well locate himself on the flat foldable pocket-map, that are based on physical geographical coordinates, in order to make his next move in the city, whereas his just concluded flight might have used the latest GPS system based on the latest updated World magnetic Model. While the aviation systems may have alternative emergency navigation systems based on other technologies and principles, a hiker or a bush-walker in the Eastern Australia, following a magnetic compass for navigation does not have this advantage and, therefore, may land in great troubles if he or she disregards the *local value of declination* that can be high as 12° (12 degree). The models or methods applied, therefore, also have to be 'full-proof', so as to give rise to a sense of security and predictability of results, along with the reusability, without which the social lives may be uncertain.

As the theoretical physical sciences are advancing, a consensus is taking shape that, be it the location based on the seemingly 'static' geo-spatial coordinates (which is actually not completely static as noting in the universe are) or based on the 'relational' magnetic model, they are in essence 'probabilistic'. And, it is only in relation to the efficiency of the data flows and having each factors and variables accounted for (chances of surprise, the "unknown-unknowns", are always present), that we can determine the accuracy of the position, specifically when it comes to locating 'real-time', and yet, with the best of the technologies available we may, still, be short

of the 100% accuracy. It only 'tends to' be 'accurate'. And, depending on the sophistication of the data flows and the calculation speeds embedded in the models, the degree of errors can be reduced as infinitesimally small or negligible, but never fully absent or completely ruled-out. The lessons that we draw here are detrimental to the understanding of the spatialized and spatializing social studies in the present and, increasingly so, in future, as our everyday lives get more and more embedded in the advanced technological realms.

While the social embeddedness and the relative nature of 'space' are widely acknowledged, it needs to be carefully looked at. As has been witnessed over the past century, in order to improve upon the previous theories on the study of the urban and urbanization, the Fordist-era orientations on the spaces of material and industrial productions cast around a system-relations of global North-South dependencies and asymmetries, later made some far reaching adjustments in tune with the post-Fordist changes in the material and technological conditions and nature and scale of production, resulting into the corresponding shift in the orientation and focus towards the production of spaces of uneven development.

The present, latest phase, in which post-colonial China and other developing economies played a major role in "bailing-out" or "rescuing" the world economy from the global financial crisis of the year 2008-09, has reopened the production versus the consumption debate with a clear and firm spatial logic attached to it.

Earlier, the emergence of the East and the South-East Asian "miracle" nations, followed by, the economic resurgence, both as a market as well as industrial export power-house, of the post-colonial China, the simultaneous diversification of the sources of energy and related developments in transportation and communication technologies, have led to the creation of a renewed, globalizing world order, with a much broader and wider distribution of risks and uncertainties, without corresponding expansion in opportunities. The importance of the nation-states as a bounded unit of spatial organization and governance has anything but diminished.

As the world economic order has sharply moved from being merely relative to relational, implying, for example, that the disturbances or turmoil in any part will have the adverse effects on the other parts (how a localized virus outbreak in Wuhan, China turned into a global pandemic and brought miseries and economic slowdown to all major national economies of the

world!), the required recalibrations of the spatial and the temporal matrices, as informed by the appropriate theory of space, has not seen the light. The quantum theoretical understanding of space-time, that promises to advance our understanding beyond the absolute or relative space frameworks has not made clear-cut entry by ways of its fuller and richer inter-disciplinary implications and consequences.

Let's think of this situation analogically. There might be individuals, groups or communities in some parts of the world who, even now, continue to believe that the sun revolves around the earth. But the Copernican revolution that forced many of us to change and align our views with the new reality, in essence, brought about an epochal change, also called as, a paradigmatic turn. Today it is the "Copernican insight," that is, uniformly and undisputedly, embedded in the systems and organizations delineating into the social and scientific learning pedagogies and investigations. It is the same insight that also allows one to be reflexively conscious of the 'other worlds' of competing 'vision' of space, not necessarily as external or alien, but firmly embedded and anchored in the ebbs and flows, and part of the long social evolution of the mankind. Our intuition and counter-intuitions are products of the limits of our embedded social experiences, regulated in accordance with the philosophical and methodological developments and advancements.

Nonetheless, we don't dispute the Copernican insight, on the daily basis, anymore!

Likewise, at the turn of the 19th century and the early 20th century, in relation to our understating of space and time, there happened a scientific revolution, with potential of paradigmatic turn in our thought processes and the constituent social relations. The *quantum revolution*, as it is called, following the great scientific advancements in the fields of theoretical physics, concerning the quantum mechanics and related theories of Max Planck, Heisenberg and other, coupled with another great discovery, known as the Einstein's general theory of relativity, altered the understanding of space and time, that we inherited for long since Newton.

Even though, Einstein's notion of relative space was a clear rupture or break from the Newtonian, Euclidean, absolute space notion, the addition of the quantum vision to the Einstein's relativity theory has, potentially, opened a whole new eidetic perspective, taking it, further, to an analytically vibrant "relational" force-*field*, which still is fascinating and challenging the

scientific communities. Known as the loop *quantum-gravity theory*, this quantum vision is still not confirmed or proven, experimentally. Yet, as the theory unfolds towards a radical reframing the *spatial problematique*, it holds certain immanent and heuristic qualities, which allow bringing together disparate social theoretical approaches and concepts to elucidate the relational spatial networked-configurations and developments of the present neoliberal phase.

The late 18th and the 19th century scientific dogmatism or scientism, meaning the indomitable faith in the infallibility of the reason and rationality, came to epitomize a clash of two oppositional dogmas: One, rooted in the idea of progress and secular civil order of the 'modern' 'social', the other, pertaining to the Church or the religious dogmas of the 'primitive/medieval' orders. Away from the "science-knows-all" syndrome, the *quantum revolution* ushered in an age of, what I would like to call, a 'new reason'. This revolution implied a totally different approach towards ways in which we raised the questions concerning physical and scientific realities, as the "world of things," hereafter, came to exist along-with a new vision, that is, the "world of relations." Also, unlike the 19th century scientism, the quantum scientific philosophy professes an understanding of reason that raise "doubt", than the one that offers "certainty" or "one-point solutions". Conversely, it considers one-point solutions as a wishful thinking, and not science. Not surprising, this 'new reason' has only few takers in the fields beyond the immediate scientific and technological interests.

Undoubtedly, since the beginning of the 20th century, the forceful, sweeping presence of "the socialist critique consolidated around the historical materialism of Marx", together with "a mix of Comtean and neo-Kantian influences," that further "reshaped liberal social philosophy and provoked the formation of new 'social sciences' equally determined to understand the development of capitalism as an historical, but only incidentally geographical, process" (Soja 1989:4), gave rise to a "despatializing historicism," that played a critical role in inhibiting and overshadowing the quantum theoretical efforts of radical reimagining of space-time, beyond troubled circuits of the dialectical interplay, reach the shores of mainstream social sciences.

The philosophical studies, unlike the social sciences, do not hold inhibitions or conservatism to break new epistemic grounds, even if they do not offer instant successes. Surprising still, even in those non-traditional areas of social sciences that make virtue of non-foundationalism or post-

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structuralism, a clear paradigmatic rupture or a break from the absolute or relative space-time

notions, towards a relational space-time, as propounded by the quantum revolution, has not

gained ground.

While delineating on the questions of mobility, space and culture, Peter Merriman (2012)

remarks:

"Massey, Cresswell and a host of others have actively drawn upon relational, post-structuralist

and processual approaches to society, space, time and mobility to move away from absolute notions of Euclidean and Newtonian space, time and movement towards more social and relational conceptions, but despite their successful ejection of a simple geometrism, mobility and

movement are still frequently positioned in an essential and foundational relationship to space

and time." (Merriman 2012:2).

Before I begin to expand further on the theme: the relational ideas on space, I want to

acknowledge that it was a seer chance in the 5 year period of my present urban sociology

research work, that I stumbled upon the works of an Italian theoretical physicist and writer, Carlo

Rovelli. Rovelli's core scientific works includes the development of the loop quantum gravity

theory, that proposes a field-relational vision of space. As I have tried to weave my thinking on

the study of neoliberalising capitalist spaces around this theory, Rovelli's own articulations of

the history and the philosophy of science has made equally scintillating impression on me. I am

grateful to his passion for the popular science writings that many of the difficult and complex

scientific concepts, with which my familiarity ended after my higher secondary education, made

perfect sense to me. It is quite possible that I have partially or completely misunderstood him.

And yet I want to use this opportunity to expand my thinking on the subject of the urban social

sciences, based on the ideas on space and time that are results of Rovelli's career-long works in

the field of theoretical and fundamental physics. As I proceed to discuss his ideas on space and

time, I want to state clearly, that the entire discussions in this section are selections from

Rovelli's popular science writings and scientific articles, and, therefore, I shall be squarely

responsible for any misinterpretations or misjudgments of his ideas, at the same time, offering

him my sincere gratitude for making his theoretical works accessible to the wider readers.

The 'New Reason': The Quantum Philosophy

The following passages from Rovelli's (2006 e-book), *What is Time? What is Space?*, translated from original Italian version (2004) by J.C. van den Berg, adequately explain what a "new reason" might look like:

"The nineteenth century developed an image of science that today cannot be defended: the idea that science is a collection of "true facts" that we have been discovered once and for all. The twentieth century has taught us that things are more complicated than this. We have realized that scientific knowledge keeps changing. Even what is probably the greatest and most successful of the scientific theories ever, Newton's theory, is, in a very precise sense, badly wrong. Newton's theory retains all its validity in certain domains and within certain approximations, of course: we use it everyday to build a bridge or design an airplane. But we have realized that the picture of the world offered by Newton's theory is partial. It does not allow us to understand the world more at large. A theory is not expected to be "definitely true", even when it is well verified by experiments. Today, scientists are deeply aware of this provisional character scientific knowledge (not all of them, unfortunately some always think that their last paper will be the Final Theory of Everything, sometimes even before any experimental confirmation!).

Science is not credible because it is absolutely true. But because on a large number of problems, it is the best answer we have found so far.

It is precisely the fact that scientific knowledge changes, which makes scientific knowledge so strong. Science is based on doubt, and this is the opposite of most of non-scientific thinking. It is doubt that makes our knowledge advance, because what blocks us from understanding, most of the time, are wrong ideas that we hold.

... Science is the result of the opposite attitude. Questioning encrusted assumptions, be ready to see the world with new eyes. Knowing that what we know might be incorrect. Be open to change.

This does not mean that we can never know anything. To the contrary, science is the process itself through which we can ameliorate our understanding of the world, but study, attempts, and, especially, by dialog. Rational thinking is the idea that if we respect points of view different from ours, new ideas proposed, and different opinions, then we can discuss these different opinions, analyze them, criticize them, make them clash, until clarity and agreement is reached. What is very remarkable is that it may take time, but science does lead to agreement. There are no discussion anymore on whether the Earth is the centre of the universe or not. It has been a big discussion, now it is solved. The key is critical discussion of ideas, facts, theories and experiments. At the end, one way of thinking, one theory emerges as the best one. It will not be the final theory of the world, but it will be the best description of the world we can give, at the present stage of knowledge. Be open to continuous change is not the weakness of science: it is its strength." (Rovelli 2006: 41-42; page numbers as per the English translated, e-book version).

The quantum philosophy in modern sciences, that underlies the theory of space and time to be discussed now, developed over several decades from the late 19th to the early decades of the 20th century, is the fulcrum of the scientific breakthroughs and research findings in various fields of physical and the fundamental-theoretical sciences, and, therefore, cannot be attributed to a single scientist or a concept. It was the time when the scientific world was at one of its most exciting

stages. Also, graduating from a stage only a couple of decades back, when it was nearly assumed that all the mysteries of the laws of the physical world has been discovered and resolved. Then, the quantum revolution happened and took the world on a whole new journey, which has changed the world, forever, in immeasurable and unimaginable ways, and yet, is far from complete.

The two great scientific revolutions of the 20th century, the *quantum mechanics* and the *general relativity* profoundly changed the ways we used to look at the physical world. The quantum mechanics, which describes the microscopic and the subatomic phenomenon, radically changed our understating of the *matter*. The general relativity theory explaining the force of *gravity*, thus also relates to the large planetary bodies like the earth, brought about the revolutionary change in our ways of looking at space and time. In scientific domain, both these theories are extremely well established and many of our contemporary technological advancements have their basis in these two theoretical developments.

In reality, however, both these theories describe the world very differently. The quantum mechanics use the notions of space and time we inherited since Newton, which are contradicted by Einstein's general relativity. On the other hand, the older notions on matter and energy, used by the general relativity are contradicted by the quantum mechanics. The inability, so far, to merge these two, apparently incompatible theories, into a single consistent theoretical framework, has given rise to a situation where the general description of the physical world becomes internally inconsistent and fragmentary.

At the end of 19th century, Maxwell and Faraday brought a new ingredient, called the electromagnetic field, produced by the electric and the magnetic forces. A collection of lines originating at positive electrical charges, ending into negative electrical charges, and occupying space everywhere, as described by Faraday, the electromagnetic field passes through space. And even in the absence of charges, these "Faraday lines," form close curve in space called "loops." While Maxwell developed the equation governing the Faraday lines, he came to realize that what we actually see through light are not the objects but the electromagnetic field and the fast the fast undulatory movement of those Faraday lines. Their discovery led to the existence of field, in addition to the particles, though the Newtonian vision of space didn't suffer any major dent.

In 1915, along-with Einstein's discovery of the gravitational field, much similar to the Faraday lines of the electromagnetic field, came an understanding that the Newtonian *table-space* and the *gravitational field* are one and the same. Consequently, the notion of the world made of field and particle in space, changed to the one made of particles and fields, and that is all. What exists now is "fields on fields" and not "field's in space." Now theoretically we no longer have absolute location of things in space, but relative locations. After the experimental confirmation of gravitational field, in the recent decades, a number of practical applications in diverse areas are emerging. The Global Positioning System (the GPS) works, only, by taking into account the general theory of relativity.

Quantum mechanics tells two things on our ways of thinking about the matter: First, it is not only physical quantities or things that have a granular or "quantized" structure, but even electromagnetic radiations/waves or atomic energy are made of "quanta," or, are granular, and a particular value of each of these units level energy can be obtained in theory. And, second, the law concerning the motion or position in question is not deterministic but probabilistic. A particle, for example, is described not by its position but by the probability of any position, in a "cloud" of probability, in which it may be found. Even though quantum mechanics relates to the world at the small scale, as granular and non-deterministic, its applications are found in many modern day technologies like computer's hardware.

Loop Quantum Gravity (LQG): A Theory of Relational Spatiality

Rovelli's describes the problems associated with the attempts of combining these two seemingly incompatible theories in the following manner:

"If one now combines the basic ideas of general relativity and quantum mechanics, it follows immediately that since space is a field (the gravitational field) space must have a granular structure, as does the electromagnetic field. The quanta of the electromagnetic field are the photons. The quanta of the gravitational field must be "grains of space", because the gravitational field is the physical space. The dynamics of these grains must be probabilistic. Hence space (i.e. the gravitational field) must be described as "clouds of probability of grains of space"." (Rovelli 2006:15-16, page numbers from the e-book version)

Rovelli's attempt to determine what this probability cloud of "grain of spacetime" would look like, took him a ring or a *loop* like curved space (*Figure:3*). These loops seemed to suggest the "single Faraday lines of the gravitational field. They are *individual* lines, instead of a *continuous*

of Faraday lines, as for the classical fields, because this is quantum mechanics, where continuous is replaced by a discrete entities. But since the gravitational field is space, we must not think that they are loops immersed in space: they themselves are space! It is space itself which is constituted by these loops. This was what the equations were telling us....a new idea was born, which would lead to the theory today called *loop quantum gravity*, and which is considered one of the ways to solve the problem of quantum gravity." (ibid:19-20)

On further investigation, Rovelli and his collaborators became interested in a particular physical quantity: the volume.

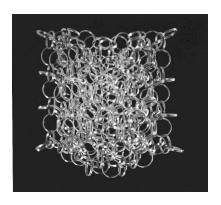
"The result of the calculation turned out to be that volume really is not a continuous variable; it is discrete, and hence that space is constituted of quanta of volume, or quanta of space. But this is not all: we also realized that these quanta of volume resided exactly on the intersections of the loops. In other words, the volume is composed of quanta, of finite grains of space, and the intersections of the loops represent precisely these grains of space. They are the grains of space we were looking for from the start.

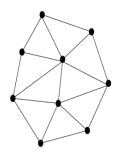
These results changed our initial picture of quantum space somewhat. The intersection points became more important than the lines themselves: we no longer spoke of a collection of loops intersecting at points, but rather of a collection of points interconnected by lines, that is of a network. As these networks are mathematically characterized by certain half-integer numbers, or spins, associated to the lines, the networks were also called "spin networks. In fact, "spin network" was the name that Roger Penrose had assigned to this peculiar kind of networks, that he had earlier studied motivated solely by his intuition about quantum space.

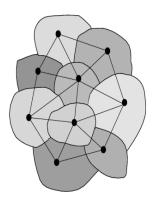
The image resulting from quantum space is remarkable: the points of a spin network are the quanta of space. The lines connecting the points represent the spatial relationships. That is, they express which grain is near to which other grain." (ibid:25-27).

This is illustrated in *Figure: 4*, below. Rovelli, further, notes:

"...The theory therefore predicts with precision a set of numbers representing the possible results of very precise area and volume measurements. Unfortunately, with today's technology one cannot yet verify these predictions. But it is very important that a theory gives precise predictions and, at least in principle, is verifiable. If it doesn't, it is not yet a real scientific theory. To this day, loop theory is the only theory of quantum gravity that furnishes an unambiguous and articulated set of predictions that are in principle verifiable." (ibid).







Left: Image with dark background (*Figure 3*.): The first image of space suggested initially by loop theory (to be modified). At the smallest scale space is a collection of small ringlets.

Right: Set of images with white background (*Figure 4.*): A"spin network" (left) is formed of quantum Faraday lines of the gravitational field; the intersection points, indicated by black dots, are the "nodes" of the network. They represent "grains of space" (right). The segments of the network represent the neighbourhood relations between the grains of space. (*Source/s*: Rovelli 2006).

The meaning of "time" meets similar fate to that of "space" in quantum gravity. Just as "space" does not exist, except the gravitational fields made of probability of elementary quanta, connected into networks, the "time" also does not exist. If time and space are bound as single entity and space does not exist, time, too, cease to exist. By implication, a need emerges to begin to think of the world in non-temporal terms. Newtonian scheme, in this precise sense, does not seem to work. The world is not made of only the macroscopic phenomenon that the Newtonian framework deals with. It might be difficult to abandon the Newtonian scheme altogether, but Rovelli insist on the need to develop a new vision for space-time, because the prevalent vision "does not function any more. In particular the idea of a time "t" that flows on its own, and with respect to which the rest evolves, is no longer an effective idea. The world cannot be described by equations of evolution in the time "t"." (ibid: 33).

The Processual Thinking to the Relational, Quantum Gravity Spatial Approach

It is very important to put forth a plausible understanding that explains why among several possible candidates on the quantum theory of space, it is Rovelli's loop quantum gravity approach, that appears to be a sound proposition for advancing the processual mode of thinking with respect to the globalizing, neoliberal spatial developments unfolding at the planetary scale.

It needs to be recognized that Rovelli's interpretation of the quantum gravity theory as relational is grounded primarily in the epistemological terms, whereby, unlike the *sustantivalists* or the

relativists, it does not make any special or particular reference to the ontology of the space or time. Moreover, it completely negates the existence of the conceptual apparatuses of the space and time or the space-time, as is generally understood in the absolute or relative terms. At the same time, Rovelli's formulation remains attached to the Einstein's theory of general relativity, in the sense it is called as "general," that means, though born as the theory of the force of gravity, it changed the notion of space, in consequence to that our wholesome understanding of the physical world also changed. In other words, by pushing the understanding of relative-space further with a new element of the relative-time or non-time, that we get a new notion of relational-field, derived independently of the notion of absolute time (unlike the Einstein's relativity theory).

Invariably, therefore, it can be assumed from the above propositions, that Rovelli's approach allows for reimagining the ontological coordinates of the macro-level relational fields of interaction among bodies, that may be *processually* extrapolated form the micro-level understanding of the networks of fields of quantum (granular)-interactions. The focus area, in this way, would not be the world of things or the *being*, but the world of the networked relations and interactions, the *becoming-being*.

However, a caution is to be made here, with regards to the understanding of the quantum gravity theories. These are not only experimentally unproven, but are also greatly counter-intuitive. That is, the experiencing of the quantum phenomenon does not naturally or automatically add up to the macro-level experiencing of everyday, real world. Though, what it does allow for, is to challenge the notion of space-time, not only in the manner the several, already proven, real-world applications of the quantum mechanics and the general theory of relativity, respectively, are doing since few decades, but also, to try to reconstruct, with the mobilization of these desperate, fundamental physical sciences theories, the newer ways of spatial imagining, that may hold better or novel explanatory potentials of the technology and information oriented-physical-social world.

The New Spatial Imagining and the Quantum Mode of the Neoliberal Spatial Convergence

What could be the new spatial imagining? Or, what are we looking for by the term "new spatial imagining"? In terms of the quantum theoretical understanding, one thing is clear. That we are

not looking for an absolute reality, but potentialities, that might actualize in the forms of spatial physical constructions. However, any sociological representations of the contemporary advanced capitalist spatiality need to see through or capture the ensemble of the mental, physical and the social relations and interactions expressed either through force-fields or networks. Interactions among actors, bodies and things constantly reconfigure the networks/field-relations. As a result the new ones emerge while the old ones may dissipate, dissolve or recede. It is in relation to these spatio-temporal power-ensembles that eventually any capitalist socio-spatial form would manifestly gravitate, even as, theoretically, it keeps gravitating incessantly through the relational-field interactions. Also, it is important to emphasize here, that in the light of Rovelli's framework, we no longer tend to think in terms of space or space-time. Instead, we have field/s, that doesn't hold things inscribed or inserted into it. Simultaneously, we need to figure out, how we may compensate or account for the loss of the prevalent notion of time. We may now think of time not only as an external, linear past-present-future terms, or the relative here and now terms, but in a circular, self-referencing before-after terms. These may be seen as the different "objective" notions of time, shared or experienced subjectively. Besides, one may think of the time as temporalities of subjective experiences, as Lefebvre might have suggested. And ultimately, time is something that does not exist. Envisioning time, thus, in multiple, or even, in non-existent ways, is what differentiates the relational-space to the relative-space, in a fundamental, unsettling ways.

This new spatial imagining, based on the various modes in which the quantum information are processed, framed and structured, is not an unfamiliar terrain in social theory, particularly in the efforts of the thinkers who worked to go beyond the objective/subjective division, and, instead, developed a line of thinking away from the structural, foundational interpretations. For example, Gilles Deleuze's concept of a manifold or multiplicity also translates into the understanding of space and time in the non-foundational ways, through which different approaches to spatial thinking such as intensive/extensive space, real/virtual space, nomadic space, *becoming* space, to name a few, can be developed. Daniel W. Smith (2013), in *review* of James Williams' (2011) book, "Gilles Deleuze's Philosophy of Time: A Critical Introduction and Guide", notes:

"In effect, multiplicity replaces the old metaphysical concept of substance. Just as Riemann created a non-Euclidean concept of space as an n-dimensional manifold with no pre-given metric, Deleuze formulates a non-chronological concept of time as an n-dimensional and non-metrical

manifold defined by "a formal network of processes" that are "interacting with one another". As the pure form of change, this manifold is characterized by its infinite variability, or chaos" (Smith, Daniel W., 2013 In Review 'Gilles Deleuze's Philosophy of Time').

The above quoted notion of a processual thinking that Deleuze used to advance his broad speculative frameworks of spatiality and temporality relates to another field-perspective on quantum theory, known as, the *quantum field theory*. *Randomness* is one of the key characteristics of the quantum theory, alongside other characteristics such as non-determinacy and probability. Different approaches to information, data and experimentations using quantum theories privilege different aspects these characteristics. In Deleuze, it the *chaos* aspect of *randomness*, that is central to his idea of manifolds or multiplicity, whereas in Rovelli, it is the *entropy* aspect. The *entropy* is, broadly, characterized as the *degree of disorder* in relation to a system. This degree of disorder or entropy, unlike, chaos- "characterized less by the absence of determinations than by the infinite speed with which they take shape and vanish", is determined against a range between "high" or "low".

Based on this comparison between two different aspects- chaos and entropy, relating the same phenomenon- *randomness*, in the quantum theory, I believe a middle ground, between the veneration of foundationalism and non-foundationalism in the study of urban spaces, emerge that can be developed for framing the unfolding of the neoliberal spatiality at the planetary scale or system, mainly but not solely driven by the technology and information capitalism. However, translating these evolving physical sciences into a theory of the socio-spatial should be viewed only broadly, as suggestive or speculative.

Here, I would also like to make reference to the two seemingly contested views on the actually existing globalization in which the role of technological component vis-à-vis the social and economic components are debated for their causal relations or primacy over the other (Marcuse 2018:68). Peter Marcuse, in his more closer, political economy-attuned approach, unlike the "post-Marxist" Manuel Castells, thinks that, the "one crucial fundamental aspect" that the character of contemporary cities share: "They are all phenomenon of Capitalist City" (ibid:72). Peter Marcuse (2002), in a previous book chapter titled, "Depoliticizing Globalization: From Neo-Marxism to the Network Society of Manuel Castells," noted that

"Castells has clearly abjured his more radical past analysis as inappropriate to the changing configuration of events since the 1960s. The question posed here is whether, in this process of open learning and adjustment of perspective that Castells has undertaken, an implicit process of depoliticization has occurred, so that the conclusions to be drawn from his present stance constitute a retreat from those that might be drawn from a hard analysis of the actual changing developments he is studying." (Marcuse 2002:135).

Manuel Castells, on the other hand, after his initial stint with Marxism in urban studies, proceeded on a more empirically grounded, networked approach that seek greater awareness of how micro-electronics based technological revolution in communication has shaped the landscapes of capitalist geographies, as networked spaces, organized not only along vertical hierarchical lines, as traditionally understood, but also, along the horizontal lines of "spaces of flows" (Castells 1983:314-315; 1989:126-171; 1996; 2004:3-45). The point, here, is not to debate the degree of the efficacies of analyses put forth by Marcuse and Castells, but to elevate the discussion at another level altogether. And it is through this elevation, I feel, that the realm of urban studies, also, the socio-spatial studies, gets placed in the quantum framework of nondeterminacy. That, in the present the alignment of capital and its progressive concentrations, along the lines in which communication and network technologies differentially undergird the physical landscapes and the mindscapes, is so rapid, widespread and mutually interdependent that any clear distinction with regards to the primacy of the role of the modern technology over the social and economic or vice-versa, in my views, is almost untenable. Moreover, in this regards, what may appear plausible in the case of the US may not apply the same ways to China or Japan! This, then, provides the most suitable background or macro-social context, the quantum mode of neoliberal spatial convergence, in which the relational space theory of Carlo Rovelli can make an inroad into the socio-spatial studies and urban sociology.

Further, unlike in Deleuze, where the source of "processing into the social" is somewhat subsumed in the spatial, in Rovellian *processual* formulation the interplay of the socio (thus, also temporal, including past, present and future) and the spatial in not a forgone conclusion. Deleuze draws a synthesis of the past (*memory*), present (*habit*) and future (the *new*) on the basis of a concept that only passively relates to the social. Whereas Rovelli identifies "a structural similarity between agency and memory" (Rovelli 2020:1); and, therefore, equip us with one of the key methodological and conceptual tools of processual, socio-spatial analysis, known as *the agency*.

"I notice a structural similarity between agency and memory, that allows us to model agency, trace its time asymmetry to thermodynamical irreversibility, and identify the source of the information generated by agency in the growth of entropy. Agency is therefore a physical mechanism that transforms low entropy into information. This may be the general mechanism at the source of the whole information on which biology builds. (ibid)

Low entropy is a form of information because a lower entropy state amounts to a more selective information about the microphysics (a zero entropy macrostate is a state that has maximal information about the microphysics: the microstate is unique). Memory and agency utilise the information stored in low entropy and translate it into information readable in the macroscopic world. In fact, they both can be viewed as mechanisms that generate macroscopic information.

Macroscopic information, stored in human memory, in DNA molecules, in computer messages, in books, in narratives, in software codes, in records of any form, must have been ultimately produced by physical mechanisms. Traces of the past and decisions by agents —possibly in turn themselves affected by memories of the past— are major sources of everything we call information. In both cases, information is created, in a statistically favoured manner, at the expenses of low entropy, in accordance with the second principle. In a fully thermalised situation, there is no space for memories or for agents.

The entire informational universe formed by the biosphere and by culture can therefore perhaps be viewed, from this perspective, as formed by information produced by a mechanism of the form described here." (ibid:6).

The above quote suggests that together with "memory" and "agency" there is a third element, the "traces", that actively and in relation with each other transform the low entropy- a form of microlevel information, into information readable in the macroscopic world. Notwithstanding the contestations over the nature of "traces" (see, also 'Traces of Things Past', by Heil, John. 1978), here, the traces may be seen as both independent as well as interrelated concept, together and alongside memory and agency. The growing digital foot-prints or digital traces are new fascinating dimensions of the previously existed physical and the mental dimensions. The crater of the surface of the moon is one of the important examples of how traces can be comprehended as distinct from memory and agency.

Artifacts, Layers, Traces, and Trends: An Evolving Neighborhood-Framework of Neoliberal Spatiality

In an open course module/assignments of the Massachusetts Institute of Technology (MIT), named as, "Artifacts, Layers, Traces and Trends", the online collections of studies/assignments include some interesting ways of understanding city-changes. The assignments are mainly to trace the changes on the identified sites over time using old maps, plans, prints and photographs.

The objective is, "to find traces of these changes present in the current environment and to interpret their significance" ("The Once and Future City", Spring 2018, Accessed: http://web.mit.edu/thecity/). An assignment, under this course, available online, on the North End, the oldest neighborhood of Boston, Massachusetts, United States, a continuously inhabited residential community since 1630s, observed:

"All in all, the North end is a very rich neighborhood in both its history and the traces of it that it contains today, as well as the many ancient buildings and foundations that serve as artifacts and as perfect examples of general trends that are constant in the site. Today, the North End is the result of many years of changes but also of constant general trends in the path that the neighborhood has taken." (North End: Artifacts, Layers, Traces and Trends, web.mit.edu).

Here, one can observe that the act of "tracing the traces" and the "traces" are important and fascinating aspects of studying changes in the cities. Under the liberal market-democracies, socio-spatial changes leave a great amount of traces that can be found as they evolve with time, including in the evolution of the forms in many of the city-features, be it the urban and suburban transports and utility expansions, the inner-city revitalizations, the blocks' and layouts' improvements, gentrification and the neighborhoods changes, the developments of business districts or other social and physical infrastructures. For example, another assignment from the MIT course that studied the Bulfinch Triangle, a historic district located in the West End of Boston, Massachusetts, notes:

"An artifact is defined as anything made by human workmanship. This includes both physical objects such as buildings, as well as abstract concepts such as street names. Artifacts change or disappear over the course of time. Oftentimes, we do not find artifacts themselves, but rather the traces they leave behind. A trace is a visible mark that serves as evidence of the former existence of a particular artifact. A series of artifacts and traces from the same time period is known as a layer. Layers can tell us a great deal about the age of a site and how much that site has changed over the course of history. ("The Bulfinch Triangle", web.mit.edu).

The above quote succinctly explains the terms like artifacts, layers and traces and their mutual, conceptual relations. These physical (and also mental and social-) traces (or memories), or the combination thereof, can be traced back to the planning documents, archives, study reports, new reports and many other sources and avenues for linking the past, present and the future. In this scheme of study, both history and memory, therefore, come together alive, into an active interplay which can be used for the construction and the reconstruction of the recent past in an urban or a city-milieu. These sorts of open, dialogical, conversational method not only helps to

use the "facts" or "evidences" much more creatively but also allow to contest and expose the official or the neo-liberal, market narratives competing for monopoly on the vision of the city. These contestations and *exposé* are the proof of the agency of the various segments of the population- the researches, the informants, the inhabitants, the social groups, the citizen, the officials, the professionals, the planners, the politicians and so on, *in-action*, for making impact of the physical, social and the mental landscapes they inhabit or straddle through. This active engagement with the people's past and the present, the constitutive of the social, is what brings a distinct disciplinary perspective and value to many of the works of the urban historians and critics.

In this dissertation, I shall be using insights from this open, conversational method, in combination with insights from urban historian, Dolores Hayden (1995), as in her book, "The Power of Place: Urban Landscapes as Public History", to write an urban history of my field site, the *Digha* neighborhoods, also an active Gangetic port till 1970s, on the West End of Patna City, and make this urban neighborhood landscape vivid. The heart of Hayden's the "Power of Place" project, which she and colleagues conducted at University of California, Los Angeles, for several years in the 1980s and 1990s, was,

"to make vivid places in the urban landscape that have been underrepresented or misrepresented by planners, preservationists, and many academic historians, landscapes important to working class communities, women, racial or ethnic groups. Working in response to historic preservation practice at the time, the Power of Place project highlighted how the histories of communities can be and should be part of the urban landscape, even if the material connections to that place are gone." (Nunnally 2020:84).

Building further on Hayden's foundational insights, I consider this undertaking as a methodological requisite in the development of the urban sociological critique of the capitalist, neoliberal urban/city growth.

Chapter 3. The Urban Implosion-Explosion and the Destruction of the Urban Commons: Reflections from the Patna Metropolitan Region.

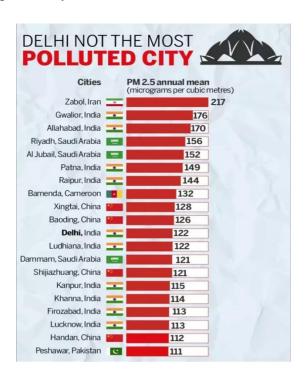
In the course of my first field-visit to Patna city, first thing that I encountered was the intolerable levels of pollution of all kinds, air, noise, garbage and waste, water-logging, bad-smelling, nauseating and overflowing drainages, traffic-congestions and overcrowding. Every single problem endemic to the neo-liberalizing cities in the Global South, and more so in India, has assumed a dangerous level in Patna, giving an impression that they have not only become insurmountable but are also in a perpetual competitive bidding for the top-slot. Consider this. Patna has consistently figured in various surveys and study reports by national, international, or non-governmental agencies on the list of top 20 or 25 polluted cities in the World. While these lists includes several other Indian and South Asian cities, Patna figures prominently in all of these, each time things staying as usual or getting worse!

A study published in 2005, titled as "Growth of Patna and its Environmental Impact", notes that, "Amongst the worst problems faced by the city today is traffic congestion, air pollution, inadequate or non-existent sewers, waste disposal systems, water pollution and housing shortages. The problem today is of deteriorating urban health" (Sahay 2005:47). Another study also made the similar points that, "this trend of population growth has created many problems in the city. Patna of today marks a complete break from its past. It has been labeled as dirtiest, most congested water-logged, stinking and garbage city of India. The city is hardpressed to meet the increasing demand for housing, transport, water supply, sanitation, and other services" (Singh 2005:120).

The Toxicity of the Air and Environment

A 2016 news report, based on the World Health Organization (WHO) urban air quality database put-up the ranking of the World's most polluted cities (*Figure: 5*). Patna figured at sixth

position. (Nandi, Jayashree. 'Delhi no more the most polluted city in the world, says WHO report', May 12. 2016).



Rank	City	2018*	
1	Gurugram	135.8	Charles .
2	Ghaziabad	135.2	
3	Faislabad, Pakistan	130.4	
4	Faridabad	129.1	
5	Bhiwadi	125.4	
6	Noida	123.6	-
7	Patna	119.7	1
В	Hotan, China	116	-
9	Lucknow	115.7	
0	Lahore, Pakistan	114.9	
1	Delhi	113.5	
12	Jodhpur	113.4	
13	Muzaffarpur	110.3	
14	Varanasi	105.3	T DESCRIPTION
15	Moradabad	104.9	
16	Agra	104.8	n ibn
7	Dhaka, Bangladesh	97.1	
18	Gaya	96.6	
19	Kashgar, China	95.7	
20	Jind	91.6	

Left: (*Figure 5.*) The 2016 WHO report on World's most polluted cities (*Source*: The Times of India, May 12, 2016); Right: (*Figure 6.*) A 2018 ranking of top 20 polluted cities in the world, compiled by IQAir Group and Greenpeace (*Source*: The Hindu March 05, 2019).

Two years later also, the 2018 report of the World Health Organization (WHO) ranked Patna among World's top 10 polluted cities. An English daily citing the WHO 2018 report, notes that "Patna is the fifth most polluted city in the world in term of PM 2.5 concentration." (Hassan, Ayesha. 'Patna 5th, Gaya 4th most polluted: WHO', The Times of India, May 3, 2018).

It also mentioned that, "The air quality in Patna has deteriorated rapidly over the past few years. ... Suspended road dust particles, vehicular emission and smoke billowing out of brick kilns have been linked to higher level of respiratory suspended particulate matter (PM 10) in Patna." (ibid.).

In March 2019, another leading English Daily came up with a news headline: "Fifteen of the 20 most polluted cities in the world are in India" (*Figure: 6*), that was based on the ranking compiled by IQAir Group-Greenpeace. In this list of top polluted cities, in terms of the air

quality, Patna occupied 7th position. (Koshy, J. 'Fifteen of the 20 most polluted cities in the world are in India', The Hindu, March 05, 2019).

The *Jugaad* Governance

Here, one can go on citing dozens of these reports and surveys, and also their subsequent publications and reporting in print/electronic/news media for their wider circulation and public dissemination. However, before moving to my next discussion, I would like to re-produce a news report from a leading English daily titled as, "Pollution check steps not implemented yet", published on November 6, 2019, in order to convey the feeling that the efforts to address the problems of the life-threatening and dangerous levels of air pollution in our cities are not only uninformative, piecemeal, insufficient, based on *Jugaad*-mindsets (meaning lack of proper expertise and tools) and lack a sense of urgency, but are also subjected to generalized state, bureaucratic and societal apathy and neglect.:

"PATNA: Chief minister Nitish Kumar issued a slew of directives on Monday to curb air pollution in Patna. TOI on Tuesday conducted a reality check on the implementation of various decisions taken by the government to curb air pollution, like prohibiting sale and use of kerosene in autorickshaws, covering construction sites and materials during transportation, ban on diesel generator sets and sprinkling of water on roads.

Sprinkling water on roads: Water was seen being sprinkled by Patna Municipal Corporation (PMC) tanker between Gandhi Chowk (Mahendru) and Tripolia on Ashok Rajapth. But it was not seen anywhere in the city, including Gandhi Maidan, Boring Road, Boring Canal Road, Bailey Road and Jagdeopath among others. PMC public relations officer SK Mishra said the civic body has only one water sprinkling machine. "We will sprinkle water on all major routes, including between Tripolia and Patna City, on Wednesday," he said.

Covering construction materials: Construction materials for private or government projects were seen being transported without any cover in several areas. Heaps of construction material were seen at Gandhi Maidan, Ashok Rajpath, Fraser Road and Exhibition Road. Road construction minister Nand Kishore Yadav told this newspaper over phone from Ranchi that construction firms have been instructed to sprinkle water near the ongoing projects and cover construction material while during transportation.

Diesel generator sets: Old diesel generator sets, which emit black smoke, were being used at several commercial and industrial sites, pump houses, flats and jugad gadi. According to Bihar State Pollution Control Board (BSPCB), diesel generator sets contribute around 5% to air pollution. Patna DM Kumar Ravi said instructions were issued to the officials concerned to prohibit the use of diesel generator sets. "The administration will launch awareness drive within a week against jugad gadi, sugar cane juice carts and commercial establishments using old and noisy generators sets. Action will be taken against the violators," he said.

Kerosene mixed with petrol: The sale of kerosene-mixed petrol to autorickshaws was seen unabated on Vidyapati Marg. Thick black smoke is released by autorickshaws using such fuel and aggravates air pollution. One of the sellers said: "Are you trying to shut our business?" Patna divisional commissioner Sanjay Kumar Agarwal said raids will be conducted this week on places where kerosene-mixed petrol is being sold to autorickshaw drivers. "Autorickshaws using such fuel will have to pay fine and their vehicles will be seized," he said.

Covering construction sites: Most of the construction sites in the city were not covered to prevent spread of dust particles. The cover, mostly a green net, prevents dust from spreading to nearby areas. After the CM's instructions in this regard, few builders started using the green cover. BSPCB chairman Ashok Ghosh said around 7% of the most harmful pollutants come from construction sites and 4% from brick kilns. "Instructions have been issued to brick kiln owners to use non-polluting technology," he said." (Rumi, Faryal. 'Pollution check steps not implemented yet', The Times of India, Nov 06, 2019).

The Free-to-roam, Open Spaces, the Regular addas

In the course of my field-visits to Patna, I meet some old-friends, whom I knew from my undergraduate-university days, who were either residing or working in Patna, and also made some new ones. We mostly used to meet at one particular market place, and, at a few instances, to some busy roadside residential neighborhoods, having the chances of getting a roadside tea-seller close-by. There are few coffee-shops and cafes in Patna, but the café culture is not as popular as the case in other big cities, or even, in smaller towns and hamlets in some parts of the Southern and Western India. The restaurants and food-joints in Patna did not appeal much to me, as they are visited by families, including the elderly and the children, in good numbers. Pubs and bars serving alcoholic beverages were closed few years back, as Patna is subjected to the Bihar-wide prohibition law that has prohibited and criminalized the sale and purchase of liquor and alcoholic beverages throughout the state jurisdiction. The ban announced in April 2016 by the state government, in the large parts, as is often mentioned in the public discourse by the supporters of prohibition, was the result of the severe opposition to the sale of alcohol by the overwhelming population amonh the women and the social activists. ('What led to an early liquor ban in Bihar? Why did it fail earlier?', India Today, April 06, 2016). The reasons for this popular demand, as stated in various news articles, were the growing problems of domestic violence, crime against the women and adverse impact on the children's education and the families' well-being in the state. The earlier prohibition announced by the Chief Minister Karpoori Thakur, in March 1979, didn't last long and was lifted soon after the new Chief Minister was sworn-in in April 1979. (ibid). However, this ban announced in 2016 is still in place, despite growing criticism of increased corruption and bootlegging, and also the loss of revenue worth more than INR 5000 crores.

Not that I am very fond of drinking, but the recreational and free/open socializing spaces for the youth, similar to the other Indian cities, keep shrinking as well as homogenized, and what persists through these transformations are, then, the pubs and bars, alongside with the movie theaters and shopping malls/centers/arcades. Other leisure spaces like the social or the literary clubs are generally by membership and reserved for a handful of elites.

Therefore, we used to meet generally in the evenings, as some of the friends used to drop-in straight from their offices and work-places, in an open, vehicle parking area of an upscale market-cum-office complex, popularly known as Maurya Lok Complex. As per the conventional imaginations of cities and urban landscapes, this Complex space, surrounded by several other office-buildings, markets and shopping outlets in close successions, sounds similar to what are known as the Central Business District (CBD) areas. This place is frequented by the range of people, as the Complex also houses several banks, government offices, the Patna Municipal Corporation's (PMC) office and other private work-spaces, besides shopping outlets and food joints. Above all, the street-foods and fast-foods-joints at this market-complex area are greater attractions for the city-dwellers and the visitors of all classes, and age groups, even if these food joints don't happen to be very healthy and hygienic.

This open, public parking area, surrounding a small, low-fenced park having a statue of Swami Vivekananda, besides the old, dilapidated Complex buildings, recently got some makeover, and improved lighting and upkeep by the Bihar Urban Infrastructure Development Corporation Limited (BUIDCo), at the behest of the Patna Municipal Corporation (PMC) that controls the Complex. This "revamp", a news report notes, was a result of judicial reprimand and intervention by the Patna High Court. (Anand, Anisha. 'Maurya Lok complex to be renovated soon', The Times of India, Jan 14, 2014).

In this entire narrative, it is interesting is to note, that the severe scarcity of open, safe socializing and "free-to-roam" spaces has come to a pass where the agencies of the elected governments are nearly handicapped in turning the situation around, and only a strong judicial intervention make some impact on the ground. A recent report (2016), of the Institute for Human Development,

New Delhi, also, highlighted the role of higher judiciary in lamenting the government bodies on the poor state of urban governance:

"However, the state of affairs in urban governance has not been satisfactory. The Patna High court has recently commented on the bias in governance and disappointing state of public services. It stated, "There is two type of Town: VVIP Area with all amenities and Facilities and Public area as Dustbin"(sic). It, further, added that the capital city of Bihar looks like a slum and this has direct impact on city economy.

Series of PILs were filed in the High court against the municipality in the last few years. Some strong judgments were passed and high court is now keeping a check on the corporation. Recent media reports show court intervention on the waste management problem and also they have put a check on illegal high-rise apartment constructions. In the course of a PIL, Patna Municipal Corporation had to submit its working condition to the court. Different instructions were given to the corporation for the improvement of the city by the court." (Tiwari, Rakesh & Nikita Sharma, 'Patna: City Profile', Institute for Human Development, New Delhi, 2016:14-15).

The Urban Green-cover and the Middle-class Environmentalism

In an interesting turn of events during my field-work, a news report, published and circulated widely, courted big controversy, that the Patna Zoo, officially called, the Sanjay Gandhi Biological Park, has bought soil for extending the pathways, from the land, allegedly, owned by the Environment and Forest minister of the Bihar state. (Singh, Rohit Kumar. 'Bihar: Lalu and sons face heat over an alleged Rs 90 lakh soil scam', India Today, April05, 2017).

The young minister happens to be the son of two former Chief Ministers of the state, as both parents, first the father and subsequently the mother, ruled the state for a decade and a half. Also that the Patna zoo, that comes directly under the minister's portfolio- the Bihar Forest department, circumvented the tender rules to facilitate this alleged misappropriation of power-position for wrongful, monetary gains. The soil in question was deemed as "surplus", as it originated from an ongoing construction works for a multi-storied shopping-mall complex on the Minister's land situated on a major arterial road on the Western edge of the Patna city.

The region, adjoining the nearby Danapur Cantonment and the Danapur town, that are, laying both sides on the Patna Canal, were zones of intense, multi-crops cultivation and allied agricultural activities. The Master Plan of the Patna Improvement Trust, 1962, also noted that,

"large tracts of land within the present municipal boundary of the City, as well as outside in its immediate vicinity, are under agricultural use. The total area under agricultural use within the proposed urban limits of Patna (that is up to the proposed National Bye-pass Road in the south and the Patna Canal in the west) works out to be 8,839 acres, *i.e.*, about 14 square miles. The

agricultural lands are mostly situated to the south of the Main Railway Line and are subject to inundation by the river Poonpoon. Some agricultural operations are also carried out on the western fringes of the New Capital area. In the Eastern Zone there are some pockets of agricultural lands north of the railway line surrounded by residential areas. All the agricultural lands in the Eastern Zone are utilized mainly for growing vegetables. Agricultural lands in the Central and the Western Zones of the City are mostly used to raise 'rabbi' and 'kharif' crops." (Master Plan, Patna Improvement Trust, 1962:VI/49).

In the last two decades, the intensified processes of urbanization has changed the entire landscape, so much so that, the boundaries that exists on the minds of the people or on the maps of the civil administrations between the Patna city and Danapur town, except for the municipal, revenue/tax and the police records, aren't of much practical consequences with respect to the everyday lives. The problems that are endemic to the Patna city, such as overcrowding, air and water pollution, loss of green-zones, overflowing waste-waters and sewages and heaps of garbage and plastic and other wastes lying all around the city, are also visible in the new urban and urbanizing spaces around Patna, including Danapur.

The above mentioned political family is at the helm of a political party, the Rashtriya Janata Dal (RJD), almost similar to a family enterprise, that also enjoys a sizable support base among the socially educationally backward electorates, and from late 1990s onwards, ruled the state for little less than a decade, till it was replaced by Nitish Kumar led government of the National Democratic Alliance (NDA) in November, 2005. The popular support base for the RJD is largely in the rural areas and the hinterlands.

Surely the contemporary political and the social processes, along with that of the preceding decades, have much to account for the nature of the actually existing neoliberal practices and mechanisms at work in Patna's socio-spatial transformations, which I will discuss little later in this chapter.

But, beyond the push and pull of the competitive politics among unequal social groups and classes and its impacts on local governance, the soil controversy is also reminiscence of the wider processes of change and transformation that are underway in the state of Bihar, and in the Eastern India. These processes related to the changing socio-spatial configurations concerning the relationship between the land and the people go further beyond the commodification of agricultural land and, subsequently, of water, and are at the core of the depletion and loss of the commons.

The Western and the Southern parts of India witnessed the beginning of similar changes in the preceding decades, and while these processes have intensified much across India after the neoliberal reforms and 'structural adjustments' of the early 1990s, the Eastern parts of the country, particularly in the Gangetic plains and the neighboring regions, began to feel the momentum of the change only in the last two decades, clearly, more so in the last decade. Amita Baviskar (2020), for example, has noted in the beginning of her book "Uncivil City: Ecology, Equity and the Commons in Delhi", that the question of the urban environment first struck her in the late 1990s, and also that the debates on the city-planning and governance, or, even the urban environmental campaigns, have little to do with ecology or justice. She also argues that, the terms of the discourse on the environment are "partial, particularistic and perverse" and the 'Bourgeois environmentalists' have seized upon the moment only to the effects that the city today is undeniably "unfair and unliveable".

The Patna-zoo soil controversy was debated mostly for its corruption angles, but hardly it occurred to the opinion-makers, that the environmentalism of the middle-class urbanites, in the name of preserving and sustaining the exclusivist and particularistic green-enclaves, the ridges and biodiversity park, the botanical gardens, imagined together as, the city lungs, have more insidious and narrow-minded dimensions that need systematic analyses that make a perfect adjustments with the general trends and processes of the loss of shared, urban commons and commodification of land, air and water. However, the point I want to press upon, in the course of this research, is far from suggesting that what is being touted as 'bourgeois environmentalism' is without any merits. In fact, urban farming, terrace farming/gardening, road-side plantations, urban parks and garden and patches of natural enclosures, and open-for-all, free-to-roam spaces even in this limited, exclusivist capacities, are some of the important residual remedies that must not be dispensed with. Moreover, they hold the seeds of discourse, only to be expanded at a much wider, generalized levels, through proper education and dissemination of information.

Together with the voluntary dimension, the limits of the 'bourgeois environmentalism' have also an involuntary dimension. While it is argued that the urban commons are important and need to be preserved and, that the communities have a vital role to play in the preservation, the power to decide on most of the aspects of the maintenance and the preservation rests in the domain of state. The middle classes are very much implicated in process by which the priorities of the state

are decided and fixed, and, therefore, it is in the realm of participatory and the democratic politics, much beyond the rigid mandates of the electoral politics, that the right policies and the alternative resource mobilization can be generated. This involuntary nature of the 'bourgeois environmentalism' calls for more critical approach to the study of the state when it comes to the preservation of the urban commons, as the most of the decisions are taken to favor the propertied and the leisure classes at the expense of the lower and the weaker masses. It also calls for a critical gaze on the role of religion and gender entering and combining the environmentalism discourse, in which the culture and consumption create a mix of ideology, i.e., a culture of consumption, geared towards segregation and exclusion, manifested through the generalized acceptance for the "enclaved gaze", "theme parks", "Dubaisation", "club class", "heritage city" and last but not the least, "insulated" gated habitats. (Brosius 2010).

The Rain and the Flood

Before proceeding to the more technical, abstract discussions over the theoretical conceptual apparatuses that guide our investigations of the urban and the city, let's ponder upon an urban problem that is too well received in the visual and print media for its inherent optics and visual, dramatic effects, i.e., the urban floods. Cities after cities are now struggling with the seasonal and the recurrent problems of flooding of the urban areas after heavy showers. It is now regularly observed that, incessant rains for only few hours or a day are enough to bring the city infrastructures, particularly the traffic and the vehicular movements, to the halt. Water-logged roads bring entire traffic movements to snails-pace or complete halt, causing distress, accidents and economic losses. The sewerage and drainage systems lay bare their incapacities to handle excess waters and one can find them bursting all around the cities, including in the new urban spaces, due to 'excess' rains. The electricity transmission and distribution infrastructures face severe risks of damage and, in turn, also pose threat to human and animal lives.

The experts and the local administration call this, more often than not, 'flash-floods', meaning far in-excess down-pouring than what are deemed as 'normal', and, therefore, manageable. As a consequence, directing all blames onto the rain-god. Of course, there are some routine exchanges of barbs over fixing the responsibilities, when every department makes forceful case in defense, and each time some new or repeat prescriptions are suggested, but changes on the ground bear

little positive effects that may effectively reduce the chances of floods in the future. The parts of a news report (Oct 01, 2019), published on Patna-floods of October 2019 reads:

"Patna has been under several feet of water since September 28 following heavy rains and the rising water table in the Ganga.

... Patna is under water because all the exit points are flooded and the nullahs are choked. ... Posh areas such as Patliputra Colony, Bailey Road, and Rajendra Nagar, where the city's high and mighty live, have also been badly hit.

"What worries me is that diseases would strike now. Even before the flood, cases of dengue were rampant in the city. Now God knows what will strike us," said V.D. Tripathi, a resident of Patel Nagar in Patna. His ground floor house has been knee-deep in water since September 29.

Hospitals are inundated and, with garbage strewn all around, have literally become death zones." (Tripathi, Purnima S., 'Patna reels under floods', The Hindu, October 01, 2019).

If the above discussions, by any account, cursory or tangential, give an impression that the urban world might be evolving as a much tolerant, calmer, easy-going society, and, therefore, accepting whatever coming in its ways without making much of a fuss, it's totally incorrect reading. Instead, the various forms of traditional and emerging urban crimes and violence, and substance and drug abuses are quite prevalent. The weaker sections, the poor, the homeless, the destitute, the women and the third-genders are subjects to systemic exploitations and brutalities, to which data from several agencies, the governmental or non-governmental, clearly and periodically points out. Official, government data relating to the crimes in the cities, however, didn't speak for itself, and numerical figures can easily contradict the perception of security and safety. I will ponder upon this perception-data mismatch at more length, little later in the discussion.

The moot-point, here, is the nature of the civic, individual as well as collective, response to the urban problems and to the intolerable conditions of existence. Why are they so weak? Do we lack proper understanding of the local and the extra-local processes impinging on our sociospatial configurations that might have implications for our quests for reforms, improvements and changes in the urban conditions?

The Urbs and the Civitas

On the nature of impacts of modern urban planning on the organicity of the relation between the space (the urbs) and the citizens/persons with proper civic attitudes (the civitas), Maciocco and Tagliagambe (2009) made some sharp remarks that read as:

"The "therapeutic illusion of space", which traditionally characterised the urban planning discipline, can be considered to correspond to the formula according to which "the improvement of the *urbs* determines improvement of the *civitas*", a formula that in a certain sense subordinates actions on the second to actions on the first. But the *urbs* has deteriorated, perhaps precisely because of this subordinate role the urban planners have attributed to the *civitas*, tipping the balance towards the *urbs* and ultimately favouring the progressive loss of their mutual relations.

... The urban event dismantles the ancient solidarity between *urbs* and *civitas*. Interaction between individuals has now reached the point of being demultiplied and delocalised at the same time. It seems as though belonging to communities with different interests is no longer founded either on proximity or on local demographic density.

Transport and telecommunications involve us in more and more numerous, diverse relations, as members of collectivities that are abstract or the spatial installations of which no longer coincide or present stability over time." (Maciocco and Tagliagambe 2009:1-2)

The above quote clearly articulates, if one may call it, the 'negative effects' of the prevalent expert-knowledge interventions in the urban spheres on the mutual, progressive roles of the *civitas*, to an extent that the *civitas* itself appear to be losing its full expressive potentials. And, therefore, now the question is, how this observation may help us in reorienting our priorities among various the elements and the premises deployed in the socio-spatial theoretical analyses across different regions and economies?

Maciocco and Tagliagambe's discussions, further, evolve into somewhat different trajectories than in ways I want to proceed, but only to converge at the later respective stages, when the discussions open up to the contested visions of the globalization and its specific socio-spatial manifestations and articulations, and finally to situate the 'city' and the 'civitas' in the broader scheme of theoretical frameworks. But for the immediate purpose, what's more important is their interrogation of the roles of the 'space' and the 'place' for the urban planning discipline that, as a consequence, calls for scrutinizing both the theories and the practices.

The above discussions, now, points at a paradoxical situation in the study of the cities and the urban and this paradox rightly confirms to what Maciocco and Tagliagambe termed as "the therapeutic illusion of the space", and that, this 'illusion' is not restricted to the urban planning discipline but has in its ambit what we call as, 'urban theory'. Before we discuss, what gave rise to this 'illusion', let us understand the paradox first.

On the one hand, the urban theory, in its course of development through successive 'turns' and 'phases', spatialized the forms and the processes of capitalist expansion, initially articulated and

contested in the cities, in which, the later functioned both the site and the expression, and then, went on incorporating the regions and geographies that were lying at the "outside". The later developments in urban theory, almost to the tune of an 'operative system', divorced the cityforms from its structural limitations, thereby made the generic expressions constitutive of its unitary, granular physical-spatial attributes though concepts like 'place' or 'locale' increasingly look like a liability or an outlier to be 'fixed' and not as analytical tools to be 'sharpened' or 'refined'. Whereas, on the other hand, a range of studies and approaches, that we collectively refer to as the study of the 'uneven capitalist development', that investigated the crystallizations of the diverse socio-spatial patterns through successive phases in the history of capitalist expansions across different geographical and climatic regions, came to emphasize the contextual, variegated, fragmented and uneven nature of the spatial expressions of urban conditions, as they were also, simultaneously, understood to be dialectically contested and hierarchically structured. (On capitalism and fragmentation, See, Harvey 1992). As a consequence, the generic concepts and categories to articulate the various manifest or imagined spatial conditions in relation with the individuals or the communities inhabiting or navigating them- not only the expansive, totalizing and encompassing ones but also the basic, unitary, and granular ones, remain, somewhat, uncritically posited across the contemporary theoretical discussions on the city and the urban.

The uncritical usages of the granular, unitary, base-line categories like 'place' or 'locale/local', unlike their more broader-oppositional, expansive, encompassing and totalizing counterparts like 'region' or 'territory', in the field of theory have, for long, been detrimental to our understanding of 'space', to the effect that, our theoretical and practical approaches to the realities of our lives as experienced on the ground, are mired/impaired with 'illusory' effects. And yet, we consider our theories as genuinely 'critical'!

Extending these granular, foundational categories of imagining socio-temporal spaces to the approach of urban analysis that is said to be founded as relational and/or dialectical, and thereby, setting in them a sense of dynamics that appears, or claims, to shake their rigid ontological fixations, though might help in spatialising the trajectories of neo-liberal capitalist expansions and growth, but, do not improve our theoretical-foundational understanding of the city-space, on the contrary, act as an epistemological double-bind. Right from the beginning of the spatial/town

planning and the city-studies from the late 19th and early 20th centuries up to its present-day interdisciplinary, relational, dialectical, polymorphic renditions manifested as extended, dynamic urban 'revolution' or as relativizing, multi-scalar urban 'problematique', our understanding of the urban spatial forms and processes remained trapped to a singular paradigm. Moreover, the epistemological double-bind, that is, the extrapolation of the existing categories of the unitary, granular and fundamental spatio-temporal formations/divisions into the spatializing strategies of the successive urban theoretical developments, seriously inhibited the understanding of the resilience or "structured coherence" of the capitalist geo-spatial expansions, particularly of its present globalized, neo-liberal varieties. (Also, see Harvey 2006:102-103; Brenner 2019:55). The discussion on the *neighborhoods* in the next chapter would help us explain how this anomaly can be approached towards the development of an integrated city-theoretical scale-based, sociospatial perspective on the urban sociology.

In the Search of the civitas: Patna "muddling through" the 1990s

Some of the key developments that marked the political landscape of Bihar, to which Patna as its capital city could not remain unaffected (also see, Rodgers and Satija 2012), were as follows:

- 1. The violent Left-insurgent movements in the agrarian hinterlands, comprising the landless, the small, marginal farmers and other weaker castes and poor communities, from the early 1970s to the 1990s and beyond, resulted in several mass-killings and exodus of many individuals and families from the villages for the safer places in the nearby towns and the cities (Prasad, Pradhan H., in K.K.Sharma et.al., 1994).
- 2. The *money-muscle-politics* nexus of the coal-mining mafias and the trade union leaders in the coal-belts of the undivided Bihar, leading to the massive corruption and illegal amassing of wealth by the private individuals, with greater scale and intensity following the nationalization of coal since 1971 (Barnes, L. 1989). The post-nationalization phase also brought the bureaucrats and the government officials, also those in the state secretariat and other important offices in the capital Patna, in the corruption chains or networks, as an indelible link for the system's frictionless workings.
- 3. The criminalization of politics in Bihar in the late 1970s and the 1980s, as also in various other parts of India, creating a spate of political killings and counter-killings, of the rivals (Jha, Vikas Kumar. in Ruby Roy Tr., 1996).

- 4. The Jharkhand movement of the Jharkhand Mukti Morcha (JMM) and other tribal and local groups for the separate state in the tribal heartlands, for effective control over their mineral, forest and land resources (also popularly, the *Jal-Jangal-Jameen*). This also led to a cycle of socio-political violence from all sides at various occasions. Finally, the separate state of Jharkhand came into existence in the year 2000, bifurcating the state of Bihar. As a consequence, the mineral and forest rich parts of Bihar got separated from its political geography.
- 5. The rise of identity politics in the wake of the *Mandal* mobilizations for the reservation of the numerically larger backwards castes and classes in the government jobs and state-funded educational institutions (Chaudhary, S. N., in B. V. Bhosale ed., 2004). This led to the first-time dominance of the backward castes and classes, chiefly from the handful of the numerically larger caste groups, in the state government by the mid-1990s. The most prominent among them were the *Yadavas*, the largest of all caste groups. Other significant groups were the *Kurmis*, the *Banias* and the *Kushwahas*.

In the light of above developments, one cannot but notice that when the New Economic Policy (NEP) was introduced in India in the early 1990s, Bihar, in the socio-political terms, was among the least prepared regions. The fractured and highly contested state of politics, and unstable governments over the past few decades in Bihar had its imprints all over the social and the physical infrastructures, be it transports connectivity, telecommunication systems or utilities like electricity, health-cares systems or the basic education. Bihar figured among the bottom ranks in each of these sectors. No wonder, the decade of the 1990s is referred as a watershed moment in the history of Bihar's regional underdevelopment, form which the economy of Bihar took another full decade to achieve a satisfactory growth trajectory. The excerpts from December, 2005, *Frontline* magazine report clearly outlines the economic downturns of the 1990s in the following terms:

"Figures provided by the EPW Research Foundation on the growth rates of aggregate, sectoral and per capita income during the 1980s and 1990s in Bihar and in India in general bear this out. While the Gross State Domestic Product (GSDP) in Bihar during the two decades grew by 4.66 and 2.87 respectively as against the all-India average of 5.55 and 6.10" (Tripathi, Purnima S., 'A vote for change', Frontline, Dec 16, 2005).

The Reign of Insecurity and the Unaestheticized Spatial Development

Under these circumstances, and also, marked by low levels of regional development, Patna in the 1990s, was replete with the criminal and the anti-social elements. The organized crimes like kidnapping for ransom, thefts, burglaries and demands for money from the traders and businesspersons, snatching of valuables and ornaments from women, became so endemic that many traders, professionals and private enterprises, also many families belonging to ethnic/linguistic groups like the *Bengalis*, the *Marwaris*, with resources and alternative location in other cities, began to shift their bases out of the city.

Here, we need to ponder a little on why the 1990s made such an impact on the overall perception of the city, when the magnitude of the overall crimes, that is, the total counts of all cognizable offences, didn't have any steep, large scale, dramatic rise.

Given the political scenario of the past several decades preceding the "tipping point" of the 1990s, Bihar witnessed high levels of criminal and political violence for a long time. The period of Laloo Prasad Yadav's rule (1990-2005), first as a Janata Dal (JD) leader and later through the breakaway faction the Rashtriya Janata Dal (RJD), that he headed and controlled, however, was marked by pervasive corruption and the criminalisation of politics, by virtue of which it is generally associated with the "jungle raj" (the reign of lawless forest, or where the only dictum-"might is right" prevails). The spurt in the criminal-politician nexus leading to the proliferation of men with backgrounds in crimes entering into political office was widely reported by the national and the international media. However, there was a turnaround in the perception of the breakdown of the rule of law when in 2005 another government led by Nitish Kumar restored some of the basic infrastructure, thereby, "setting in motion what is sometimes referred to as the "Bihar miracle", whereby the reign of conflict and violence over the past 15 years was markedly reduced and the state soon embarked on the path of development with clear signs of economic growth, prosperity, and infrastructural improvement. The reduction of criminal violence and the corresponding improvement in the rule of law and public order clearly stood out, as these factors for long affected the development of both the state and its capital Patna. (Rodgers and Satija 2012:30).

While trying to make sense, with the help of the official data, of the turnaround of the crime situation of Patna post-1990s and also at the regional level in the same periods, that translates

well into the present phase, marked by improvement in the overall perception of law and order situation, Dennis Rodgers and Shivani Satija (2012) observed:

"Indian National Crime Records Bureau (NCRB) crime statistics for Bihar do not bear this particular narrative out, however. State-level crime, although definitely high in the early 1990s, actually dropped steadily throughout the decade, with the overall rate of crime in particular dropping from 147 per 100,000 in 1992 to 107 per 100,000 in 2001. Although crime began increasing again in 2002, to 110 per 100,000, it subsequently reached its apogee during the 2000s in 2009, to 128 per 100,000. At the same time, however, while the rate of decline of violent and non-violent crime was essentially the same during the 1990s, during the 2000s – and more specifically from 2005 onwards – there was a major decline in violent crimes such as murder, robbery, dacoity, or kidnapping, with the increase in crime during this latter decade almost wholly due to an increase in non-violent crime such as burglary (violence against SC being a major exception, although it should be noted that recorded levels are extremely low).

The trend in Patna has been very similar, although it should be noted that the proportion of crime in the city is considerably higher than at the state, even taking into account the concentration of population." (Rodgers and Satija 2012:30-31).

In order to make further sense of the notorious 1990s, I cannot but recall the very pointed remarks Jane Jacobs (1961) made with respect to perception of a city turning unsafe, therefore, unlivable:

"Today barbarism has taken over many city streets, or people fear it has, which comes to much the same thing in the end. ... It does not take many incidents of violence on a city street, or in a city district to make people fear the streets. And as they fear them, they use them less, which makes the streets still more unsafe." (Jacobs 1961:30).

This environment of generalized insecurity, reaching its apogee in the 1990s, among the middle classes put the entire frame of urbanization of Patna on a specific trajectory of deaestheticized development. Anything valuable, and, therefore, appealing to the senses, or vice-versa, had to be necessarily kept away from the public view. This ranged from the latest or new automobiles to the pricy jewelries and ornaments to even ceramic-decorative tiles on the front walls or courtyards of the residential buildings. What applied to the residents also applied to the shopowners, be it jewellery shops or automobile showrooms.

The idea of open space that Patna's city planners imagined in the 1960s read like:

"Patna has very little of organized public open spaces. It has only three major public open spaces, viz., the Hardinge Park, the Gandhi Maidan and the Mangles Tank. These, along with other smaller parks, comprise about 115 acres only. On a very modest standard of 2.5 acres per 1000 persons, the City's present needs of public open spaces work out to 900 acres. Another 600 acres would be required for the growing population during the next 20 years. Public open spaces have often been called the 'lungs' of cities and most cities have some highlights like botanical garden

or zoological garden where people can congregate on weekends or holidays to have a feel of being close to 'nature'. Patna has nothing of this type. Parks and play-fields are required for all age groups and within easy reach of all residential areas. A healthy mind can grow only in a healthy body, and the City should be able to provide the basic groundwork for this, by providing adequate areas for outdoor recreations." (Master Plan, Patna Improvement Trust, 1962:XI/114)

In order to suggest that an open space of 2.5 acres per 1000 population is not too much to ask for, they also noted that, "For every 1,000 population, the City now has only 0.33 acres of public open space. The minimum standard recommended by some authorities in the United Kingdom is 6 acres per 1,000 population." (ibid:VI.49).

As a result of the early planners' emphases on the organized open spaces, a botanical-cumzoological garden came in to existence and opened for the public in 1973. Today it is spread over nearly 152 acres of area, also, situated in the close vicinity of the state government establishments and the upscale residential areas in the central parts of Patna. While upkeep of this and few other parks and open spaces, from the prevalent local standards, can be termed as satisfactory, the other open spaces like the streets and the sidewalks turned into a menace for a great majority of the city-dwellers and commuters. The very idea of open spaces today does not enthuse the broad spectrum of inhabitants and denote negative connotations in Patna. This change in perception is broadly a result of the two interrelated reasons. First, it was perceived as open invitation to the anti-social and the criminal elements in the neighborhoods, and second, any land not effectively claimed by the private owners in Patna was susceptible to the encroachers, the poor, illegal-settlers, also, the land-grabbers and the land-mafias, mostly at the behest of their patrons in the politics. We shall return to these aspects more in detail, little later.

To all close observers of Patna it is apparent that, the production of spaces in Patna necessarily had to pass through the security tests. The shops, the commercial and the banking and financial establishments are mostly indistinguishable from their outward appearances, if not transacting any business as they all are put behind look-alike metaled doors, security guards, and multiple locks. Except for a handful of elite enclaves or old localities, the housing constructions, either owner-cum-rent occupancy residential buildings or large residential apartment buildings, are aesthetically very dull and unappealing, also bearing very low levels of professional, independent and creative architectural inputs.

The efforts to compensate for this unappealing spatial or built-environment development are clearly discernable in the forms of the state-led constructions of the public buildings and other physical infrastructures, notable among them are Biscomaun Bhawan, or, the newly constructed Bihar Museum, designed by renowned Japanese architect Fumihiko Maki, also his first project in India (Maki, Fumihiko. 'Sister Act: Patna Museum is in stellar company...', Architecture & Design/AD. Nov 14, 2017).





Left (*Figure 7*.): The meditative Buddha courtyard inside the Bihar Museum building, the design based on the Japanese concept of oku; Right (*Figure 8*.): The Bihar Museum as seen from Bailey Road—featuring Corten steel, black granite, and little greenery. (*Source*: Rajesh Vora, Architecture & Digest/AD, Nov 14, 2017).

But this too has serious limitations. Primary of which are the low levels of sensual, aesthetic and appreciational learning and development, which has its origin in the ways the city-functions in Patna are imagined and actualized. The prism of insecurity, instead of, the openness, undergirds the major aspects of the imagining a family or a household setup in Patna city, not only among the narrow base of economic elites but among the broad spectrum of the middle classes. This being the case, there isn't much incentive for the government planners to involve highly-paid and internationally acclaimed architecture consultants and firms, to execute their project designs.

The overall state of affairs allowed for the haphazard spatial growth and development in the Patna's newly urbanizing areas throughout the post-liberalization period, as also documented in the several news articles, reports and surveys. One report (2016) stated:

"There are no government authorities to check the building controls and quality since last decade. As per a rule approved by urban development authority, a panel of 50 licenses architects was appointed in the city that had authority to approve building plans without any government

interference. This panel did not have legal authority to check the building construction after the approval which led to the unmanaged illegal and poor quality construction in the city. Recently this act was derecognized and power to approve any building was returned back to Municipality. Since then municipality has started taking strong actions against all illegal constructions in the city. It had served notices to the owners and builders of 447 high-rises that had flouted stipulated norms." (Tiwari and Sharma 2016:14).

The uncontrolled and poorly regulated spatial development, that came to denote the norms or the new standards, the market forces began to gear up for widening and intensifying the process of gentrification of the pre-existing settlement clusters and the lower class neighborhoods, in order to capitalize on the poor regulatory regime, and to also claim accolades for "redeveloping" and "revitalizing" the moribund, unlivable, underdeveloped spaces. More and clearly so, in the Westward directions, in which the city-limits expand across a vast expanse of agrarian plains surrounding multiple urban centers and towns and small-scale industrial clusters.

Except for some low-scale, in-situ housing development for the urban poor under the central government sponsored schemes, and also residential flats for the members of the state legislature and high officials in the already-developed areas, the state of Bihar for the past 3-4 decades didn't construct any major public housing/residential colony in the new urban areas extending into the outward directions from Patna. This near withdrawal of the local state from the public housing construction is in clear contrast with the very active and large scale involvement of Bihar state in the construction of the physical infrastructures in roads, highways, bridges, flyovers, airports and neighborhood streets and lanes. It is almost clear that the housing sector would grow and develop as per the diktats of the market forces and state would not play any major role. By this account also, the process of gentrification becomes the most viable route to bring about large scale redevelopment of the semi-urban or clustered built environment, as the land relation in the entire region of fertile agrarian plains are under legally enforceable mechanisms for over several centuries, even when in the past pre-modern customary laws reigned supreme.

The Neighborhoods and the Open Spaces

The Streets and the sidewalks are among the most visible and important open, public spaces in cities. Understanding the urban explosion/implosion of Patna from "how the previously developed, and the recently developed/developing residential areas or the neighborhoods relate

to their streets and the sidewalks?", would give us fair idea of why today the gated housing apartment colonies and the cooperative housing societies are the new norms against the spatially diffused and socio-culturally-economically mixed housing societies, on the lines of large scale area development, such as the ribbon development models or the town planning schemes (TPS) involving the public finance and investments.

The streets and the sidewalks in the previously developed residential areas: The Patna Improvement Trust (PIT), set up through the enabling legislation of Bihar Town Planning and Improvement Trust Act, 1951 (also, later Amendments 1952, 1955), prepared the first Master Plan (1961 - 1981) for the City's planned development. Even though the final outcome turned out to be only "quick land use exercise" (Patna Master Plan-2031, pp.-6), the Master Plan, originally, envisaged and proposed to construct seventeen new residential neighborhoods covering an area about 5000 acres in the three zonal divisions of the elongated city, eight in the Western Zone, seven in the Central Zone south of the railway line, and two in the Eastern Zone, besides improving the conditions of the other existing built-up areas of the city assessed as consisting of 27 neighborhood units, each with populations varying from 10,000 to 20,000.

The proposed residential areas were to be developed based on the "general principles of the neighborhood planning". (Master Plan Vol. I, Patna Improvement Trust, pp. XI/116). Despite several shortcomings in the implementations and also resource constraints, many neighborhood units were developed in this period, also called, the PIT phase. And, therefore, whatever planned housing development the city of Patna witnessed since Independence, up to the present, barring one marked private initiative- the Ashiana Housing Cooperative Society (1976) – whose constructions stretched over the late 1980s, relates to this phase. The later days' planning remained only in papers and nothing much happened on ground.

The planned development of the neighborhoods in the PIT phase also witnessed the associated spatial arrangements for the commuters' lanes, streets and sidewalks, well connected with the broader, arterial roads. However, with the passage of time, many of the sidewalks converted into slums or were subjected to the encroachments by the street-vendors. In many palaces even makeshift or permanent shops took over the pedestrian spaces. The neighborhood planning considered the "walkability limits" as a function of accessing the nearby service locations like school or shopping prescient. (Master Plan Vol. I, Patna Improvement Trust, 1962:VII/62). With the

subsequent loss of sidewalks and pedestrian spaces in many areas to their new occupants, the neighborhood residents face hardships, especially during the day-times, office/peak-traffic hours, and in the rainy seasons.

This was the phase when the high-rise residential complexes were not considered a good, viable option for the Patna city, and therefore, negotiating the sidewalks-pedestrian spaces in those low two-three storeys' neighborhoods are much more frequent than, say, in a closed, gated, high-rise residential society. Considering what the PIT Master Plan itself has to say on the nature of dwelling units and neighborhood connectivity, can give us a fair understanding of how things were to shape and reshape. It stated that,

"Urban land being scarce, the general trend in many cities in recent years has been to obtain as high a density as possible by putting up tall multi-storeyed structures. But in the case of Patna this is not possible for four reasons. Firstly, the City lies in a seismic belt; secondly, the soil is rather poor for structural purposes, being mostly black cotton soil; thirdly, multi-storeyed structures require special services such as lifts etc., which require foreign exchange and power, both of which are in short supply; and fourthly, with the present non-mechanised system of building construction, the cost of construction per unit floor area will be much higher for multi-storeyed buildings than for buildings with two or three storeys only. In view of these limiting considerations, most residential buildings in Patna shall have to be only two to three storeys high, at least for the time being. Studies in residential densities in relation to heights (storeys) of buildings indicate that with two to three storeyed buildings, optimum gross residential densities vary between 45 to 75 persons per acre. The higher figure, in exceptional cases such as for the redevelopment of the existing congested areas, can, however, be pushed up to about 100 persons per gross acre by curtailing, to a limited extent, the width of roads and sizes of social service elements. But for all new residential development in the City, the gross density must keep a balance between 45 to 75 persons per acre. From this as well as other considerations, mentioned earlier, the optimum size of the neighborhood in terms of population works out to about 15,000 persons and in terms of physical extent between 200 to 300 acres. It is apparent, therefore, that a neighborhood normally will comprise of two sub-neighborhoods each with a population of 7,500 persons. Form sociological considerations also this figure appears to be desirable, as it is big enough to give the neighborhood an urban character and yet small enough to stimulate intimate social relationships." (Master Plan Vol. I, Patna Improvement Trust, pp.VII/63-64).

Further, explaining how a neighborhood identity and its form may be intimately tied, the Master Plan notes,

"The arrangement of the various elements within and about the neighborhood is important and also offers great possibilities of giving the neighborhood its definition and identity. One of the chief reasons for the absence of a 'feeling of neighborhood' in the towns and cities of to-day, is that there are no recognizable boundaries for the neighborhood. The 'ward' which is the only territorial sub-division in an urban area as no significance, except for purposes of municipal administration, and no recognizable shape at all. If in the future, each urban neighborhood can be given a clear identity, then the neighborhood may take the place of the ward any may even

become a very potent unit of local self-government. The urban road, though generally a serving agent in the urban pattern, offers a means of giving the neighborhood its identity. One recommended way to do this is to align the sub-arterial or major roads of the city's road network along the periphery of the neighborhoods, connecting one neighborhood to another but never cutting across any of these. For the proper functioning of such a peripheral road system, it is necessary that the number of entries from these into the neighborhood, should be as few as possible and yet consistent with desirable access standards both for normal conditions and for emergencies (such as fire, ambulance, etc.). No house within the neighborhood, therefore, should normally have any direct access from the peripheral roads, but where houses must face the peripheral roads, access to these should be provided by separate service roads. In the interior of the neighborhood, somewhere about its centre, should be placed the chief focal point, the neighborhood centre, which will comprise of the principal public and semi-public buildings, the shopping centre, the community centre, the health centre and the high school. Besides this central group, an optimum neighborhood of 15,000 population will have two other sub-neighborhood centres, each comprising of a set of basic schools, community hall, nursery school and shopping prescient." (Master Plan Vol. I, Patna Improvement Trust, pp.VII/64).

From the above quotes, it is evident that the idea of the neighborhoods in the imagination of the early planners of the post-Independence Patna was one of fixed, self-contained spatial units, in which the streets were thought to be used mainly by the local residents and their visitors, merely as a passage for retreat into the dwelling spaces hidden behind the walls of privacy and imperturbability. They were never meant to be shared, self-organizing, open spaces that could play an important role in making of modernizing, vibrating, inviting, interactive neighborhoods, that could act as vital organs in keeping the city "safe from barbarism and fear" (Jacobs 1961:30), where children could play safely under the watch of familiar, not so familiar, and also, unfamiliar passersby, while also learn the mannerisms and street-smartness of a multi-ethnic, multi-colored urban life.

Streets and Sidewalks in Today's Neighborhoods in Patna: "What does 'free movement' entail?" asked Richard Sennett (2018), while discussing different aspects of "walking knowledge" in a city, in his book titled, "Building and Dwelling: Ethics for the City." He outlines the contrasts of an ethnographer's account of walking to a planner who seeks to organize movement and further complicates with that of the *flâneur*. He writes,

"Here is a distinction between the *flâneur* who wanders, not quite knowing why or where to go, and the person with a definite goal in mind, like getting from home to work or, in another vein, cruising for sex. The same split between aimless and purposeful appears between the casual tourist and a critically minded walker like Ian Sinclair, who foot-travels with the aim of illuminating where and how the city has abandoned its poor, or highlighting the stupidity of planners. Rebecca Solonit thus distinguishes between a wayfarer – the walker on a mission – and a wanderer.

The wandering *flâneur* is a friend of the night, because it is at night when the city's secrets come out. As well as shielding thieves or prostitutes, night has been the time when the huge homeless population of London and Paris took over the streets, as later happened in Delhi's Nehru Place. The advent of gaslighting did little to transform the crawling out of the hidden city, since gaslight was dim and the penumbra of cast gaslight usually small, no more than 5 to 6 metres across in the mid-nineteenth century. Even now, when sodium lights cast a uniform orange-yellow pallor over the streets, night is transforming; figures are drained in colour, and the sodium lights create their own shadows." (Sennett 2018:183).

The analogical relation of the streets and sidewalks to the arteries and veins through which the vital-fluids reach to every organ of the body, similar to William Harvey's (1 April 1578 – 3 June 1657) analysis of blood circulation encapsulating the imaginations of the planners of the late seventeenth and early eighteenth centuries, is not entirely misplaced. Restricting the passage at one point affects the entire system of flows. However, care must be given to understand how the streets themselves relates to the sidewalks, coalesce in ways that are, simultaneously, complimentary and contradictory. The whole idea of crowded streets and sidewalks- self-organizing the entire city into a system of mutually civilizing social spaces- gets upside down, when the focus shifts on how to avoid crowding and, therefore, minimize intermingling and exchange. Crowding on the streets is not same as crowding on the roads, or, that of the sidewalks. The act of planning that misses on these aspects, instead, mixes different acts of movement, circulation, wayfaring and wandering for a singular aim of free-flowing traffic may cause totally undesirable outcomes, that is, the unusable sidewalks and the overcrowded streets.

For the city of Patna, where the urban land, for the widening of the roads for managing the smooth flow of the everyday traffic and other vital future needs, were already scarce, treating the neighborhood streets and sidewalks as closed, self-contained, private-use spaces proved to be double whammy. Neither the problem of overcrowding got contained, not the streets and sidewalks evolved into the vital organs for regulating mass circulation and civil behavior. Today's everyday encounters with the traffic snarls in almost every parts of Patna, and, apparently, insurmountable nature of the problem has a great deal to do with the basic ideas of the neighborhood planning and development in the 1960s and 1970s, particularly, in relation with the understanding of the urban, collective "open spaces". The aspects related to the history of the neighborhood planning in India, the conceptual development of the "neighborhood unit" as an important spatial planning tool in India, will be further discussed in the Chapter- 6.

The Uses of Sidewalks: "Encroachment" and "Illegal-Parking"

Jane Jacobs (1961), conjoins the sidewalks and the safe urban spaces with an utmost clarity of vision, as she writes, "To keep the city safe is a fundamental task of a city's streets and its sidewalks." (Jacobs 1961:30). While questioning some of the basic assumptions about what makes a city life safer and livable and how neighborhoods become cohesive and lively she gave a great attention to what all happen on the streets and the sidewalks. Whereas many earlier planners considered parks and other designated neighborhood spaces as safe, she strongly contradicted them, and, instead, considered the crowded neighborhood sidewalks as more important for the playing children and their safety. A form of involved neighborhood surveillance of the most public of the city spaces- the streets and the sidewalks, that comes from "eyes of the street", makes them safer for the children and the women. She believed that the focus of planners to avoid trespassing or over-crowding or to keep the delinquents and the slumdwellers away by ways of policing or planning is not a good idea as it makes the streets more vulnerable to easy crimes. She wrote:

"The first thing to understand is that the public peace- the sidewalk and street peace- of cities is not kept primarily by the police, necessary as police are. It is kept primarily by an intricate, almost unconscious, network of voluntary controls and standards among the people themselves and enforced by the people themselves. No amount of police can enforce civilization where the normal, casual enforcement of it has broken down." (Jacobs 1961:31-32).

Certainly, Jane Jacobs' diagnosis may be valid for the whole spectrum of the developing cities in the Global South, but this lays, in my opinion, at the heart of many of the today's problems the city of Patna facing today, and to which the local, civil and the police administration are utterly helpless. Patna's traffic conditions are comparable to the worst among the Indian cities. Consider a recent news report (Sep 10, 2018), titled as "Mayhem on Patna roads, courtesy encroachments, illegal parking", which states with a sense of dismay:

"Traffic snarls have become order of the day in Patna and people's perception to denote distance in metric unit has changed to time.

Illegal parking, indisciplined driving, lane violation and encroachment by roadside vendors have only added to traffic snarls, especially near schools during their assembly and dispersal time.

Makeshift roadside vegetable vendors at Antaghat, rag-pickers and slum dwellers have erected shanties and live alongside roads, under the very nose of the district administration.

Add to it the mounds of garbage, slush and filth on the JC Road, connecting the DM's office, near the Bankipore Club, and the road is completely blocked." (Kumar, Ruchir. 'Mayhem on Patna roads, courtesy encroachments, illegal parking', Hindustan Times, Sep 10, 2018).





Left (*Figure 9.*): Vegetable vendors have fully encroached the JC Road, Patna; Right (*Figure 10.*): Traffic snarl outside St Joseph's Convent School, Patna. (*Source*: Hindustan Times, HT Photo, Sep 10, 2018).

Similar news-lines are reported from every parts of Patna, almost on the daily basis, and the story line differs only in terms of the proper nouns, that is, the name of the places and the respondents. Consider another report (July 27, 2016), titled as "Encroachers rule the roost on footpaths", that shows the similar story-line:

"Footpaths on almost all important roads in the city, including Boring Road, Exhibition Road, Patna Junction, Jagdeo Path and Ashok Rajpath to name a few have been encroached upon by roadside vendors, shopkeepers and showroom owners.

Elderly people and children are always at risk as they are forced to walk on the roads. At times, they don't find a suitable place to make way for speeding vehicles and just pray to god for their safety.

Amit Kumar (42), a businessman from Boring Road, said, "If roads are meant for motorists, footpaths have been built for pedestrians. Sadly, it's not the case with Patna. My parents usually go for evening walk. Till the time they return home, we remain anxious as they have to walk on busy roads due to encroachments on footpaths."

"The footpath near Jamuna Apartment is dotted with makeshift flower and vegetable shops. Even motorcycle mechanics have set up their shops on the footpath. Pedestrians become panicky when vehicles apply brakes to avoid accident. Civic authorities are not initiating any measure to end the woes of pedestrians," he added.

Manish Kumar, an A N College student, said, "Vendors and shops have occupied major portions of the footpath between Krishna Apartment and Boring Road roundabout. The Boring Road locality is the hub of coaching centers. Thousands of students from across the city visit the place every day. Even in the peak traffic hours, students walk on the roads as the footpath has been left with no space for pedestrians. In fact, the footpath has turned into a business spot."

He added that most of the footpaths in the city are in a dilapidated condition due to lack of maintenance. "Encroachments are not being removed. The tiles on the footpaths have broken, thereby making pedestrians vulnerable to mishaps. Shop owners keep their belongings on the footpath, much to the discomfort of pedestrians," Manish said." (Das, Dibyandu Shekhar. 'Encroachers rule the roost on footpaths', The Times of India, July 27, 2016).

The Civitas and Beyond: the Dialogical Communicative-Actions

The present unfolding of the urban, both in its traditional and non-traditional, newer locations, in the form of familiar issues and problems abstracted in the physical spaces as patterns, repetitions, dystopia, haziness, blurring, smog and smoke, sirens and horns, entails much more than the problem of ethics and aesthetics. In essence, it has to do with the loss of communication, the missing action of dialogic exchange between two broadly oppositional forces. One values the realm of the private and the exclusivity as the standard for a developed, civil order, whereas the other values the distributional justice as the moral above all morals. The absence of dialogic actions, manifested as "uncoordinated" and "unskilled" among the various agents, throw the human conditions in the state of confusion and disarray. "A very important feature of human action is rhythmizing, cadence. Every apt, coordinated gesture has a certain flow" (Taylor 1999:35).

This common rhythmizing, however, is only one of the several forms of dialogic actions. It extends from a shared agency of a ball-dancer making into common agent to a larger animation of the collective celebration and dance of the human triumph over hunger, disease, war and unreason. This corresponds to the *culture* in the broadest sense. Pierre Bourdieu has developed this understanding of the dynamic, dialogic social in terms of his notions of various forms of *capital*, social, cultural, educational, linguistic, that the individuals benefit from, also inherit and transmit to their next generations. Although, these non-economic forms of *capital*'s underlying mechanism of the communicative, dialogic action, also, closely linked with Bourdieu's *habitus* (Taylor 1999), remain valid analytical tools, Bourdieu's various notions of *capital* are now faced with the changing modes of organization and circulation, from the *fields and positions* to the *networks and nodes*. The challenge of another round of abstraction and the drag force that the Bourdieusian understandings today are faced with is equally an opportunity to bring-in more case-studies and empirically grounded investigations that may help synthesize a new sociospatial framework for urban sociology, distinct from the political economy loaded, critical-Marxian urban studies.

If the Carlo Rovelli's idea of space is *bodies-in-relation*, it doesn't mean the despatialisation of bodies. The idea of place, between mobility and position, between events and actions need to be retrieved, but dialogically. The planning of city mobility for seamless, free-moving traffic are

characteristic of the monological, institutional modes of thinking which affects the intended logic of a multi-ethnic, cosmopolitan city-life- permitting the dialogic actions. The loss of communication is also the disorientation or distortion of the identity and the self.

"In seeking the relationship with place, the contemporary city shows, however, all the diseases of false relations: aestheticisation, thematisation, segregation, discomposition, genericity are some of the diseases resulting from this behaviour. The relationship with place is faked, it is not dialogical, but analogical, in that it is characterised by an approach in which one is not separate from place and from abandonment, in the sense that one lets oneself go passively, cancelling out oneself in the place: this is the city as theme-park. (Maciocco & Tagliagambe 2009:41).

One encompassing force that may help recuperate and retrieve the disorientation and fragmentation of identity is to see the crisis as related to the crisis of environmental concerns and the depletion of shared, life-affirming ecological goods. The present day efforts to make the planning process as participatory and bottom-up, in great deal, has to do with the need for an open, dialogical, communicative action for shared goal of tackling the cities' environmental degradation and resource depletion. Moreover, this is certainly not restricted to the realm of nature, but extends to the wider aspects of historical, cultural and architectural conservation and preservation. The broadening and the deepening of the scope of planning, however, may show how the old fault-lines, marked by private-liberty versus the public-distributional justice, are not merely technical, but deeply socio-cultural and also pervades deep into the constitution of our democratic politics and institutional structures.

Dolores Hayden (1995) refers to a debate in the 1975 between Herbert J. Gans, an urban sociologist and Ada Louise Huxtable, an architectural critic and supporter of preservation, wherein Gans triggered the controversy by attacking New York's Landmarks Preservation Commission, alleging that "the Commission mainly preserves the elite portion of the architectural past. It allows popular architecture to disappear. ... This landmark policy distorts the real past, exaggerates affluence and grandeur, and denigrates the present." To Huxtable's response that both esthetic singularity and vernacular expressions are important and, therefore, the great buildings, the major architectural monuments as a primary and irreplaceable part of civilization, need not be stigmatized as product of the rich, or their conservation as elitist cultural policy, Gans reverted with "the case for a broader approach to ordinary buildings as part of public history." He argued, "Private citizens are of course entitled to save their own past, but

when preservation becomes a public act, supported with public funds, it must attend to everyone's past." (Hayden 1995:3).

Alongside the merits of the debate, which is no less interesting in its own rights, Hayden drew our attention to the fact that both were unable (or unwilling) to understand each other's language. Hayden noted that,

"Neither delved into the downside of what they promoted. He did not explore the problems of preserving and interpreting ghetto locations or bitter memories. She did not ask how to justify spending taxpayers' money without giving public access or interpretation. And neither of them tried to identify opportunities to realize both his ideal of urban preservation and her ideal of architectural preservation." (ibid:5).

However, Hayden noted that both shared a common concern, that was, the loss of significant public memories. Hayden also acknowledged that, unlike in 1975, the debates in the contemporary times on the issues of urban environement, urban past and urban culture take place with greater contestation on the basis of race, gender, and class. (ibid:6).

Public memories serve as repository of cultural pasts through which the communities and groups make sense of their present well-being and collective identity. They derive their relation with place in terms of public history attached to the landscapes as imprints of the shared, public memories. While the historians may have done some works on the aspects of public memories and public history with respect to the pre-Independence era Patna, works of sociologists and urban and architectural conservationists are non-existent, particularly concerning the period after the "tumultuous-1970s". While documenting and archiving public memories are certainly very arduous and require great deal of time and patience, from an urban sociologist's point of view, the reconstructing the local history, with the mixture of public memories, archival and field-works, would serve a great purpose in contesting the sweeping, dominant narratives of the official and the planners as the latter are mostly fine-tuned to the interest of ruling and the middle classes, rather than the working and the lower classes.

An example from my own field of study, the Digha neighborhoods in Patna, would show that how the changes in the urban landscape shapes the public history to the taste of rich and powerful and put the working classes at loss of public memories of their cultural pasts. The most commonly accessible, photographic public memory of Digha, even by this day, relates to the much famed variety of Mango, named after the same very place, and, called as, *Digha Malda*.

The pace of commodification of land for housing and real-estate constructions has nearly wiped out all the orchards that were there all along the Ganges bordering Digha and also all over Digha and the surrounding areas. Still one can find some traces here and there but certainly not the orchards, except in one or two educational institutions that came up before 1990s on the lands having the trees standing on it.

A few years back, in January 2016, a report appeared in an English-daily mentioned that,

"Digha Malda' has been a delicacy known to generations all over the country, even abroad, but the juicy mango variety is on the verge of extinction due to felling of trees for constructing multistorey buildings in the particular locality of west Patna.

To preserve this variety of mango, chief minister Nitish Kumar has recently ordered the Bihar State Building Construction Corporation (BSBCC) to get two saplings of 'Digha Malda' planted on the campus of all the government bungalows in the new capital region." (Chaudhary, Pranav. 'Now, 'Digha Malda' mango at govt bungalows in new capital region', Times of India, Jan 22, 1016).

Another report published in February 2017, in an English-daily noted that the campus of Bihar Vidyapeeth near Sadaquat Ashram, in close vicinity with Digha area, is home to 250 Digha Malda mango trees. Now a nursery is set-up in the campus spread over 15 acres land, and it will sell mango saplings to the residents. The report mentioned that,

"The nursery is being developed on two acres on the Vidyapeeth campus (now a vocational training centre). Former President Rajendra Prasad's granddaughter Tara Sinha said the mangoes were her grandfather's favourite. "Baba even professed his love for the variety in a letter to Nathni Singh, a Bihar Vidyapeeth official when he was President," said Tara, a retired Patna University teacher." (Chakraborty, Shuchismita., 'Mango Nursery Grows on Bapu Campus', The Telegraph Online, Feb 02, 2017).

Both these reports clearly indicate how the transformation of Digha, originally, mainly, a working class neighborhood, into the blistering middle class residential colonies, gated communities and high rise apartments, has not only deprived the fast-shrinking working classes of this gentrifying area of the real taste of the "Digha Malda" variety, but even the public memory that relates to this delicacy is represented now through the elite voices of Patna. The present public articulation has no mention of the Digha locals for how the conservation must include the interests and views of the working classes of Digha, first and foremost. As per the first report, the Chief Minister and other officials of the sprawling government bungalows, or as the second report suggests, the granddaughter of the former President, also the first President of Independent India, are the new patrons of what earlier was only one of the several varieties of

mango, grown in the region. Should this new found concern for preserving the Digha Malda variety be seen as service to the public? Or as an excuse, a cover-up for the "disservice", for not doing enough on their parts, despite being in the position of power as top politicians, bureaucrats, citizen-elites, to prevent the gentrification of Digha without any regards for the preservation and conservation of the age-old orchards. It is certainly a crisis of communicative actions, along with aesthetics and ethics, too, and not only urban environmental crisis. Outlining some of the salient features of Habermas's "Theory of Communicative Action", in relation with the loss of freedom and loss of meaning entailed by modernization and rationalization, Stephen K. White (1988) writes:

What is needed, according to Habermas, is not just a critique of instrumental reason such as Horkheimer and Adorno developed, but rather a "critique of functionalist reason," which can be obtained only when a systems perspective is integrated with a communicative model of action. From the resulting theoretical viewpoint, the key notion of reification can then be reinterpreted as "deformation of the lifeworld" which are "systematically induced." (White 1988:104).

Chapter 4. The Phenomenological Reframing of the "Urban Question": The *internal factors*, the Neighborhoods and the Processes of De-localization

Re-Setting the "Urban Question" Background

I would like to begin the chapter by the remarks, starting with a series of provocative questions, made around early 1980s by Manuel Castells (1983) in "The City and the Grassroots: A Cross-Cultural Theory of Urban Social Movements":

"Our goal is to explain how and why cities change. But what are the cities? Can we be satisfied with a definition like, spatial forms of human society? What kinds of spatial forms? And when do we know that they are cities? At which statistical threshold of density or population concentration does a city become a city? And how are we sure that, in different cultures and in diverse historical times, we are referring to the same social reality on the basis of a similarly concentrated, densely settled and socially heterogeneous population? Urban sociologists of course, have repeatedly asked the same questions without ever producing a fully satisfactory answer. After all, it seems a rather academic debate, too far removed from the dramatic issues currently arising from the worldwide reality of urban crisis. And yet it seems intellectually dubious to undertake the explanation of change in a social form whose content we ignore or whose profile could be left to a category that is ill-defined by the Census Bureau. In fact, our basic theoretical perspective supersedes the question by studying the city from the viewpoint of historical change." (Castells 1983:302).

From the lens of the social theory, the disciplinary thinking on the urban sociology needs to graduate from the earlier preoccupations with the identification of the appropriate object of study. As pointedly shown in the preceding remarks made by Castells, the overemphasis on "what to study", and the over-determination of the *historical* over the *empirical-contextual* or vice-versa, that leads to the never ending debate on the importance of the analytical roles between the "city" and the "urban" has, in my views, created a stalemate to the further reframing of the "urban question" with respect to the present conditions. Despite some serious attempts to expand the Lefebvre's and Harvey's *spatial production* and the *second circuit of the capital* frames by suffusing it with the reproduction and consumption based logics, the "urban question"

as framed by Manuel Castells, is in a dire need of further reevaluation and retrofit, in tune with the present neoliberal times.

To elaborate further on the aspects of the present day "urban question", it is important to acknowledge that the social scientists like Castells, in the late 1970s and early 1980s were concerned with the *urban social change* based on: a) the crisis that was unfolding due to growing de-industrialization of the cities and, b) their commitments for emancipatory social goals, therefore, picking class-struggles oriented social movements over class-relations as guiding force in the socio-spatial inquiries. While the crisis tendencies of the capitalism and the urban social movements that emerge as a consequence of the former remain a constant, well into the present neoliberal times, we, simultaneously, are also witnessing a widespread phenomenon of crisis-induced urban growth and expansion. By growth and expansion, I mean to suggest the general, long term, macroscopic urbanization trends, and not a specific or a regional case on urbanization. In this sense, today a social scientist may feel that his hands are already full, that he has already a great deal to explain, in terms of why the recurrent crisis of capitalism, instead of arresting the growth, are making our cities grow further. If the socio-spatial forms are reflective or even constitutive of dynamic-interplay of the socio-cultural, political and economic power, the proper understanding of the urban growth processes can improve our understanding of the "crisis", "resilience" and "growth" aspects of the neoliberal economic processes.

Moreover, the ideas of *alternative city* or "just city", that the "urban question" in the 1970s and 1980s gave rise to, remains, at best, marginal as compared to the enormity of the present delocalizing, neoliberal, multi-centered, multi-nodal "urban growth" *question*, and at worst, fanciful, given the global experiences of such possibilities actualizing itself in socially substantial, meaningful ways. The understanding on "why our cities are growing", is crucial, and, is in need of our immediate attention, not because the ideological concerns for social emancipation is inherently flawed or unnecessary, but, because to have any meaningful social goals there has to be a good deal of clarity on how to approach the right kind of questions. The social phenomenon as they unfold need unsentimental analysis before we scrutinize them against the ethical, moral standards. It is in this sense that the "urban question" today finds a renewed sense of purpose and importance. Instead of looking for answers to the urban crisis, which in any case, have been far from forthcoming, that Castells also rightly observed, the "urban question"

today is about asking the right kind of questions. If in the 1980s Castells identified it within the domain of the urban change, today it pertains to the question of urban growth and expansion. The question, therefore, is: what had led to the massive *implosion- explosion* (Brenner 2013) of the processes of urbanization in the less-industrialized, postcolonial countries and regions, including, in my own case study, the Patna city?

The "urban question" today has three important dimensions that may have been inconceivable during the 1960s and 1970s. It pertains to:

- 1. the implosion and explosion of the cities into region-wide, expanded and extended, multi-centered, mega-metropolitan, urban agglomerations comprising several transversing and interconnecting zones having hundreds and thousands of residential and non-residential mega-structures and massive infrastructural systems. While the theorists in 1970s were grappling with the crisis and issues of de-industrialization in the cities of the global North, the urbanization, expansion and growth of cities continued, in significant measures, in the developed world, even after the *crisis*. But, more surprisingly, found some of the most virulent expressions in the low-industrialized, post-colonial regions in the global South.
- 2. the nature of the present-day, crisis-induced neoliberal capitalism that actively seek to disrupt and change the existing global economic and geo-strategic arrangements of the financial institutions and organizations in consonance with the strengths of the emerging market economies, and;
- 3. the level of advancements of information and communication technologies enabling mass surveillance on "*real-time*" basis, and also, driving *total securitization* of the life-worlds.

As a consequence of these three major realities of the contemporary human social existence, the role of the state vis-à-vis the big corporations, notably, financial and technological, has anything but diminished. Contrary to the textbook-version of the neoliberalism doctrine, a much better and stronger coordination of the two, across both sides of the Atlantic, is the general order of the time.

The Internal Factors, Beyond Subjectivation and Objectivation

In this chapter, I propose a line of thinking based on "how to think", that, phenomenologically speaking, seek to identify the *internal factors* detrimental to the groundings of the field of urban sociology. These *internal factors* should be viewed as the key *processual elements* that can be mobilized in a framework of empirical investigations of the urbanization processes under the present day neoliberal economic conditions. These *internal factors* are not pre-given or are foundational to the cognitive or social structures but arise in the efforts of the theorists and thinkers engaged in the field of contemporary urban socio-spatial investigations. These *internal factors* constitute cross-conceptual domains that bring together the multi-layered and multi-nodal processes of sociospatial developments circumscribed into field-relational, global system-oriented frames and also help to go beyond the binary thinking of subjectivation and objectivation. At the same time, these factors also recognized some broad postulates on the present day social realities.

What are those postulates that these *internal factors* recognize as critical to the systematic sociospatial inquiries? Are they concerning the role of power in society? It is based on an understanding that the *state* and the *capital* are two important sources of power that structure the socio-spatial fields of the human social interactions, activities and experiences. These two sources are historically mediated and culturally constrained. It also recognizes the need for a field-relational, *network-based* thinking of the urban socio-spatial formations. Manuel Castells (2004, 1996) suggests that the new, microelectronics-based information and communication technologies have led to the emergence of the network based social structures. In short, a network, according to Castells, is:

"a set of interconnected nodes. A node is the point where the curve intersects itself. A network has no center, just nodes. Nodes may be of varying relevance for the network. ... The network is the unit, not the node." (Castells 2004:3).

The three *internal factors* to the field-relational, network-based approach to the "urban question":

- 1. Gentrification, in general; Planetary Gentrification, in specific
- 2. The New Middle Classes
- 3. Collective Consumption

It is interesting to note that each of these factors has been developed in markedly ambivalent relations to the political economy traditions, in which they seldom occupied a core theoretical status, and yet, almost all important studies in the area of urban research, alongside and together with the neoclassical economic traditions, in the period following the developments in the 1970s and 1980s make substantive references to at least one of these factors. Pondering upon these factors individually would also reveal that these three intersect with each other in several ways, in order to create an ensemble of economic, cultural and political relations. However, surprisingly, not much effort has been made to utilize these intersections and relations to develop an urban theoretical lens for socio-spatial investigations.

Neighborhood: A Neoliberal Spatio-theoretical Imperative

Alongside the reasons internal to each of these three factors mentioned above, there is an overarching, encompassing reason that, in my opinion, inhibited the deployment of these three factors together for developing a distinct urban theoretical lens. It relates to the underdeveloped field- or networked- theoretical notion of the neighborhood spaces. In large parts, the neighborhoods are looked as built environment inscribed into various local spaces or localities. The theoretical building-blocks- the local, conjoined together to give rise to a sense of a rescaled spatiality called territorial, moving further up into an expanded, enlarged scale known as regional or national, remain mired into the Newtonian or quasi-Newtonian, absolute-space notion frames. Even in various relative-space based frameworks the basic premise of the absolute-local mirroring everything that goes inside, do not get questioned.

Therefore, what goes under the term *local/locale* in urban theoretical literatures and all that it gave rise to do not represent a field-relational approach to a theory of the space or space-time. Instead, it refers to an empty, *shell*-like space that can replicate itself to all conditions, with or without human social relations. The understanding of neighborhood as clusters of built environment for human habitation inscribed into a more fundamental empty space called *local*, and therefore, undifferentiated, and without being recast on the basis of the relational space theoretical notion, the term- *neighborhood*, remain, largely, a second order reality, while the term- *local* being the primary. The theoretical grip of the *absolute* and *relative* space notions and the term *local/locale* as its most fundamental and natural ontological product, capable of multiplying or mutating into rescalable spatial orders- the territorial, regional, and global, for

long inhibited the *relational*-spatial, fundamentally expressed *in* and *constitutive-of* neighborhoods, to occupy theory-attuned roles in grounding and directing human social inquiries. For the large parts, the urban research anchored on the neighborhoods remained theoretically fragmented and also maintained a kind of uncanny distance from one of the most important social theorists of the *field*-based, *relational*-spatial investigations, Pierre Bourdieu, even though, the neo-Weberian impulses with respect to the class differentiations and consumption practices structuring neighborhood developments seemed unavoidable.

Neighborhood notions are fundamentally constitutive of how different classes of people occupy housing spaces and how these spaces are structured with respect to the access to the transport and communication networks facilitating connectivity from the production/work locations, and other social and public goods and services like water, electricity, parks and playgrounds, rail, airports, schools, hotel and restaurants, markets and shopping malls etc. Neighborhoods are both differentiated and differentiating. As they structure the urban social, they themselves also assume distinctive forms. Therefore, the neighborhoods are both the empirical and phenomenological concepts. Today, however, there is a need to emphasize the phenomenological nature of the neighborhoods. In this regard, we are actually concerning ourselves not with the neighborhood *per se*, but with the *neighborhood changes*, where it takes a more integrated approach towards economy, culture and environment, which are, otherwise, considered as parts of the separate specialized domains/sub-disciplines of the political economy, social ecology and the political ecology.

With respect to the urban change and urban growth, the majority of the urban neighborhoods, occupied by the working classes, the lower and the lower middle classes, are susceptible to the gentrification or other kinds of voluntary and involuntary urban restructuring impulses. For long, the several concepts delineating the processes of neighborhood change have been found to be analytically wanting, inadequate or *chaotic* (Warde 1991). Gentrification, the most notable among them, has also been subject to great contestations over its analytical and theoretical elaborations. These contestations, though largely inconclusive, were representative of the urban historical developments in which they emerged and flourished. Amidst the greater possibilities of the better contextualization of these debates today, as compared to the period in which they began to unfold, one can also find today greater appreciation of some of the key points made

previously on these contestations. For example, the points that the role of state has been always important to the gentrification process and also that the interconnections of the production and consumption sides in the gentrification debates can be resolved at the higher levels of abstraction (Warde 1991), today appear more convincing and acceptable. This is, however, not to conclude that the debate itself cease to exist. In fact, through the proper contextualization in theory and social developmental history, the various aspects of the gentrification process can be effectively mobilized.

As the service-industry led urban change and growth of the present neoliberal times have allowed for better appreciation of the production and the consumption aspects of the gentrification debates, it, simultaneously make a renewed case for the refashioning of the theoretical and the methodological dimensions of the debate. Today, for example, a more open discussion of the roles of the state and the market with the help of numerous comparative studies and the plethora of empirical data and information media allows transcending some of the earlier concerns with the theoretical standpoints, or the East-West binary thinking.

The spatial theoretical notion of neighborhood become important in this regards, as in my understanding, the gentrification debate can be satisfactorily contextualized by placing them into a neighborhood notion offering greater potentials for generalizability. That is, by placing the gentrification processes into an appropriate space-time framework of analysis we may expand the field of neighborhood change to include those questions that are important today, and discard those that we may find distracting or unhelpful. For example, today we may find the question of the "inner-city revitalization", strongly present in the earlier studies with regard to the forms and processes of gentrification, may not be as significant to the present-day gentrification studies in the face of the planetary implosion-explosion of the multi-centered metropolitan regions, as the question of "revitalization" today is as much about the improving of the non-residential, public physical infrastructures (in multi-modal, IT-driven transport connectivity, utilities/servicedelivery systems, through the software/control system architectures like Supervisory control and data acquisition (SCADA), enabling remote and centralized supervisory control, that involve data and complex algorithms driven functions; and wireless and/or internet-based communication, geared towards the seamless flow and networked relations across different zones and regions, and having potential for future integration, upgradation and migration), as is about

the private appropriation of the scant urban spaces close to the older city-areas. For example, in the case of Patna, a news-report published in August 2016, mentioned that, "The SCADA-DMS Project is undertaking Power Monitoring, Control and Modernization of the Patna Electric distribution network." (Gupta, Anand. 'Hon'ble Bihar CM Nitish Kumar Inaugurates SCADA-DMS Project Control Centre implemented by Schneider Electric India' EQ International, Aug 19, 2016)

This report clearly indicates the intensity and scope of technology owned by private corporations for-profit reaching to the different types of end-users/customers (the state, communities or individuals) has increased manifolds, in the manner that the earlier understanding of neighborhoods as insular, static category, also divided along old/new or inner/outer binaries, must be reimagined today as networked and interconnected spaces of flows.

As the previous discussions on the neighborhood change had the non-relational spatial notions implicit in them, this needs to be reframed against the relational spatial-theoretical notion of the neighborhood. In order to put the two notions in contrasts, I would like to go back to one of the important innovations by Manuel Castells on the understanding of the changing aspects the production and the consumption that were equally central, and yet inconclusive, to the gentrification debates concerning the neighborhood change for nearly half a century.

Castells in his keen observations of the transformation of the urban forms and the associated meaning of the urban from the 1960s to the 1980s in the industrialized world, recognized a general urban crisis in the domains of services, housing and social control and also found the state to be actively involved in managing the urban crisis that led to the further politicization of the early types of urban movements (Castells 1983:312). The tow-fold response of the dominant interest Castell's argued, were the *political* that includes both repression and integration, and the *technological*. The technological response led to shifting gears towards new systems of management and new techniques of production, which he called as the informational mode of development. (ibid). "Thus, the informational mode of development created the conditions for a new restructuring of a spatial form in crisis, and at the same time it needed new spatial conditions for its full expression. The main spatial impact of the new technology, based upon the twin-revolution in communication systems and the micro-electronics, is the transformation of the

spatial places into flows and channels- what amounts to production and consumption without any localized form." (ibid).

Neighborhoods and the Process of De-localization

The spatial-theoretical imperative of doing urban sociology in the present, neoliberal times, I argue, calls for the shift from the absolute, deontological locale/local that is often rescaled and relativized into higher orders of spatial complexities to an ontological, relational local called the neighborhood. However, this shift is not straightforward, and involves the theoretical and the cultural-historical underpinnings. In the former, it emerges as a factor of human consciousness making sense of the surroundings that we socially and historically inherit and navigate. We, as social actors, abstract meaning from our concrete experience of spatial forms, eg., neighborhood, than from formless abstractions, that is, the local. Historically, as Castells argues, it is mediated by a process of *de-localization* of the practices of the production and consumption. However, this technology-led delocalization process as a factor of transformation of the spatial-places into flows and channels, with which the present day neighborhoods or the neighborhood-relations may be identified, is mostly associated with the production and consumption involving the masses. Simply put, as long as the production relations were locally organized and, also, the consumption practices didn't override the logic of the locally interconnected flows and circulation of goods and services through aggressive marketing under monopoly capitalism, the spatial forms could also tend to be localized. But in the absence of the localized production and the associated consumption practices, the spatial forms rushed towards conformism, uniformity, standardization, and total commodification. Neighborhoods became their most notable reflections.

In terms of resisting their own subjectification to these spatial transformations, the dominant classes, however, while designing the spatial process, exercise some limits on the *de-localization* of the production and consumption which, according to Castells, are summed up in the four points (that I have further shortened, in fewer words):

- 1. An enormous amount of the capital stock is in fixed assets.
- 2. Some cultural institutions, historical traditions, and interpersonal networks in the upper echelons of the ruling elite must be preserved and improved. The spatial process that the dominant has designed to deal with these two problems is a well-known device: urban renewal.

- 3. Yet the information mode of development requires some centres where knowledge is produced and information stored, as well as centres from which images and information are emitted. So universities, laboratories, etc., must still be spatially concentrated.
- 4. Furthermore, the information mode of development is inextricably intertwined with the industrial mode of development. Thus, factories, fields, housing, and services for workers and peasants must have some spatial organization. (Castells 1983:313)

The dominant class strategy of delocalization of the informational mode of production at the level of the world accelerated the global division of labor and transnational flow of capital, in the manner that ushered a tendency towards disconnection of the people and the spatial form. This, together with the crisis of spatial meaning for the large majority of the urban working classes, led to one of the greatest paradox of the present urban age, put succinctly by Castells: "Not that people will not be in places and the cities will disappear; on the contrary, urbanization will accelerates in most countries and the search for housing and services will become the most dramatic problem facing people." (Castells 1983:313-314).

Undoubtedly, we need to explore the aspects in which a supposed meaninglessness of existence and reality are counteracted by the social actors working on their physical environment in communion and affective solidarity but also in contestations and revolt against the powers that be, for seeking control over their destinies, including the after-life goals, the broader aspects of meaning raised by Castells, to a great extent, seems worthy of our attention today. He observes that,

"The new urban meaning of the dominant class is the absence of any meaning based on experience. The abstraction of production tends to become total. The new source of power lies on the control of the entire network of information. Space is dissolved into flows". (ibid).

Subsequent to the above remarks, Castells goes on to explain how the projects of urban restructuring of the dominant classes meet with the active and passive, reactive and proactive modes of oppositions and contestations by the dominated classes. Today, in my understanding, both these modes of contestations should be seen as interrelated processes combining the rational and the affective. The speculative logic of the present day neoliberal global economic system as a force of sociospatial organization has put even our imaginations, besides the actions, on the alternative urban living and cities, on a perpetually deferral, and seemingly unrealizable mode. The choices that are presented, such as those between sustainability and equality, or, between justice and equality, or, between community and individuality, or, between mobility and longevity, are hardly the *choices* that we should be making today. There is a mad rush to cities

without any clear basis to what should be the threshold for pollution of water and air, loss of arable lands, and use and spread of harmful chemicals, loss of open, non-commoditized spaces, and damage to the wilderness and the natural geological features of the planet by means of resources extractions and diversions. More than ever, the human beings today need to reorient their focus on "how to think" and "how to learn", than "what is to be done". The proposed learning-paradigm in this dissertation, in contrast to the wage-paradigm that can be loosely seen to mirror the political economy frameworks, need to be developed, in its own rights. That is, attempts should be made to create a semiotic field of learning universe combining the macro and the micro perspectives that involves the incorporation of both the rational and the affective in the development of the neoliberal subjects and, then, to understand the processes that mold and constrain our agency to accept from the desperate, neoliberal, market choices. Some of the conceptual aspects of these two approaches/paradigms framed in their mutual juxtapositions, will follow later, in this as well as in the next chapter, where the social importance of the built and historical spaces would be acknowledged as critical in the making of the "neighborhood" places, both as a complex network of social and spatial ties- the lived spaces, and the repository of architectures and monuments for the preservation, transmission and development of elite and/or vernacular aesthetics (see, Dolores, Hayden., 1995).

Similar to theoretical physicist Carlo Rovelli's quantum relational space, the *relational*-spatial manifests itself, socio-ontologically, either in the social empiricist Manuel Castells' or field-relational theorist Pierre Bourdieu's understanding, in some kind of interactional frameworks, that is, either in networks, or clouds or field-relations, where interaction takes places due to communication or relay of information encrypted in language, codes, or signs, among receptors capable of understanding or decoding them and, thus, are linked or tied to a common protocols or practices/*habitus*. These interactional frameworks, though organized through power relationships, cannot be measured on the line of the traditional bureaucratized or hierarchized social structures. Instead, it is the "*rules* of the game", the common protocols of communication that bind the various nodes in these networks, and therefore exclude all others, by the same virtues.

The network-based thinking is crucial to understand how *territorialities* get formed and also how these are caught in the perpetual process of reorganization through deterritorializations. It is

relative as well as relational at the same time, but never absolute. Either from the point of the multiple centralities or the decentralized nodalities constituting the relational network-structures, the *territories* are always conceived in the minds of the social actors and are, therefore, important conceptual-cum-socio-ontological categories in which the notions of subjectivation and objectivation merge. The territorial mapping, in sociological terms, involves mapping of the ways in which social actors interact with each other and with the physical spaces that, simultaneously, bestow on these spaces the imprints of those interactions. Lived-spaces or social-spaces are, therefore, interactional space. Signs and symbols are important referents in these interactions as they help in the transmission of cultural resources, maintenance of order and also in navigating the field of interactions. And, by the same token, also helps to seek subversion or disruption of the existing networks, patterns and orders. Any potential for interaction, therefore, involves *learning*. The capacity to learn, though innate to social beings, simultaneously, need some protocols to be observed or followed, based on the degree of complexities involved. It is also additive and cumulative. Like science, newer learning base itself on the previous learning.

Mobility, (In)-Security, Territoriality: The Learning Field

However, the kind of learning-field that is critical to our understanding of neoliberal learning-paradigm relates to the one of the most innate and structural human socio-psychological nature: security. In fact, it relates to the inter-working of three concepts: mobility, (In)-security and territoriality. The notion of territoriality as a network of relationships based on neighborhoods as its key nodes (instead of the "unit"), then, go on multiplying through inclusion and exclusion of more of the different nodes and intersections that connects to those internal to each of the territorial constructs or networked-mental mappings. The various nodes relate or are linked to neighborhoods, playgrounds, streets, transits, markets, shopping arcades, or cross-sections of roads or pavements and other impressionable physical-spatial encounters. Here, what counts as internal and external are primarily based on the notion of security, and, therefore, is never fixed or absolute. Securitization as a dynamic process of externalization and internalization of bodies, actors, and effects, is depended on human social interaction with the aid of domestic/embodied and non-domestic/non-bodily technologies, including language and communication technologies, signs and symbols, and values and norms. These intersecting nodes are generative of mental loops, to be considered as the primary spatial vectors enabling mobility and mobilization of

thinking-action bodies, that combine at their points of intersections for the purpose of territorial spatial mappings- to be internally relativized on the basis of their sensual/perceptual order of securitization. These loops should not be viewed as any permanent or fixed spatial structures. Instead, it arises in each quanta or grain of thoughts that involve a desire for action, of which *mobility* is the ideal type action. This ideal type of mobility is framed upon the relational movement understanding of Erin Manning (2009). She develops the notion of the incipient action as a category through which one may look at mobility as a site where consciousness is activated into the bodily functions before actualization of the movement. However, the actual movements are passage in the streams of incipient actions whose presence is only felt in the passing, *after* the occurrence. Explaining this relational movement notion, she writes,

"To move is to engage the potential inherent in the preacceleration that embodies you. Preaccelerated because there can be no beginning or end to movement. Movement is one with the world, not body/world, but body- worlding. We move not to populate space, not to extend it or to embody it, but to create it. Our preacceleration already colors space, vibrates it. Movement quantifies it, qualitatively. Space is duration with a difference. The difference is my body-worlding, always more than one. Our embrace quickens the molecules that compose us. An adaptation occurs—we begin to recompose. Volumes, always more than one, emerge from surfaces, recombining with lines, folding, bridging, knotting. This coming- together proposes a combination of form- forces where preacceleration potentially finds passage. The passage flows not in a preinscribed direction: this is an intensive flow. Preacceleration: a movement of the not-yet that composes the more- than- one that is my body. Call it incipient action.

Two bodies: compositions—actual, virtual, organic, prosthetic. As we move with them, remember: there are always at least two, even when you perceive one, connected. Connection, not the locus of all beginnings, but the invisible-but-palpable link between bodies. To move together, the connection must be alive. As they move, they reconnect. Call it a relational shape-shifting." (Manning 2009: 13-14).

Unlike the Marxist political economy oriented *wage-paradigm*- line of sociospatial thinking, oscillating between the absolute and the relative space frameworks, thanks to its persistent metageographical underpinnings, the *learning-paradigm*- line of socio-spatial thinking is more relational, as it may also be relativistic. The human social contexts involving everyday lived experiences of mobility, security and territoriality mediated by the learning-technologies of life, either domestic or non-domestic, placed in networks of spaces towards their perpetual unfolding or becoming-spaces, through interactive-communicative actions provide richer canvass in which both the spheres of work and the spheres of non-work merge, so that the search for meaning can be made more open to the subjects of the present day neoliberal spatial restructurings and development. This line of socio-spatial thinking that looks at social realities in their

fundamentally non-deterministic (non-wage, non-labor-time) or probabilistic aspects, can beautifully relates to the quantum relational space understanding of Rovelli, though both are fundamentally separated by two exclusively distinct physical worlds. The principles governing the world of the particle physics may not mirror the rules concerning our human social existence but the foundational values of both can inform each other for proceeding towards a better science of society. In this sense, we have certainly graduated or are in need of graduating from the 19th century scientism and deterministic fallacies of the scientific inquiries. Working through the social science framework that are increasingly critical of the absolute-space notions are critical to our present-day, crisis-induced, neo-liberal spatial restructuring of the life-worlds.

Dwelling further on the notion of discrete, granular spatial, relational, intersecting *mental loops* in dependent arising with the notions of mobility, security and territoriality, we may think of these loops as rings or spin-foams or clouds interconnected with several such loops in a sociospatial orientation of "incipient movement" or "incipient action". Mobility is an act in relation-with/*against* the field of gravity that involves, in its ideal-type understanding, a patterned and regular loop-like movement. At the processual level, where the subjective and the objective work in tandem, these mental loops involve twin logic of burning and conserving, to be logically complete or folded. One may also relate this twin logic with Gilles Deleuze's discussions comparing the two seemingly related conditions of the "exhausted" and the "tired". Deleuze (1995) in his paper titled, "The Exhausted" states:

"Exhausted is a whole lot more than tired. "It's not just tiredness, I'm not just tired, in spite of the climb". The tired no longer prepare for any possibility (subjective): he therefore cannot realize the smallest possibility (objective). But possibility remains, because you never realize all of the possible, you even bring it into being as your realize some of it. The tired has only exhausted realization, while the exhausted exhausts all of the possible. The tired can no longer realize, but the exhausted can no longer possibilitate." (Deleuze 1995:3).

Incipient motion, thus, involves the working of the consciousness of thinking bodies, the "I", for mobilizing the potential energy into kinetic energy, where the possibility of realization lies not in the reason (I think, therefore, I am) alone, but in the will to reason (I will, therefore, I am). That is, to be willing to project the physical-Self *outwardly/territorially*. This projection needs an advance-confirmation, even as it is to be realized, which leads to the rise of a recursive *pattern*, or a *recurrence*, in the form of the discrete but interconnected mental-loops. However, the objective, final-confirmation or the realization of the outward projection of the Self lies in the

collapsing of the mental loops registered through the twin *adjectives*: the tired and the exhausted. This rise and collapse of the mental-loops form an epistemic ground on which the notion of the discrete relational space rests, but in the absence of the thinking body there isn't any notion of space.

It is the outward projection of these hundreds of thousands of mental loop-like formations that in their various permutation and combination enable territorial mapping and eventually their sociospatial *security-mobility-territory* ensembles. Certainly, the technologies, more rudimentary like shoes, sticks and magnetic compass to advanced GPS devices and Internet-of-Things (IoT) based electrical vehicles, play important role in each individual and social context, and, therefore, determine the life-world and life-chances of all of the member of the field-relational, or networked-relational social systems. In order to further understand how the discrete spatial *mental-loops* may actually correspond or relate to, we may find the *relationscapes* notion of Erin Manning- "the sensing bodies in movement", useful. Explaining the inner workings of the relational spaces or *Relationscapes*, as she calls it, Manning (2009) writes:

"The dynamic form of a movement is its incipient potential. Bodies are dynamic expressions of movement in its incipiency. They have not yet converged into final form. Throughout *Relationscapes*, I refer to bodies as pure plastic rhythm. I propose that we move toward a notion of a becoming-body that is a sensing body in movement, a body that resists predefinition in terms of subjectivity or identity, a body that is involved in a reciprocal reaching- toward that in-gathers the world even as it worlds. As thought shifts toward expression, it moves through concepts in prearticulation. How thought becomes concept is parallel to how duration becomes experiential space-time." (Manning 2009:6).

Having understood the co-arising of mobility, security and territoriality, with the neighborhood relations being the key nodal intersections, we may now think of the ways in which the aspects of security or insecurity in human beings with respect to their immediate and extended social environments are weaponized by the neoliberal capitalism and the neoliberal state for their own perpetuations. Today, the neoliberal subjects consume not just *commoditized space* but also *securitized space*. The more the space is commoditized, it proceeds, simultaneously, towards total securitization of space, marked by private control over public spaces like roads, parks, streets, and housing apartments, most likely in active cooperation of the state and its institutions. The gated neighborhoods are its most striking features. Privately owned public schools with their fleets of private buses for transportation of children to their door-steps/neighborhoods are another common feature of securitized existence.

Except for those manners in which the schools are marketed or are branded for catering to a distinct social class, which in turn may contribute to the differentiation in educational outcomes, the securitization aspects of schools are standardized to such an extent that the most of them are starring towards a securitization having totalizing effects. The story is similar for the gated housing, neighborhoods and corporate offices. Delocalization of the production and consumption are very much part of this process of commoditization of mobility and space. The near total loss of open, free urban space is the most important outcome of this process. The process of gentrification as a powerful force of neoliberal capitalist expansion is both, the consequence and cause of this vicious trend of commoditization and total securitization of urban spaces. Based on these aspects, we may draw some useful contrasts between the delocalized, neoliberal, urban neighborhoods with the localized neighborhoods, to mark the processes of ongoing spatial restructurings as they are unfolding in the postcolonial, third world cities. These contrasts can be both: physical, material and mental, symbolic-cultural. The connections with the public landscape memories connecting the past to the present, the patterns of changes in family or personal behaviors like dining-out or night-out, employing domestic helps, or increasing dependencies on home appliances, spending less on local market or locally grown food stuffs and more on items involving complex networks of supply chains, using manned security or surveillance technologies and instruments, these all together can help us understand the degree to which a neighborhood is mimicking the tendencies, life-styles, values and practices of a gentrified neighborhoods.

However, as we put the territory-security-mobility ensemble at the forefront of the understanding of the neoliberal urban forms and processes, we should also, simultaneously, remember that this ensemble is an innate, perennial functional vision of the urban landscape spaces, tilting towards any of the three roles while also seeking to strike a balance with the other two in order to grow and prosper. Here I would like to allude to the two similar ways in which this ensemble can be animated towards its more rooted functional roles in organizing the dynamic life-world of city-like urban landscape spaces. The first way pertains to the domain of thought with the *conduct* of the men (or, the *civitas*) as its object, in which Michel Foucault brings together *security, territory and population*, referred as a "conceptual hinge" that helps to conjoin the enthical and the political axes of his fascinating mode of thinking evolved into a body of knowledge known as the *governmentality studies*. (Davidson 2009:xviii-xix).

The second way refers to Joel Kotkin's (2005) three critical factors, namely: "the sacredness of place, the ability to provide security and project power and the animating role of commerce" that determine the working of cities, as complex urban systems geared towards regeneration and preservation, i.e., the overall health of the cities, (Kotkin 2005:xix-xx). With these factors present the cities tends to florish and when these weaken or go missing the cities decline or vanish. Here, the sacredness aspect of the place, through its religious, cultural and commercial built structures, links the dynamic process of territorialization (that is the infirmity of space) with the relatively fixed, refied imagination of the landscape, as awe-inspiring and evocative of civic patriotism. Defensive structures, mechanisms and systems that safeguard the lives and properties of the inhabitants from the raiders, marauders and the invaders and at the same time contribute to the overall law and order help cities to escape the flight of population, degeneration, chaos and decline. The ability of cities to conduct commerce shows the health of the *mobility* infrastructure and passage that the landscape in question is tied to and also offers the services of the same to the producers, sellers and the buyers. Archeological research also vindicates Kotkin's formulation based on his analysis of over five millennia of the rise and the fall of the cities since the earliest times. (Sabloff 2016/2008:71).

Gentrification Debate: Some Observations

Some studies around 1980s that attempted to synthesize or get a sense of direction from the various disaggregated study approaches to gentrification pointed to its limited analytical value and chaotic nature. Sharon Zukin (1987), in an article evaluating various forms and dimensions of the gentrification, began by describing the gentrification process as "the conversion of socially marginal and working-class areas of the central city to middle-class residential use", that "reflects a movement, that began in the 1960s, of private-market investment capital into downtown districts of major urban centers". "Related to a shift in corporate investment and a corresponding expansion of the urban service economy, gentrification was seen more immediately in architectural restoration of deteriorating housing and the clustering of new cultural amenities in the urban core." (Zukin 1987:129). In the same article, Zukin recognized the unfolding of the gentrification for much wider and serious applications in the study of the urbanization processes. In another study, Zukin (1988/1982) pointed at the lower middle class, instead of the working class, being victim of the gentrification process (Zukin 1988/1982:5-6),

that shows that the concept has been used in ways which indicate the class differentiation and class substitution as important aspects of the understanding of the gentrification process and the urban change.

However, he pointed towards the wide methodological disagreements among the different streams of analysts such as the neo-Marxists, the neo-Weberians and also, what he calls as "mainstream", leading to a stalemate on empirical research. He suggested a synthesis of both the economic and the cultural analysis that highlighted the importance of "the cultural constitution of higher social strata in the advanced service economy", and also, underlined "how space and time are used in the social and material constitution of an urban middle class." (Zukin 1987:130).

As more and more cities deindustrialized and, networked-together by means of advanced transport and communication technologies with the new urbanizing spaces, to be reorganized into the "new production" logic for mass-based, collective consumption of services, leisure and entertainment, the urban spaces themselves became commodities sought for both symbolic and material gratification, to be sold and resold to the ever present and willing gentrifiers coming from different, also sometimes unexpected, regions. Gentrification was to stay with logic of its own, that is, to expand into new neighborhoods and territories for cultural and material appropriation, leveraging not only on the basis of rent-gaps or supply-side factors, but also on the basis of an ever-expanding pool of willing gentrifiers reading to move-in. This willingness involved a myriad of social symbolic and cultural and affective considerations that at a conceptual-analytical level create a powerful semiotic field of meaning and identity-making processes.

A stalemate in the late 1980s that hit the empirical research on gentrification was despite the fact that for the past 10 years or so, new works expanding on the scope of gentrification were regularly forthcoming. As rightly pointed by Zukin, this stalemate pertained to the methodological logiams. In my understanding, the enduring legacies of the city-centered study practices and absolute-space notions could not adequately disentangle the dynamic-social from the fixed-spatial, and as a result failed to retrieve a phenomenon expanding fast into new urban spaces beyond the Global North, that includes also the suburbs and the new towns. From the beginning of the twenty-first century, there was a growing recognition that gentrification has gone global. However, the some of the leading investigators of the globalizing gentrification

processes have cautioned against casting these movements in a linear North to South or West to East trajectory, instead, points towards a much more complex story. (Lees et. al 2016).

Loretta Lees her collaborators, who forwarded a thesis, called "planetary gentrification", based on their empirical research in several parts of the emerging and globalizing market economies, point towards the hegemony of Euro-American industrialized city based approaches to gentrification studies. They argue that in much of the discussions on the "global gentrification" these hegemonic notions of the Western urban experiences are uncritically deployed to the urban processes in the East and the South, from which their various globalizing dimensions are extrapolated. Lees cited various studies, e.g. Ruth Glass (1964), that pointed to this hegemonic presence of Euro-American urban knowledge and discourses.

While underlining some of their own methodological underpinnings on the unpacking of the "global gentrification", and reformulating it under the term, "planetary gentrification", Lees, et.al., forwarded the argument that gentrification process is increasingly turning influential as today it unfolds at a planetary scale. (Lees, et.al., 2016:4). Considering the existence of the different, contextual notions of urbanism, informality and neighborhoods under specific state developmentalism intertwined with advanced neoliberalism in the postcolonial, lessindustrialized geographies, Lees calls for an ontological awakening that is receptive of the phenomenon of gentrification unfolding in connection with its globalizing dimensions, but also away from it, by ways of its 'force' reverberating across different city or urban restructuring mechanisms over past several decades all over the World. "We show that gentrification is a phenomenon that cities worldwide have experienced (it is not totally new in the twenty-first century to the global South) and are experiencing (through different types of urban restructuring)." (ibid:5). The phenomenon of gentrification provides a medium to overcome the "asymmetrical ignorance" (Robinson 2003) emanating from the division between urban studies and theories focused on the West and development studies focused on what were once known as "Third World Cities".

By putting their basic definitional understanding of gentrification to be similar to Zukin's (2010), in that, it is a "displacement process", where richer people take the place of the poorer people, and diversity is substituted for social homogeneity, Lees and her co-authors make strong case against this kind of displacement or "class substitution" as this process tends to increases the

displacement pressures mirroring (un)tenability of social diversity and (un)livability of heterogeneous classes. With the change in the neighborhood characteristics and the resultant course of extinction to the way of life of the previous inhabitants, the cities get reorganized in more unjust ways, in which, ironically, gentrifiers own desires for diversity of urbanity in terms of the actual realization of outcome get reduced into a sanitized version of it. (Lees, et.al., 2016:9-10).

Gentrification studies, Lees et al. (2016) argues, has long been at the forefront of opening up and moving beyond the traditional dichotomies of urban studies, reflected in the old binaries of city and suburb, urban and rural, but also between North and South, developed and developing worlds.

The Planetary Gentrification

The planetary gentrification, thus understood, is not simply "gentrification gone global", instead, acknowledges that the traditional dichotomies are getting increasingly unsustainable and the complete urbanization of society as envisioned by Lefebvre (2003), or what Brenner and Schmid (2012) call as the "totalization of capital", are unfolding at the planetary level. Pondering upon the debate between the roles of the suburbanization at an expanded scale (Roger Keil 2013) and the production of multiple centralities as preferred analytical lens for globalizing gentrification processes, Lees et al. (2016) argue that the gentrification process unfolding at the planetary scale has led to the emergence of contentions not only at any single site in the city as traditionally understood, e.g., inner-city, but at the multiple sites, both in the Global North and South. The intensification of the spatial dimension of capital accumulation being the underlying logic of this pluralization of contested sites within the cities undermines the historical differentiation of the suburban or rural vis-a-vis the urban, as the former undergoes the similar restructuring process amounting to the development of the concentrated urban forms along multiple centers and subcenters. Therefore, they also argue that the focus of gentrification studies today should be (a) around the contestations wherever it is emerging and not around the fixation with the earlier logic of inner-city renewal/revitalization, (b) on analyzing the different aspects and capacities in which the state and capital are contributing to the class substitution of the settlements and neighborhoods, and (c) on mapping how the economic restructuring is deepening the poverty

trap of the urban poor and finding new victims among the fractions of the vulnerable middle classes. (Lees, et.al., 2016:11).

The growth of the new middle classes contributing to the ever-expanding pool of gentrifiers, in turn, offer a new dominant logic of remapping, rescaling and reorienting the accumulation strategies along the processes of gentrification that are comparable only with the other dominant logics like mega, inter-zonal, inter-regional transport corridor infrastructures or large scale urban territorial restructuring or mega redevelopment and resettlement projects. Apart from those based on the scale or the magnitude of accumulation potentials, this comparison of gentrification logic with the other dominant spatial capitalist logics point to the relative nature of the risk assessments and resilience inducing capacities to the every capital invested. Gentrification as logic of capital's growth and expansion bestow some kind of stability and predictability into the illogic of other riskier modes of investments. It is this inherent logic of over-spatializing capital investment at multi-regional, large, expanded scale for less predictable future returns versus the gentrification at concentrated multi-centered metropolitan regional levels for assured/foreseeable capital infusion into the financial systems, that the states seek to actively promote the gentrification processes though both planning and non-planning based strategies.

The New Middle Classes, the "Welfare-like" State and the Consumption of Spaces

Based on the insights from Claus Offe's (1984; 1985; 1991) contributions towards the understanding of the relationships between democracy and capitalism, and on the basis of his accounts of the politics of welfare provisions in Germany, "an account that has implications for all European welfare systems", Martin O'Brien and Sue Penna (1998) notes:

"The fragmentation of classes through welfare state structures generates four winner and loser groups. The first is a privileged group of highly paid workers who enjoy job security and excellent occupational benefits; the second, largest, grouping is also in stable employment, maintains traditional family structures and benefits from the state insurance system; the third group consists of those out of work for various reasons but still eligible for in the state scheme, who have less political clout that the others and whose benefits are more vulnerable to cuts; the fourth group – divided into two subsets – consists of, on the one hand, a disparate category of persons, reliant on means-tested and residual state provision, and, on the other, a group of refugees, immigrant workers, illegal entrants and asylum seekers who are the most vulnerable of all, mainly excluded from welfare provision altogether. This fragmentation generates a number of political divisions and axes of conflicts, so that the main lines of conflict are not capital versus labor but organized workers against unorganized workers, women, children, and families against

male-dominated and employment-centered corporate bodies, employed against unemployed, and so on." (O'Brien and Penna 1998:149-150).

The 'two-thirds' society, consisting of O'Brien and Penna's (1998) first three fragments or groups (quoted above) that are clear or potential beneficiaries of the state economic policies, and, where one third of the population is excluded from the growth and economic rewards (ibid), broadly corresponds to what Claus Offe and Volker Ronge (1982) termed as the *capitalist class society*. (Offe and Ronge 1982:250).

In order of understand why gentrification is increasingly becoming a significant force of the capitalist, "free-market" re-organization of the city/urban spaces in the third world liberal, plural democracies like India, we need to understand that how the neoliberal economic reform policies in India since the early 1990s, have led to the development of what can broadly correspond, now, to a *capitalist class society*. However, the most important marker of this *society* is in the realm of consumption, and not production. In India's situation, it is the ideology of consumerism that is playing the domineering role in determining the economic policy framings that marks both the continuity (middle-classedness) and the newness (of this middleness). The *continuity* amidst the newness aspect can also be grasped by an understanding of the concept of *social class* (in its relation with *social capital* and *social institutions* see, Portes 2010), the use of which, with a partial exception of the social ecologists, has been largely avoided by the contemporary macrosociologists (Portes 2010:8).

This development of capitalist class society in India, unlike the *industrialization-route* it took in the West, has been mainly on the basis of the phenomenal expansion of the intermediary classes, also, known as, the middle classes, or the new middle-classes. This "class-longitudinal" separation or fragmentation is broadly based on the degree in which certain *state welfare*-like provisions or other economic reforms or the affirmative action programs, benefited previously to a section of population to give rise to a narrow, yet recognizable "middle-class" in some Indian states/provinces. In the North versus the South context, the gentrification literatures also make this distinction (Lees et.al. 2016:83). Lees et.al. notes,

"Importantly the term 'new' middle class in the literature on gentrification from the global North refers to a post-industrial, postmodern, 'new' middle class whose values and lifestyles were very different to the traditional middle class. By way of contrast, the term 'new' middle class in the literature on gentrification from the global South refers to a newly emerging or expanding,

modernizing middle class with new spending power and associated interest in consumerism. Europe and North America have had welfare systems in place for longer than the 'Third' World, as a consequence the middle class is better established there, and has reproduced and mutated (fragmented) over time. By way of contrast, an Asia and parts of Africa the emergence of the middle class is coincident with the post-1970s periods of rapid economic growth with much improved social access to state- and privately provide welfare." (ibid.).

While consumption remains the key to the understanding of the "newness" of the middle classes, equally important is to explore how certain commodities are valued relative to each other and how do these connect with different fragments of the middle classes, for the different fragments display different modes of negotiating their values and lifestyles and also their degree of resilience to maintain their new spending power also differ widely. In the regions like India where consumerism as an ideology of the new middle-classes, emerging in the post-liberalization era, coincides with the staggering rise in the collective consumption in modern, urban spaces for housing, also means bitter urban political contestations and a more divided and segregated (by implication also, securitized) city-spaces.

While the "rise" of the "Indian middle class", at a regional level, is not much doubted, the longevity and the nature of this "rising" trend are debated as some of the observers of the capitalist transformations contradict the development at the global scale. Globally, some argue, that the band of the middle classes seem to be narrowing such that the more and more population are getting sedimented at the bottom, resulting in a structure that no longer resembles a "pyramid" but increasingly and "hour-glass". Saskia Sassen's (1986, 1987, 1991) "polarization thesis" in the context of the growing social divide based on the polarization of the occupational and income structures along and also within the Global cities, is one such example. Several case studies, however, contradict Sassen's thesis as a true description for all regions and present evidences of the inter-regional or intra-regional variations. (Hamnett 1994).

In India, this debate revolves interestingly around the question of sustainability and resilience of this rise of the middle class, with the most immediate, practical implications for the real-estate sector, as the part speculation-based "India Story" has been, in a big way, packaged and sold to the global real-estate and investment firms for inviting the partnerships and/or investments, for the "Betting on the Future", by the local builders (land mafias themselves, in many cases) having men and muscle clout and nexus with the political establishments, local bureaucracies and the land mafias. (Searle 2016).

My intention here is not to delve into making a case for, or, against the "polarization thesis" or the "disappearing middle". Instead, I intend to bring the third fragment or group mentioned above by O'Brien and Penna (1998), i.e., "those out of work for various reasons but still eligible for in the state scheme, who have less political clout that the others and whose benefits are more vulnerable to cuts", in the sharper focus, for although they are part of the *capitalist class society*, yet a great majority of them in India, the marginal farmers, the underemployed youths, the petty producers, the shopkeepers and road-side vendors and sellers, the small traders, the sex-workers, the artisans and craftsmen, the urban working classes engaged in the informal sectors, together constitute low-skilled, less-educated workers who are vulnerable to the crisis cycles in the national or global economy and are trapped in a vicious cycle of low income and poverty and, therefore, qualitatively do not differ much from the fourth fragment of group and are prone to the downward mobility/marginalization. (See, also Lee, Kim-ming. Et.al 2007). By her term the "aspiring and arrived middle classes", Brosius (2010), in her book on the India's middle-class, in the discussion parts subtilted as "Moving Down and Out: The Fear of Falling", also explains fairly the same phenomenon. She writes:

"In the period before the global economic meltdown, the notion of 'India Shining' not only shaped new forms of confidence but also new fears. Undoubtedly, the fears have multiplied since 2008, when economic crisis also became a 'hard fact' in India. The fear of falling behind or losing ground and thus one's membership in the middle classes is ever present and haunting for many members of the aspiring and arrived middle classes. It has bitter connotations for many. Many of my informants highlitled the speed at which globalization has 'taken over' the Indian subcontinent and ways of life, and that some people's salaries had increased breathtakingly. It appears as though there has not been sufficient time to react adequately, with a cool head. Either one managed to jump on the train or was left behind. This is how many informants described the experience of economic liberalization. Several fears can be distinguished: first, of other upwardly mobile social groups claiming access to the same status domain; second, ofnot being able to compete; third, of failing in social and business relationships, and fourth, that one's competencies were recongnised or treated 'fairly' in competition contexts." (Brosius 2010: 18-19).

In India, the three major factors: (1). the later days educational gains made by the class of agricultural tenants and share-croppers, who benefitted earlier from the Zamindari abolition and tenancy reform laws, and also from the "green revolution", (2). The various affirmative action laws to ensure the representation of the marginalized and the depressed classes in the government jobs and education, and (3). the reforms for the political decentralization and democratization in both the urban and the rural areas, specially the 73rd and 74th Constitutional Amendment Acts, 1992, led to an upward mobility of a significant population. These

developments helped many to break the vicious cycle of low-income and poverty traps, as the liberalization of economy post-1990s and the information and communication technologies (ICT) led growth of the IT and the IT-enabled services sector, opened employment opportunities for the lower classes' youth with the technical, computer and English education (popularly called as the "merit"), but also experienced serious limitations in terms of further reach and expansion to other members of the lower, working classes. The landless workers and the urban poor, as a result, constitute a great majority of this poverty trap, primarily because the lack of industrialization and low-levels of manufacturing sectors growth made these low-skilled, low-educated populations ineligible for steady income and gainful employments.

This situation, moreover, didn't arise overnight but was due to the nature of developments in the periods soon after the Independence. D. D. Kosambi (1954) in a *Monthly Review* (New York) essay titled, "Notes on the Class Structure of India", recognized some of the basic elements structuring the social and economic landscapes, also having potential to influence the course of the future growth trajectory of India. He notes:

"The government today is undoubtedly in the hands of the bigger bourgeoisie, a fact which is shown no less by its personnel than by its policies which favour Big Business and impose only such restraints as serve the interests of the sub-class as a whole and prevent any single capitalist group from dominating the rest. Moreover, there is no question that the big bourgeoisie wants industrialisation." (Kosambi 1954).

While India lagged significantly behind other post-colonial counties, like Brazil, or China, to expand its manufacturing bases, both for domestic consumption and exports, by the late 1980s, the real-estate sector in housing emerged as "industry", open to the private realtors and free from the monopolistic control of the government. This brought both the production and consumption of spaces into an openly contested terrain of capitalist gains, thereby making the state's tightrope walk of rebalancing between the interests of the big and the petty bourgeoisie a more difficult, and therefore, insidious affairs. The different parts of India based on: (1). their level of secondary and tertiary sectors' growth, (2). the nature of land-relations and (3). the nature of provincial political processes, in the processes of their unfolding, developed different mechanisms towards the conversion of land into the real-estates. In Bihar, even though the nature of petty production in agriculture remained significantly higher, the land relations faced lesser difficulties to migrate fully along the capitalist lines. The remarks made by Kosambi (1954) also pointed this difference

early on. Kosambi noted that in the Gangetic basin the process of the liquidation of feudalism has witnessed a simultaneous process of the rise of a new class of capitalist landlords and well-off peasants which shows that in a significant manner the feudal wealth got transformed into capital, "either of the owner or of his creditors" (Kosambi 1954).

Patna: A Case for Planetary Gentrification

The Gangetic plains are the urban sociological enigma, similar to the coal mines region of Dhanbad in the undivided Bihar, that has never been attempted in a systematic manner, for the nature of the city and the urban in both these regions are very different than what we generally understand by both the terms. Just as the rural surrounding/local contexts of mines (both opencast and underground) amidst the thriving industrial working class culture in Dhanbad region defy the mainstream understanding of a planned industrial city with big plants and factories, the region of Patna also bring its unique challenges.

With the several closely packed urban clusters/market towns in the District areas surrounding the core Patna city, together with its long unbroken past of urbanization and commercial and people connections, with the regions much beyond its immediate influence through the road-river-sea navigations "throughout in history" up to the "present", and by rail and other networks in the modern times defy its placements, either in the category of a "Third" World provincial city or into the frameworks of a linear North to South or West to East trajectory of planetary urbanization that constitute the core themes of the mainstream writings on the "gentrification gone global" perspectives. Even if, Patna's present socio-economic status crudely corresponds to any mid-range capital city of a post-colonial African nation.

Patna's preeminent position as the first important city in the upper country moving up the Ganges from Bengal, also as the "forwarding station" and "a great central godown", only declined from the late 19th century, as with the spread of the Railways, Patna's commanding role as regional entrepôt declined. (Yang 1998:83). Anand A. Yang's (1998) accounts of the late medieval and the colonial periods of the Gangetic Bihar and Patna gives a clear impression of why Patna is a misfit to the general accounts of the Third World urbanization processes and sense of prevailing urbanism involving great architectures and high-levels of individual consumption (read, *in contrast* with, "collective consumption"). However, this is not to suggest

that the decline was not real. Patna, indeed, suffered a great decline in the first half of the 20th century. But this decline somehow couldn't arrest its urbanization and growth, except, perhaps at the end of the 19th and the beginning of the 20th centuries. And this is an important point that, in my views, demands more targeted historical studies focusing the development of the land-capitalist relations in the region since the introduction of the Railways, to understand why and how. While its preeminent position as regional entrepôt declined, it became the capital of the separate province of Bihar when it got separated from Bengal in 1912. This new found status of the capital city, then, opened new inroads of physical and administrative infrastructures and willing-settlers belonging to all classes into the city-fold, that put it back to the status of a primate city for the most of the Gangetic Bihar region.

In the Gangetic province of Bihar, the urban, small and medium industries' clusters or the local market towns around Patna always maintained close links and physical proximities with the agrarian commodity production and rural economy (ibid:53-111). After the decline of the feudal order (meaning, mainly the agrarian land-ownerships and production relation) of production process and the appropriation of surplus, and with the growing democratization of the region since the 1970s, the urban land in and around Patna became so much contested and pricy that it became virtually impossible for the low-revenue, low-budget state of Bihar to venture into the public housing constructions without jeopardizing its popular political support among the populous backward communities with small landholdings, as buying the (aggregated) lands from such a huge number of people on the market price was simply out of question. The Bihar state with the backward castes' members at the helm of political power since the early 1990s was, then, left with the two options: to go for means employed in the other regions like "forced displacement" or "forced eviction" and soon go unpopular and dethroned, or, withdraw from the housing. The state practically withdrew from the housing and instead made good use of other instruments like fuelling speculation in real-estate through announcing intents for infrastructural developments in rail, roads, airports etc. or, using the building bylaws and environmental laws and regulations to grant/withheld permissions for constructions. In the course of time, especially in the last decade, with the significant rise in Bihar government's spending capacity due to more money flowing from the central divisible pool of revenues, the increased investments in rural connectivity in roads, electricity and communication, Patna, the only city in Bihar with allweather rail-road-air connectivity, turned into a hotspot for housing growth, and, the larger market in urban land in the urban agglomeration region of Patna, eventually, landed firmly into the arms of the private developers.

These developers mainly look for properties in land or residence in and around the urban clusters and market towns spread all across the North-West and South-West of Patna, such as Anisabad, Khagaul, Phulwari Sharif, Danapur, Maner, Digha, of those owners who themselves cannot construct modern, multi-storey buildings either replacing their existing dwellings or on some land parcels in possessions. Some fortunate working class land owners even enter partnership for share in total residential flats on the redeveloped land and eventually better their lot by earning rents on extra-flats, whereas in the most case, they succumb to the hidden coercive measures of these well-connected builders and "accept" the offers that are somewhat higher that the "market-price". Many localities in these areas are already under what can be called as the "displacement pressure" not as much due to the "lifestyle changes", as due to the constant pressure tactics of the local builders and land mafias. Along with the class factor, the caste, religion and ethnicity factors also play important roles in inducement of the displacement factors. We shall explore some of these aspects in more detail in the next chapters.

In the last part of this chapter, I want to highlight some of the important points of the planetary gentrification thesis made by Lees et.al.(2016), where they discuss the comparative and relational aspects of gentrification processes, against the traditional approach. They clearly mention that even though the form and the process are interrelated, it the urban process that is the primary concern of their approach to the gentrification studies. It means that the engagement should be with both, the territorial geographies as well as the relational geographies in which the cities are inscribed, as it is the relational aspects such the the history of the developmental cycles of the wider city-region and the nature of the later's connection with the world-outside that help us weave the conditions under which the present urban form would find its logic of evolution. (Lees at.al. 2016:13-14).

In the traditional aspects to the studies of gentrification process, Lees et al. noted that cities were considered as bounded and given, whereas in the relational comparative approach cities are understood as unbounded and constitutied by its relations of flows and netowrks with other spaces. While in the former the singularity of cities are assumed, in the later, the multiplicity and diversity of cities are recongnized. Same goes with the neighborhoods, as the former approach

considers them as bounded and as building-blocks that put together would tell us what a city might be, whereas in the later, the neighborhoods, just like the cities, are constituted in relation with other places. In the former, the theory-building is certain whereas in the later it is tentative and evolving. (ibid.)

How Patna's growth and its present phase of the neoliberal urbanization, through the verticalization of the neighborhoods, and rise of the gated communities, with the active alliance of national and the local state and the capitalist developers, fits into the planetary gentrification thesis, shall be explored in details, in the next chapter. On the nature of the application of this thesis/theory in different geographies and the role of the local and the national state, Lees et.al., (2016), write in the *conclusion*:

"Indeed, to keep pace with the new geographies of gentrification, we need a gentrification theory that is both located but also dis-located. Betancur identifies a structural core of gentrification or universal conditions of possibility (enabling conditions), which include: societal regime shift, and the associated restructuring of the cities, encompassing key factors such as 'rent production, reproduction and capture, the production of gentrifiers and the gentrifiable areas; and class displacement/replacement'." (Lees, et.al., 2016:203-204).

The regime change in Bihar since 2005, under Nitish Kumar led National Democratic Alliance (NDA) government, emergence of a new class of gentrifiers due to the English-medium school revolution in Bihar in the last two decades, and since the last decade the massive increase in the transport-oriented public investment in the areas connecting the cities to the countryside, specially surrounding the Patna region, have created what Betancur (2014) calls as contingent/conjunctural (necessary) factors, along with the universal conditions of gentrification in land-rent-property relations and societal shifts (rise of nucleated family, non-traditional occupations). We shall now explore all these enabling/historical and contingent factors in the empirical accounts of a fast changing neighborhood, called Digha, in the Patna metropolitan region.

Chapter 5: Contextualizing the Digha Neighborhoods: Layers, Traces and Trends

The Transformation of the Territorial Landscapes: the Capital and the Technology

The transformation of the capitalist social system, as it proceeds from one phase to another, manifests itself both in the spatial organization and in the socio-cultural and political lives and everyday practices of the people. There can be some disagreements over the choice of the wordtransformation. From the system's perspective, there is an implicit core-periphery duality, even if the social and the spatial distribution of the capitalist development remain as non-linear and uneven. While the scholars analyzing the situations in the developed "core" may prefer to use the word-"restructuring", those have their empirical focus in the underdeveloped areas may find the use of the same word rather fanciful. For a large part, the majority of the people in the underdeveloped regions face multiple, intersecting or overlapping orders and systems working upon them and, irrespective of the forms of the government (democratic or authoritarian), there isn't much that they can do to control the forces, as per their will and desire. For any effective action require proper understanding. In fact, it is precisely in the domains of the knowledge and the concepts enabling proper understanding that the power asymmetries work in the most insidious fashion. I am certainly not suggesting that those using the word- restructuring, are using it to mean a simple, linear extrapolation of the working of the world around them from the recent past to the present and into the future. I am only alerting to the issues the usage of the words and metaphors of social change, un-reflexively against the macro sociological and the political-economies' contexts, may lead to.

Once alert to this proposition, we may use both the terms more effectively. For example, in the underdeveloped regions the role of the state as an instrument of socio-political mobilization may be as important as the role of the capital. And, therefore, the state with its range of instruments at disposal, subject to the prevailing system of politics, may act as peaceful arbiter and facilitator of the capitalist restructuring or as a malevolent force of transformation and disruption. One such

instrument at the disposal of the developing states that make a great difference to how societies navigate the insidious forces of capitalist expansion is- the system of the public education.

The focus of the existing studies on the role of education/learning in the transformation of the capitalist social systems, manifesting through socio-spatial reorganizations and restructurings, has been inadequate and, therefore, the theoretical-methodological advances in the field of urban sociology stayed disenchanted from the socio-cultural instrumentalities of power and domination. Instead, the political economy related frameworks have been used in the most cases. The roles of the spatialized social action and the spatialized social actors are largely restricted to the domain of the production and wage, and to the techno-social ensembles that these may broadly lead to.

The role of the technologies in the transformation of the capitalist social system is pivotal as it enables the required social, political and economic transactions and interactions for the transformation to be real and working. There can be instances in which the societies may lack the appropriate technological interfaces and the transmissible technological know-hows to effectively navigate through the system-wide, top-down transformations, and, therefore, may witness, what Manuel Castells suggests as, "a long period of "muddling through" social inertia" (Castells 1989:3). After the advancements of the inter-planetary satellite based communication and information networks and the mass rapid transit systems the system-wide differences and disparities have become much more visible and pronounced.

It is this long period of "muddling through" social inertia, and the subsequent restructuring of the spatial forms in one of the neighborhoods of the Patna metropolitan region that makes the subject matter of this chapter, that, in the contemporaneous terms, is also the story of the neoliberal restructuring of the urbanization processes of the Gangetic flood-plains region surrounding the Patna city.

The capitalist order, in this respect, is about managing the contradiction of uneven capital accumulation, distribution and circulation. The neoliberal capitalism, as all previous forms of capitalism, also manages this contradiction but some important new dimensions have added to this phase in the world capitalist system. The big industrial and financial corporation that previously held control over market forces are themselves today managed and controlled by

firms having not just billions but trillions of dollars' worth assets and shares in their names. This is a kind of *corporate landlordism* that extracts rents as profits on the planetary scale and work towards the total commodification of the spaces and the life-worlds. Even in the unlikely locations like Digha, Patna, where the share of the public investment in urban development is still significant, the ubiquitous force of this collaborative, "neo-colonizing" form of capitalism can be experienced in the growing popularity of big shopping malls, multiplexes (with a growing viewership of English box-office hits), fine-dining, health and leisure spas, gyms/saloons, wellness-centers and software-applications/internet based transport/service/delivery systems, together in ways, similar to, but also, expanding and multiplying on the earlier form of "McDonaldization", e.g., MacDonaldization in the digital age. (Ritzer 2019) (Also, see for 'Consumption in a Globalizing World', Jackson 2002: 283-295).

This force of renewed consumerism in which entanglements of the private and the public spheres intensify, and, simultaneously, and this is equally important, work to weaken and destroy localized forms of production and consumption practices, as it actively seek to promote the delocalized production and consumption (for a discussion on the 'public sphere' in relation with the practices of the Indian middle class, see Brosius 2010: 30-34). The investments of these mammoth investment and asset management firms, through an army of managers and consultants target every new frontier for profit as they simultaneously make the alternatives unsustainable, redundant, and finally unavailable. The idea of the "world-class", initially associated with the schools and education but later also with the residential buildings and urban living, that is cultivated largely on the basis of imported goods and services, has made a steady inroad in Patna.

The significant part of their capital extraction comes from the urban infrastructural assets under control and management under deregulated market conditions. These assets form the bulwark and also provide impetus to take the speculative market activities into newer and wider levels, making the whole system acting towards the perpetuation of these firms' growth. The controlling of the flows of information and data, and the Internet of Things (IoT) and Artificial Intelligence (AI) based global supply chain of material and services are other areas which give power to these firms and corporations to run the planetary or even interplanetary affairs as per their own

capitalist rent extractive simulations, stock and financial trade speculations, big-business forecast models and expansion/growth plans. Data is the new oil, they say.

Since the time Bihar got its first SCADA-DMS system that heavily rely on data, in Aug 2016, as also reported by the Smart Cities Council India (SCC India) that provide all stakeholders the relevant information about the Smart Cities development in India (SCC India Staff, 'Bihar gets its first SCADA-DMS system', Smart Cities Council India, Aug 22, 2016), for "centralized monitoring of all 53 substations across Patna and power outages due to line faults being known instantly at the Control Centre" (ibid.), the process of the adoption of advanced automation, control and monitoring technologies with big data centers at their commands have only increased and expanded to different utilities and urban service delivery systems. Electrical systems linked to the operation of the modern mass transport systems like Metro-rails in all parts of India and the world use SCADA or similar technologies for their smooth maintenance, operations and also for data analytics for future requirements. On the upcoming Metro rail project in Patna, for example, recently a news report announced:

"Six firms have submitted tenders (bids) for substation and cabling works of Patna Metro's 30.91 km Phase 1 project....

The next tender notice for electrification works, which is yet to be published, will be for its 25-kV overhead equipment (OHE), 33-kV auxiliary power supply system, and supervisory control and data acquisition (SCADA) system." (Rai, M.K. 'Six Firms Submit Bids...', Metro Rail News, Nov 18, 2020).

Under "India Smart City Mission" and other urban development initiatives urban functions like water supply, electricity supply, waste management and sewage systems in Patna are fast migrating towards such adoptions. For example, the Smart City Mission Proposal for State 2 in Patna proposed the "Revamping (of) the water supply with world class automated systems to provide uniform, pressurised uninterrupted quality water and reduce NRW losses by the use of leak detection systems and SCADA. Reuse of tertiary treated water for commercial & industrial non potable use." ("The Smart City Challenge- State 2', Ministry of Urban Development, Govt. of India)

Presently the Smart City Mission does not cover the entire municipal region of Patna but only some parts of it, but the adoption of these technologies are taken forward through several routes to many parts of the greater Patna city regions, that includes Digha, For example, the Bihar

Urban Infrastructure Development Corporation Ltd (BUIDCo), a Bihar government undertaking, in February 2018, invited bids for sewage treatment plant works in Digha and Kankarbagh zones of Patna, under the National Ganga River Basin Project (India), that is partly funded by The World Bank (BUIDCo-WB, Feb 18, 2018). The expression of bids details included the design, build and finance of sewage treatment plant of capacity 100 MLD including SCADA and online monitoring system for Digha zone and STP of capacity 50 MLD including SCADA and online monitoring system for Kankarbagh zone. (ibid).

The role of intergovernmental, multilateral international organizations controlled by advanced nations in funding and supporting such technological adoptions cannot be seen as purely altruistic exercise but significantly driven by the interests of the giant infra/tech-corporations who earn profits/royalties for licensing/rolling them out to various end-users. It is in this context that we are to approach the present neoliberal phase that seek to achieve a sort of stability and predictability in the short to the medium terms, through infrastructure asset managements and controls, in an otherwise a vastly speculative domain of capitalist expansion. Not that the infrastructural domain itself are free from speculative activities, but their nature of transforming the physical spaces into long term assets tends to arrest or defer the "burst of the speculative bubble" to an higher or the next plane of speculation. The *speculative market system* thus forms a vicious cycle of boom and burst, in which the transformation of spaces into built environments for rent extraction continue unabated. This speculative spatial trasformation, however, is more than what was previously understood as the second circuit of the capital, as sustaining this process of structural changes at a generalized, planetary scale involves the control and the shaping of both the supply and the demand side aspects. The latter is achieved through a system of commoditized mass education and learning that produce highly differential outcomes, forecloses the possibilities of alternative ways of thinking and living, and are heavily dependent on techno-managerial ensembles of human and non-human resources. This vastly regulated market of education, life-long learning and training together with an equally impoverished world of informal yet commoditized education and training, blur the boundaries of the work and the education, and of the buildings and the dwellings, so much so that the life-affirming, regenerative, care-giving nature of the planet earth is nearly lost on the reformed subjectivities navigating the web of life and the socio-spatial relations and interactions.

Situating the Past: The Industrial and the Deindustrialized Digha

Digha, a Diara land (flood-plains) on the southern bank of the river Ganges, and westward to the Patna city, is the largest legislative assembly constituency of the state of Bihar with over 4 lakh voters. This constituency, in the present form with 6 *Panchayats* (rural local body) and 21 wards of Patna Municipal Corporation, came in existence in 2008. Digha reminds those familiar with the place of two things: the famed mango variety named after the land, Digha Malda, also, Dudhiya Malda, and the Ghats (riverine banks), to be used, but not exclusively, as river-ports. However, the area, as it appears today, is near completely blindfolded to these two aspects, and the people unfamiliar to the region might not find these characteristic attributes convincing. The upcoming high-rise buildings in Digha and surrounding areas have sounded death knell for the Digha Malda mango variety, as reported by an English Daily in 2013, under the title, "Mango lost in mortar - Experts blame construction of buildings & rise in temperature for decline in quality". (Bhelari, Amit. 'Mango lost in mortar', Telegraph Online, May 27, 2013). The Ghats are still there but their significance has receded in the background of the spatial developments, the blistering constructions of the buildings and the growing urban and the public infrastructures. After the construction of the road bridge in the early 1980s, the Mahatma Gandhi Setu, at a distance of 12 kms from the Digha area, the Ghats in Digha are no longer used for the ferrying and the transport of men and materials using motorized ships, steamers and large sailing boats.

However, there is much more than what meets the eyes. The story of Digha, prior to the present resurgent *urban-phase*, is the story of certain form of a much localized industrialization in the late 19th century, followed by a period of relative stagnation and decline by the 1980s, that, can be called as the *industrial-phase*. The period following the decline of industrialization to present resurgent urban-phase marks an "*muddling-through*" *phase* (the term "muddling-through", as discussed in the beginning of the chapter, is used by Manuel Castells), of nearly two to three decades, that witnessed a very haphazard, unplanned and sporadic developments of the Digha area. Explaining the nature of urbanization and the urban process during this intermediate period is crucial to the understanding of the working of the present neoliberal capital in the broader Patna region.

What we are witnessing today in the form of blistering urbanization- the concretization of the vast agrarian landscape and the proliferation of the high-rise residential and commercial built-

environment is only another phase to the region's socio-spatial development. Digha already knew or experienced an earlier, industrial form of urbanization, although, at a limited scale, that was subsequently followed by an in-between, de-industrialized phase. Barring the last decades of the 20^{th} century and the early decades of the 21^{st} century, that comprised the de-industrialized growth phase, Digha for the most part of the 20^{th} century was a busy, industrial and trading area, however, minus the tall chimneys and the planned industrial townships.

The story of this localized industrialization is difficult to weave in an authoritative narrative as it would take a great deal of archival works, but the imprints are unmissable to a close observer. A close, field-based observation of today's urbanization processes of Digha opens up to the two very divergent perspectives. In one, it gravitates around and unfolds through itself, only in order to open to a multi-centered, multi-dimensional analysis of the socio-spatial development in the larger Patna region, and in the other, it appear merely an extension of the municipal boundaries of the urbanizing Patna, extending into the surrounding outgrowth and the peri-urban areas.

The Industrial Phase: The beginning of the industrial phase dates back to the 1860s with the introduction of the railways in the area, the consequent development of Digha Ghat (LCT Ghat, LCT abbreviated for "Landing Craft Tank") as important river port and few other developments that affected the riverine transportations in the Ganges. As a consequence of all of these, by end of the colonial period in 1947, the landscape of Digha disintegrated from its earlier rural form. The village-like settlement patterns fragmented into more dispersed and town-like patterns and landscapes. The industrialization beginning with the improved transportation connectivity and inter-related developments, led to the rise in commerce and trade in the area and also to the development of the local market.

Digha, before the 20th century was known mainly for its famed Mango variety. The area was largely under active paddy, vegetables and other crops cultivations. Besides, there were the mango orchards in lager numbers. In the West of Digha, at little over a couple of miles distance, was Danapur, also Dinapur or Danapore, a cantonment town established by the British in 1765. And, Patna was seven miles in the East and in between laid the Bankipur British settlements and the walled city's suburbs. Bankipur, at the Western end of Patna, near the present day Gandhi Maidan, was the residential area of the European civilians that they came to occupy after the Patna Massacre of 1763. The struggle of economic and political control of the region between

the Muslim elites and the British colonizers led to the killings of the approximately forty British officers held captive by the Nawab, Mir Qasim, in the walled city area of Patna. Many Europeans including the British were living in the walled city area. After the massacre, they shifted to "a convenient spot by the river's side, a short distance beyond the suburbs." (Roberts 1837: 132). Explaining the spatial organization of the later 18th century Patna city in relation to the suburbs and the newly established Bankipur area British settlements, Rebecca M. Brown (2003) writes,

"Bankipur's categorization lies in a nebulous space somewhere between a separate town and a distant suburb—its status is not clear: a "convenient spot" rather than a town site. The space of the suburb suggests a reading of Bankipur as a site outside of the colonized-colonizer spatial framework. Bankipur is thus a space outside of the colonial, one (at least partially) exempt from the problems (and threat) of either the city or its suburbs. Yet, it is also undoubtedly a colonial space by its very relation to that which it is outside of (both the city and the suburbs)." (Brown 2003:162-163).

Owing to their lesser numerical strength and the provincial nature of the Late Mughal Days' Patna, the British had very low chance of sanitizing themselves on a strict racial line. (Boyk 2015:21) "In addition to the servants they depended on, and the elite Indians who built homes there, even very poor Indians regularly came to Bankipur from nearby villages in order to shop and seek medical attention." (ibid).

The racial spatio-temporal duality, or the fort/black town paradigm, that formed the bedrock of the colonial urban analysis in the South Asia has itself been challenged for its empirical and analytical weaknesses and sloppiness or simply for the imperialist bias. For example, while making the colonial Patna itself as her case study, and also citing studies that questioned the fort/black town paradigm, by recasting the paradigm's empirical core: the presidency cities, in the different lights, Rebecca M. Brown (2003), identified the strength and endurance of the paradigm with the constitutive role it plays in the designation of colonial city, and not in connection to some sort of reality "on the ground." (Brown 2003:157). She writes,

"I suggest that the persistence of the black town/fort colonial city was not due to ignorance about the cityscape. After all, the colonizers were there—they could have (potentially) seen the city as a space of mixed mercantilism, as a suburban culture, or as a company and civilian space, for example. Given the context of colonialism, however, none of these options could be articulated by the colonizers: The discursive need for stark division dictated the black town and the fort, regardless of the pattern on the ground." (ibid).

Being situated between the cantonment area in Danapur and the British residential settlements of Bankipur, the Digha area began to receive greater interaction and attention. In 1858, St. Michael's High School, Patna was established in Digha, by the sides of the arterial road (today's Ashok Rajpath) passing right through the Old Patna and Bankipur to Danapur, by the Congregation of Christian Brothers. Initially only the children of Catholics, British expatriates and Anglo-Indians were studying there. Today it is run by the Jesuits and is among the most prestigious public schools in the Patna region.

After the establishment of the Danapur cantonment, the entire stretch of twelve to fifteen miles of the Ashok Rajpath began to develop further through the proliferation of the commercial and residential settlements. But before that also, this road parallel to the Ganges was in much use for the commercial and the port activities at various locations right up to Danapur. In the 1820s, a clergyman Reginald Heber noted that between Bankipur and Danapur, "the whole way lies between scattered bungalows, bazars, and other buildings." (Boyk 2015:20). Also that, the suburbs extended westward to "practically form one continuous narrow city hemmed in between the Ganges and the railway." (ibid). Here we can see how the studies on Patna through the different phases had the shifting notions of the city and the suburbs. That the 18th century suburbs between the walled city and Bankipur settlements by the turn of the 19th century shifted further Westward, towards Digha. Partly, the description has the empirical basis in the spatial organization of the built environment, but it also points towards the analytical fixation with the city-core/suburb-periphery dichotomy in the study of the urban and the cities.

Much of the developments in Digha during the industrial phase were due to the geographical location that allowed the area to be connected with rail-roads. The inundated, low-lying Eastwards areas, beyond the densely populated walled city of Patna discouraged the infrastructural developments in the East, whereas the broadening of the landmass in the upland Diara (flood-plains) areas of Digha, towards the West, supported critical infrastructures right up to the river banks.

The Ganges always played a very important role in the social, political and economic life of the entire region of the North India. From the life-cycle rituals to the trading and commercial activities to the political conquests, it facilitated several key functions in the social lives of the communities. Besides the fishing activities, it directly supported the much crucial inland water

navigation, connecting millions of people along its entire stretch in the Northern and the Eastern plains of India. By being serviceable throughout the year, it offered a unique opportunity for both the countrymen and the foreigners to organize and plan their activities with the greater degrees of certainties and predictabilities. In somewhat a lamenting tone, an official of the British in India and Siam, John Crawfurd, wondered in 1821, why the steam-vessels have not yet been established in India. He highlighted the importance of the navigation through the Ganges all along its course in the plains right up to the Bay of Bengal via Hoogly, in the following words:

"With all the difficulties and the dangers of the Ganges, the English, if their Indian conquests be any advantage to them, owe almost as much gratitude to it as the Hindoos themselves, for unquestionably to it they are indebted for their Indian empire. It is the great military road which enabled us to conquer the richest provinces of Hindustan, the acquisition of which enabled us eventually to conquer and maintain the rest of our possessions." Crawfurd 1830: 6-7).

David M. Balfour (1849), a merchant of Massachusetts, went on to note that,

"Its (the Ganges) value to the natives of Hindostan is immense. It is, and always has been, a grand route of communication and traffic in the country, throughout which the roads adapted for the conveyance of goods are very low. Not only the main stream, but all its tributaries from the North are navigable for large or small boats, to the very foot of the mountains, for more than half the year; thus forming a most extensive system of inland navigation." (Balfour 1849: 251).

Some available sources go on to establish the importance of the Digha port even prior the 19th century for export and import by water. These are suggestive of its favorable location that, unlike the low lying inundated areas in the East towards Patna, was more conducive and also that, from Digha area the north bank areas in Saran district were well connected. In dry seasons an island like formation (also part of what is called as *Diara*) with a very large tracts of land appear in the river near Danapur, and one can see not one but two river streams. When not flooded and completely inundated, these tracts are used for grazing and cultivation as few communities such as herdsmen and fishermen lay customary claim to these lands. In fact, some portion of Saran district make direct land boundaries with Danapur and Digha area along the south banks.

Robert Montgomery Martin (1838), an Anglo-Irish author and civil servant, clearly mentioned the importance of the Digha port and its locational aspects in his chronicles in the following words:

"On this part of the Ganges, Danapur and Digha are the only places in these districts which carry on an export and import trade by water." (Martin 1838:7).

An anthropologist Leon Swartzberg, Jr. (1979), who studied a village-market relation, close to the Khagaul market area (11 kms from Digha), made some general observations based on her secondary sources, that appeared first in her doctoral work in 1969, as follows:

"Even before the completion of the railroads and the Suez canal in the nineteenth century, India had national and international markets (Habib, 1963: 61-89; Leeds, 1961). This trade was carried on land by caravans, on rives by barges and boats, and along the coast by ships (Radhakamal, 194?:118). What is of interest to us is that butter and ghee were regularly carried and that Patna and Dinapore were noted for their ports and as import-export centers for Agra and Calcutta (Radhakamal 194?: passim; Habib 1963:63, 73). Undoubtedly local markets were early integrated with regional markets; this integration has the effect of transferring demand for milk from the regional markets, which were connected with each other along the Ganges, to the small Gowalla villages in and around the diara even before the advent of the rail road in 1857-1863. To the regional demand for milk must be added the local demand for the nearby town of Patna, Dinapore, Khagaul, and Phulwari Sharif." (Swarztberg Jr., 1979:21-22).

A regular steamer service for navigation in the Ganges was started in 1834 by the East India Company (Lokur 1954:17-18). In 1844, the Indian General Steam Navigation Co. Ltd., a private company, came into being for ferrying goods between Bihar and Bengal (ibid). As the traffic and loads began to grow, some more companies came up by the 1860, but the growth was soon arrested due to the establishing of the rail lines connecting Patna to Calcutta and other regions. During this momentous change, Digha retained its importance for river port. While activities on other Gangetic ports declined due to the newly established rail transport lines parallel to the Ganges, activities at the Digha port wasn't much affected. The reason was the newly established rail-line in 1862, that connected Digha port to Patna main line. Digha in those days was a center of the leather and the footwear industry. To transport raw materials and the finished goods the rail-line was set-up. But, this connectivity also allowed for transportation of the variety of goods and people across the Ganges in the North Bihar. Digha port was used for transportation of items such as wood and coal, food grains, milk and vegetables, cattle and finished goods, across the Ganges to the nearly districts, thanks to the port-railway connectivity. Well beyond this period, when the first ever bridge on the Ganges in the region, Rajendra Setu (nearly 100 kms East of Digha), connecting the north and the south Bihar came up in 1959, the steam-vessel ferrying services from Digha remained of critical importance, even though the Digha-Patna rail service connecting the port remained operational only intermittently.

The development of the Digha region following a new mode of connectivity by the rail upto the river port, made it and, also, the adjoining areas attracted to the capitalist entrepreneurs since the

turn of the 20th century till the late 1960s. For sure, Digha's proximity to Patna was an important determinant for the attraction, as Patna had the presence of all the political, bureaucratic and professional elites on the region. Besides it had the High Court and a fairly developed market and urban living. But that was not all that favored the Digha and adjoining areas industrially prosper. In fact, analyzing the development since mid-1970s would make it clear, why from a fairly healthy state of industrialization the area moved back to a state of stagnation and deindustrialization, whereas Patna's city-folds maintained its growth and expansion trajectory for most of the period after the Independence?

Some of the notable industries that came to the region like the Bata leather footwear factory (May 1942, Batagunj, Digha) or the Dalmia sugar industry in Danapur or the Polson Dairy (butter) in Digha (1957), reveals the importance of a vastly rich agrarian belts in the vicinity offering steady supply of raw materials like sugarcane, leather and milk, with low input of transport costs. Moreover, the rail connectivity through Danapur and Patna to cities like Calcutta and Delhi and the Digha rail-port connectivity facilitating transportation across the North Bihar made the industries attracted to the region. The vast agrarian plains in South-West of Digha ensured no paucity of land for industrial expansion, even though it offered its own limits. A proper understanding of these limits on industrial growth would lay bare the contradictions of the Patna's metropolitan developments, which will be dealt in the later parts.

By the middle of the 20th century, the neighborhoods in Digha began to develop with a distinct flavor than the other non-industrialized market towns or area in the region. To ensure supply of trained manpower, the industrial training institutes, both for men and women, were set-up by the State, right at the bank of the Ganges near Digha Ghat. The Food Corporation of India (FCI) established its godowns for grain storage, also near the Digha Ghat railway station area. With the passage of time, an agricultural market began to develop near these establishments and the area began to attract settlers form different and faraway locations for better economic opportunities.

But the industrial growth momentum didn't last long. Despite the visible signs of the progressive socio-economic change, and the early stride made in the transportation and other physical infrastructures such as rail-road, the region didn't receive much support from the union government in the post-Independence era. The critical infrastructures in the surface transports,

electricity, and communications, also called the social overhead capital (SOC), in the development economics terms, remained abysmally poor, or lacking.

The social composition of Bihar included a large backward population with no formal education of any kinds. The agrarian social and production relations were mainly feudalistic. Even though there was no formal State-ideology enshrined in the constitution, and the post-Independence political system that came into existence remained a multi-party democracy, the governance in reality was dictated mainly by the Soviet-model, planned economy based on the socialistic principles. The 42nd Constitutional Amendment that inserted the word "socialism" in the Preamble of the Constitution made no change to the practices on the ground, except that it confirmed to existing bias in the governing principles.

The concepts and the processes required to achieve the social, economic and cultural-scientific advancements, that arrived in India from the Soviet experiences became the hallmark of the modern, progressive form of government. Bihar became the first province, also, called state(s), to legislate the land reforms laws. Except for the abolition of the landlordism or the Zamindari system, the most of the land reform laws could not be implemented and also, the big land owners managed to find ways to avoid the land ceiling provisions. Bihar soon entered into a very vicious kind of identity politics that dictated much of the course of its socio-economic development since then.

Nearly half of the total land area in Bihar (in its present, divided form after the separation of Jharkhand) was under active cultivation and yet, the "green revolution" that was witnessed in the states like Punjab or Haryana, did not occur here. Bihar witnessed a famine in the year 1966-67. Among large populous states, Bihar had the lowest per capita income, the distinction it still retains. It fared equally poorly on other social indicators like health and education. It is also among the most densely populated provinces in the world. Given these circumstances, two interrelated factors stand out as important reasons that shaped the course of the urban growth and development in Bihar, notably in the Patna city region. One is the physical-geographical and the other is the political.

Bihar is the land of many perennial and, also, rain-fed rivers that bring devastating floods in the region, particularly but not exclusively, in the North Bihar. Being a land-locked region, it is the

economy of the land that reigns supreme, and yet it lacked basic infrastructure of all kinds. Both the provincial and the union governments in the early decades were overwhelmingly represented by the traditional elites of the society, who found little or no interests in the advancement of this region having one of the largest share of the backward, under/non-educated populations. The lack of the basic infrastructure was so overwhelming that even those big landowners who could invest into the capital goods for the modernization of the agriculture or to establish the agroindustries, instead, continued with the older practices, including the feudal and semi-feudal forms of the social and the production relations. Moreover, the most of the surplus capital were used by the wealthy farmers to buy lands, both in the villages and the cities and to invest in human capital through education.

The process soon created strong social networks of elites comprising the class of people in the various government professions and civil, legal and medical administrations. The big landowners, loosely estimated to possess over 25-30 acres irrigated land/family, the salaried professionals and the bureaucrats and the service professionals like the lawyers and doctors created networked relations extending from the villages to the cities. Within the city-folds these relations displayed flexibilities to incorporate or to join with other networked relations, or nodes in those networks, like that of the traders or politicians. However, these networks were/are organized at various levels and scales and are open to readjustments and reciprocities, in order to maintain optimal and sub-optimal dynamism for urban living.

The story of Digha in the period of its industrial decline, upto the present, resurgent *urban*-phase, when, it has embarked upon a definitive journey similar to the other neoliberal city-regions, cannot be explained without the understanding of these networked-relations. The other frameworks based on the dominant caste-relations or, agrarian production relations or the mixed-social relations would be too condescending towards a process which has so many layers and interesting facets. The story that I am trying to weave here, is more an open invitation to the other sister disciplines, the urban historians, the urban architects and designers, the landscape artists, to explore this part of the world with the perspectives of their own. Every new perspective can have its own surprises and tragedies, their distinct moments of glory. When a Bombay Parsi, Pestonji Edulji Dalal, decided to start his Polson Butter factory in Digha Ghat area to revive his fortune, that was hit due to the success story of the Amul Co-operative, he must have calculated

his maths correctly. In fact, in the 1950s and 60s Polson butter was a big commercial success and a household brand in Patna and other cities in Bihar and older people have fond memories of its taste. But he may not have calculated the nature of the politics that was to unfold very soon or the scale of devastations and flurry that the floods would have brought to the region. There must be more to what is commonly known, that due to his old age and his sons not interested to continue with the business, Pestonji decided to wind-up a soaring business and a household brand name in merely a decade's time!

The Deindustrialized Phase: The tumultuous decade of 1970s began with the influx of migrants, mostly Hindus, who came to India during the crisis in the East Pakistan and after the creation of Bangladesh in 1971. Nearly 4.5 lakhs refugee migrants are identified to be living in the 115 legalized colonies in the various parts North Bihar. (Swaroop, Vijay. 'Bihar: Hindu refugees from East Pakistan want land, living, identity', Hinduatan Times, Mar 02, 2018). Soon after, the political scene began to erupt in Gujarat, Bihar and elsewhere against the then Congress government of Indira Gandhi. Soon Patna became the epicenter of protest demonstrations and the movement, in which university and college students and youth participated in overwhelming numbers. In April 1974, Gandhian socialist Jayaprakash Narayan, also referred as JP, called for "total revolution", asking non-violent non-cooperation with the state and the government. This was followed by a nationwide railway strikes. Eventually a nationwide State Emergency was declared on the night of 25 June 1975, that led to arrest of many opposition leaders and protesters. Amidst all these chaotic and tumultuous years, at least since early 1974, Patna and Bihar suffered another blow, only within two months since the Emergency was declared. Due to heavy downpour of several days and release of excess water of the Son River into the Ganges, the embankments in Danapur were broken and water entered into the entire city region. Along with parts of Danapur and Digha, nearly whole of the West and the Central Patna city area submerged into the flood. The city for three-four days came to a complete standstill and despite efforts to pump out the water by large motor pumps the common life took a severe hit.

In Digha, the railway tracks submerged under water. Many people who already made a move from the lower *diara* island areas due to rising river in the previous months and took shelter in various parts of Digha, prominently on the empty lands along the railways tracks, the railway station compounds and sheds, were further hit by the flood in the upland *diara*-Digha areas due

to the breach of the embankments. This was the state of total helplessness, that forced them to permanently leave their habitats in the lower diara areas, on either sides of the river in the Saran and Patna districts. Mostly the backward communities of farmers, herdsmen and fishermen, they squatted all around the empty or government lands in Digha areas. Digha offered them a convenient location to start alternative livelihoods, at the same time maintain the connections with their farms and the grazing lands in the lower *diara* areas, after the monsoon and the floods. But not all of them were poor. Many had significant amount of lands or multiple land parcels, in dozens of acres in the *diara* and adjacent areas and also dairy animals like cows or water buffalos. Soon many of them started settling down in either rented accommodations available in the Danapur-Digha-Patliputra areas or buying land-plots for housing constructions. The process started relatively quickly as many of them had no safe place even to store their agricultural produces, most importantly the food-grains.

The families without any other safe place to go, numbered in hundreds, occupied the empty lands for dwellings on both sides of the railway tracks, on its 6 kms Digha-Patna stretch, even though the basic amenities were lacking and there was always fear of forced eviction, demolition or flooding. Many families opened household dairies, called *Khataal*, form same locations and started making a living. Thus, there started a process whereby those who could earn enough to save, began to buy residential plots in the neighborhoods as a buffer or safeguards against evictions or future calamities.

By this time Patna city already underwent one planned development phase under the planning vehicle called as the Patna Improvement Trust (PIT), and efforts were on to expand the city limits as per the new plan, which was in the making and not yet finalized. As Patna city had already exhausted its expansion limits in the Eastern sides, the only natural option left for expansion was in the South-West and the West. In 1974, the Bihar State Housing Board (BSHB) decided to acquire approx. 1,024 acres of land in Digha for the proposed Digha Housing Colony, where in the present Rajeev Nagar is situated. This announcement for the proposed housing colony coupled with the geographical constraint for the residential area and neighborhood expansion on the other end of the Patna city, and the influx of new population in the wake of the 1975 floods, created a new dynamics in the socio-spatial organization of the Patna-Digha-Danapur stretch. This brought a new speculative market in land in relation with the real estate

development and housing and apartment constructions. Till this period, Patna had not experienced the cultures of the high-rise apartments and the gated-communities. Except few government offices, one could rarely find buildings with elevators.

Broadly, there were two competing field-forces to this new development of the speculative market in housing and real-estate and both these forces were subject to an over-arching upper limit: the limits of capital for the big-ticket investments. Here, by big-ticket investment means the capital resources required for a large-scale area development through a single project/firm. Only one such project came to this area, in the late 1980s by the name Ashiana Housing Cooperative Society, 1976 (also called, Ashiana Nagar), near the proposed Digha Housing Colony site. We will come to some detailed aspects of this housing cooperative society later. However, this development also can be considered as part of one of the forces at work in the speculative market in housing and real estate constructions.

Characteristically, the one set of forces relate to the group of people who were part of the urban social networks that developed over 30-40 years' time since the Independence, and were placed in the position of relative advantage and economic and bureaucratic domination. A generation of government officials, who joined in the early decades of the post-Independence period, either reached their retirement age or were on the verge of retirement form their jobs and professions. This created a pool of willing buyers of homes who wanted to shift to their own homes from their previous official residences. They were educated and with connections in various public departments and legal and bureaucratic arms of the state. Because of their networked positions in society, they could access information related with the government policies or the official data on the matter like land and revenue records, legal cases and previous judgments. Being an educated, urbanized class of people with no interest in relocating themselves to their respective native locations, they developed a stake in the active politics unfolding in and shaping the Patna city region. The influx of a large number of the backward, agrarian, poorly educated class of people in the prospective urban neighborhoods of Digha and the surrounding areas created a ripple effect to the already shaping speculative land and housing market. And by the 1980s and 1990s several housing cooperative societies emerged in the same area that was notified by the Housing Board in 1974 for the Digha Housing Colony, several of these cooperatives on the proposed land site itself.

These housing demand related factors got a shot in arms with the newly constructed first ever road bridge on the Ganges in Patna and vicinity, the Mahatma Gandhi Setu. This opened a flood gate of footloose workers, migrants and settlers from the North Bihar to Patna. Inaugurated in 1982, by the then Union Prime Minister, Indira Gandhi, the 5.7 kms long, "Gandhi Setu" Bridge connected East Patna at Gayghat to Hajipur in the North of the Ganges. This bridge coupled with a bypass road, that came soon afterwards on the southern side of Patna, , passing from Anisabad in the East to Didarganj in the West, to handle the decongestion form the heavy vehicles in the dense, elongated city areas, expedited the unfolding of a deindustrialized redevelopment and spatial reorganization of Digha and other western fringes of Patna. Better connectivity across the Ganges via road with the coming of the Gandhi Setu made the Digha port almost dysfunctional, except for a much localized cross-river operations by the local communities on small boats. Now, with the major transportation business shifting to roads, the industries also found cheaper and convenient locations in Hajipur, on the northern end of the Gandhi Setu, and also, along the East to West Bypass road. The latter passes through the relatively cheaper, low-lying areas in the South of Patna, and, is well connected with the Bridge through an elevated road. On both sides along this Bypass road, particularly while passing through South-East of Patna, one could see small scale industrial units.

While the major port function reduced to the margins, and abundance of land stretching westwards, the settlers began to come to Digha and surrounding areas in a big way. The lands become the hot-cake. But there is a catch here. Whereas the industrialized Digha had its orientation towards growth based on its own locational strength, the deindustrialized growth phase unleashed by the speculative housing market got the area firmly entangled with the nature of Patna as the most important urban center and also seat of provincial political capital in large backward region of Bihar. By the late 2000s, there was far greater convergence in the nature of Patna's and Digha's growth, that can be characterized as the neoliberal phase of the urban growth in the region.

The Politics of Necessity and the Self-initiated Spatial Area Development

The housing market that emerged in the Digha area in the 1980s is to be characterized as *speculative*, because it grew on its own, and developed into a market of land and housing on a *self-initiated* basis, and yet the state played an important role in shaping its course. In another

way, I mean to say that the state has stepped in indirectly (mainly through funding the public infrastructure, and to a lesser degree, yet equally important, building and land-use regulations), a process that accelerated market led land housing market. While the legal-regulatory aspects of the state power (having large-scale/long-term transformative functions) do not affect things as they unfold on the level of everyday spatial changes, as these involve long processes of enactment and change, the involvement of the local state/urban bodies (ULBs) in the development of the critical public/neighborhood infrastructures like PCC roads and sewage lines, play crucial role to this self-initiated, *incremental yet phenomenal*, spatial area development process.

Health and education (and to an extent, electricity, transport and phone connectivities) were the twin-necessities that made Patna the most sought after place in entire Bihar for housing. Here, the term *necessities* should be viewed as two interrelated measurement/imperatives of the living standards: the demand-side imperatives and the supply-side imperatives. From the perspective of the demand-side imperatives, the term can be understood in the manner economist Alfred Marshall (2013/1920) distinguished nessesaries with the comforts and the luxuries. (Marshall 2013/1920:56). From the perspective of the the suppy-side imperatives, the notion of necessities or "absolute necessities" should be viewed as discussed in Melvin M. Webber's (1974) "permissive planning", where in the field of city/urban planning it corresponds the engineer's equivalent of the administered or legislated quality standards that are rooted in the more fundamental idea of requirements. Because the conditions in which the standard-operatingprocedure (SOP) in the field of engineering evolved are very different (e.g., the degree of control over variable/external factors), the planners in their quest of adopting the standards of operation had to drop the engineer's conditional qualifications for requirements, instead substitute it with an expression called as the *need*. Explaining the aspects of his understanding of the term "need" as it entered the field of planning, Webber (1974) writes:

"As best I understand the idea, needs are seen as absolute nessecities, not as conditional preferences. Of course, no prices are attached because no *comparision* of values is possible, nor are trade-offs among competing 'requirements' and 'needs' possible. As *absolute* nessecities, they are all equally, and infinitely valued ends." (Webber 1974: 227)

He further writes:

Each filed is guided by its own ideology- by profession-specific notions of individuals' 'needs'. Each has its own altruistic perceptions of the 'public welfare', which typically relies, of course, upon the very sorts of services that the given profession offers. (ibid:228).

For much of its existence as a capital city of Bihar in the 20th century, Patna lacked the infrastructures comparable to the metropolitan/capital-city standards. But some periods during this entire stretch of time were more decisive years/decades in terms of the structuring of the urban patterns, than the rest of it. Those were the desperate times, since the mid-1970s, in the country-sides, marked by agrarian unrests, radical violence and anti-state Left-wing uprisings. The feudal and the semi-feudal vestiges of agrarian production were up against the democratic churning of the state of Bihar. While the working classes struggled for assured and better wages and also share in political power, the landowners tried to arrest the process of change, many times by preventing the working classes to exercise their electoral franchises. As the provincial elites, the big landowners, amidst local unrests, needed safe habitats for their children's education and families' well-being, they were also not inclined to sever the ties with their zamindari-era (colonial-era) landed properties. Patna, while offering a convenient location from the countryside, also promised better education and health care facilities. Moreover, the elite, upper class social networks that developed in Patna over nearly a decade, initially while in service of the colonial government and later in the state government and bureaucracy, came as an assurance for the rural gentry and traders and the traditional provincial elites to settle to the new practices of urban social life, in the relatively "safe" enviornemnt of the capital city and free from the everyday troubles of the hinterlands.

Much of Digha, until 2008, was out of Patna Municipal Corporation (PMC) area-folds, and was designated as *rural*, even though from all three sides its was surrounded by the designated urban municipal bodies (councils or corporations). Therefore, the services of these urban local bodies could not be extended to this area. Moreover, the land revenue records, or popularly called as revenue-*thana* (station), of Digha area were under the jurisdiction of Phulwari Sarif *Anchal* (denomination for revenue area having a Revenue Divisional Office) and not with Patna area revenue department. And yet, when the Bihar State Housing Board announced for the proposed Digha housing colony, it stated a spate of land speculation in housing. Anticipating development works in infrastructures connecting the proposed sites by the state, the land prices in the area skyrocketed. Provincial capital, from businesses like *brick-kilns*, black money from politicians

and the mining mafias (in undivided Bihar) and corrupt bureaucrats played a major role in this boost as, by the 1980s and 1990s, a 60:40 ratio model of housing development emerged in the region. It was the win-win situation for the small landowners in Digha area who could enter into contract with an investor for housing construction and get 40% of the developed housing floors (depending on the building bylaws), for own dwellings and for lease-on-rent. These investors could easily capitalize on their social-networked connections with the politicians and bureaucrats for clearance of constructions deigns and tax-related or other paper-works.

Parallel to these multi-storied (although restricted to four-five floors in most cases) housing constructions, there was another process of land purchase for housing. These land purchase were propelled by the presence of the squatters who came to Digha in the wake of floods and began to settle by purchasing even a very small residential plots, many of which had problems of water logging and were also without proper roads or electricity connections. These were earlier either paddy-fields of mango orchards. This buying of lands by the *Diara-Yadavs* (as the majority of them were the herdsmen), brought them into a competitive dynamics with the networked social elites and Patna urbanites (majority of them non-*Yadavs*). By the early 1990s Yadavs were at the apex of the political power in the state. With a share of nearly 10-12 % of the total population in the state, they form one of the largest communities of the electorates, and the largest among the sections officially designated as socially and educationally *backward*. Danapur is a predominantly Yadav region and with more Yadavs settling to the contiguous regions in Digha, the later bordering Patna, could place them in the position of physical-numerical dominance in the whole region.

This dynamics played itself out with similar intensity over those 1024 acres of land site proposed for the Digha Housing Colony. At least, this is one instance that offers a sneak peek into the dynamics of the less documented urbanizing Patna following the great floods of 1975, as the areas earlier nucleated outside the Patna city folds began to merge with the larger socio-spatial reorganization along capitalistic lines, with a robust production and consumption market in housing. The role of the state was of a catalyst in propelling the speculation in housing market business to attract demand. Along with the promise of higher tax-revenue from the housings and the commercial establishments in the area, the competition over housing also allowed the officials to make illicit money in the overall processes of unplanned development of the areas.

This led to two parallel modes of spatial development in Digha that characterizes its present day the neighborhoods. One, a regulated, and also, regularized neighborhoods, with a characteristics of an upscale, gated or semi-gated housing societies, and second, a self-initiated, individuated, piecemeal spatial development with a characteristics of a working or a lower class neighborhoods. Let's look at both these neighborhoods in some detail. These details are based on my fieldwork for this doctoral project, during which I collected data over the development works in Digha area and neighborhoods, made a close, month-long observation of an ongoing agitation against the forced eviction of the residents from a Digha lower, working class colony and also interacted with many participants of the agitation. I also collected data from some gated and semi-gated middle class neighborhoods, the AG Colony, the Ashiana Nagar and the Yadav Colony/Ghurdaur Road, to be the prominent neighborhoods among them, the former in the East and the latter two in the West of the Ashiana-Digha Road, and interacted with few residents to understand the local issues and their expectations and/or frustrations with the ongoing changes and developments.

Ashiana Nagar, is among those very few well-planned residential cooperative societies on the Digha-Ashiana road, that came up on the southern ends of Digha area only in 1980s. Ashiana Nagar, as suggested by one resident, can be called as a model housing society as it was meticulously planned. Though not replicated in comparable forms, it left an imprint on surrounding areas and also gave boost to land prices and housing constructions.

Ashiana Nagar, as per one respondent, may be called as "peoples' housing cooperative society" for its orientation towards the holistic needs of residents expressed through spatial planning and organization. Spread over 72 acres of area and two phases (earlier Phase I and II had an undifferentiated identity) each divided in five sectors, Ashiana Nagar is registered under Bihar Cooperative Society Act 1932. After getting incorporated in Patna Municipal Corporation (PMC) around the year 1988/1989, Ashiana Nagar, for all physical purposes is part of Patna city but land records, as per one respondent, still remains under Phulwari Nagar Parishad.

The state government notified the entire area and much beyond for housing constructions in the 1970's but later, based on initiatives of Ashiana Housing Cooperative Society Board, denotified a part of it on which present day Ashiana Nagar is situated. The cooperative was allowed to buy land parcels directly from the farmers and cultivators that, in effect, guaranteed the security of

land tenure for the prospective buyers. This security of land tenure, further consolidated through governmental notification and denotification processes, attracted immediate applicants for homes. Most of these early members were government (both the Central and the state) employees at various levels.

Along with many important aspects of physical planning of the Ashiana Nagar, such as proper drainage systems (constructed well before the commencement of housing constructions/plot sale) to regulate land use, separate arrangements for used and unused water utilizations, broad roads/streets at all levels, sectorial divisions to minimize commuters' related disturbances and ensuring privacy and security, housing space/design choices (in two options: ready homes and plots) based on income groups, the most remarkable are the utilities' infrastructures, particularly in relation with the control over the groundwater resources. As per the agreements with the PMC, groundwater of the entire Ashiana Nagar is used only by its residents and cannot be used or siphoned by any other agency including the PMC. Residents of Ashiana Nagar, therefore, are not dependent of PMC water supply and PMC cannot levy any water tax from the area. Later attempts of PMC to take control of water supply were defeated by the Society through litigations.

In last 20 years, Ashiana-Digha road became one of the most important commercial and residential centers of Patna city. Density in the area has increased many folds which has also affected Ashiana Nagar in significant ways. Though originally proposed as a residential colony, it has witnessed proliferation of commercial establishments beyond the zones marked for community shops/markets which, in turn, has diluted it character as a 'model housing society' in a very small span of time. Lack of effective control over the area by PMC has also led to neglect in maintenance of roads, streets and parks inside the housing society creating severe problems of water logging and encroachments. Out of seven parks only 3 are properly maintained and one is used by some members to park their vehicles.

There is another interesting feature associated with Ashiana Housing Cooperative Society, or Ashiana Nagar. It was conceived by its promoters as "retirement homes", a first of its kind in the Patna region. This clearly indicates that this planned "private" endeavor of spatial development from the very beginning had the sympathies of senior bureaucrats, officials, and professionals and this might have played an important role in the manner it got necessary technical and official approvals. Also that, this development clearly indicates the growth and spatialized expansion of

the social networks of the traditional elites and the big landowners who in a generation's times could establish themselves as urbanites and city dwellers. They were part of the growing middle class which was also the first aspirational class in the region. Unlike those older generations of colonial elites living in their sprawling, individuated bungalows and homes with courtyards or front lawns, organized along the road-lanes in a slow moving Gangetic town, in the areas surrounding Bankipur British bunglows and the Secretariat building, this new generation of retired professionals were more inclined to develop a community life on the line of the metropolitan cities across other developed regions in India. They were also inclined to set aside those Gandhian pretentions of effeminate forms of nationalism marked by Swadeshi, austerity in life-style (sada-jiwan), household-based or small scale, localized production and consumption model with dignity of individual labor, and belief in constructive social work, for a more delocalized, market based, commoditized consumption patterns, and muscular and militaristic forms of nationalism. The industrial backwardness and the rural outlook of Bihar became an object of self-derision and shame, so much so that, many middle class families from Patna and other urban centers in Bihar changed family names, also called *surnames*, of their children to make those appear as non-Bihari names and also as *caste-neutral*, fashionable or trendy.

It was in these moments that there was a visible growth in new commercial activities in hotel and restaurants, beauty parlors and spas, fast-food joints and stalls, and cinema halls and liquor bars. It was a clear break from the past patterns of socializing through elite, professional clubs, literary and artistic groups and intellectuals' discussion meetings and congregations. By the 1990s people had only fond memories of literary giants like Faneeshwarnath Renu living in Patna (he also wrote a small prose "Jal-Pralay" on the 1975 floods, as he was a witness to it from his partially inundated Rajendra Nagar home), or Ustad Bismillah Khan's over a week long musical programs during the Durga Puja festivals. The new visual media in televisions, televised programs and cinema came as a powerful medium of capitalist marketing and advertisement which influenced the generation after 1980s. The old paradigm of literary and artistic cultures soon found new expressions in television and cinema actors and performers with their ability to match the metropolitan counterparts in Delhi and Mumbai in fluent English lingos and accents. Shekhar Suman, a film and television actor, born in Patna, was a household name by the 1990s. Along with numerous earlier appearances in films and television programs, he also hosted a late-

night talk-show "Movers & Shakers" starting from 1997, in which he was seen to be speaking "fast-English" (meaning fluent, flawless English).

In close proximities with these changes, that is, the middle-classization of the neighborhoods, there was a parallel process of the working class neighborhoods' development in Digha, reflective of its own distinct, haphazard, mixed, fragmented spatial-organizing and political-mobilizing patterns. Comprising mostly of small and medium farmers, herdsmen, small traders and shopkeepers, and other communities involved in menial and low-paid services and professions has a difficult times negotiating change as they struggled to make a foothold and a dignified living in the city. Even though they took immense pride in owning a home or land parcel in state capital region of Patna, the Digha neighborhoods of working class communities lacked institutional and state support. While lacking the legal and technical knowledge due to their low levels of educational attainments, the only support these communities could muster was based on political patronage of their more fortunate, frontline members in local or provincial politics who themselves lacked experience in legislative and constitutional practices.

By 1990s these backward communities, the Yadavs, the Kurmis, the Banias to name the prominent among them, however, made a strong position in the state legislature and formed governments on their numerical strengths, and, therefore, could better negotiate their chances, even by the illegal, spurious means. While the political mobilizations became cut-throat and intense, the governance became increasingly difficult. From the late 1980s onwards, the spatial developments in Digha proceeded on a clearly self-initiated, squatting-like path. We may see a glimpse of it from the following case.

In the year 1974 Bihar State Housing Board (BSHB) notified approx. 1024 acres of land in the Digha area of Patna, where present day Rajeev Nagar is situated, for the proposed Digha Housing Colony. Nearly 600 acres of this 1024 acres area falls on the eastern side of Digha-Ashiana Road while the remaining 400 acres of lands are on the eastern side of the road. One the western side some of the lands are still under active cultivation whereas on the eastern side all the lands are converted into residential colonies.

Even after the lapse of more than three decades BSHB failed to completely settle the landowner's compensation related issues. During this period, individual buyers as well as

housing cooperative groups purchased lands from the landowners, most of them small and marginal farmers. As per one informant, when registrations for housing cooperatives on these lands were prohibited by the authorities in Patna, these groups got themselves registered in neighboring districts.

Attempts by the state government and the housing board to take control over the notified lands were met with resistance by the local residents. In the past, a portion of the notified area was forcibly secured by the state government where the present day Rajeev Nagar police station, a facility of central paramilitary forces a well as a big CPWD building is situated. One person died in the police action to drive away the 'encroachers'. Later, the matter went up-to the Supreme Court that ruled in favor of the government. To settle the dispute, the Bihar state government enacted the Digha Acquired Land Settlement Act, 2010, one of the latest pieces of legislations to regulate land use in the PMC area. Subsequently, to fix the rates to settle the claims of landowners and the residents, the state government approved the Digha Land Acquisition Settlement Rules and Scheme 2014 which did not convince the landowners. The landowners maintained that, as per new land acquisition law enacted by the Union government in the year 2013, the BSHB's rights over the notified lands stand nullified. They also claim that the present market rates for their lands are much higher than the rates fixed by the government that is based on 1973 circle rates.

As per the Digha Acquired Land Settlement Rules & Schemes 2014, the state government decided to hand over 600 acres of lands on the East of Digha-Ashiana road back to the residents after a payment of penalty rates fixed for the purpose, citing its inability to drive away the residents in this densely built-area. Whereas, it decides to acquire the remaining 400 acres of lands, on the West of Digha-Ashiana road, by paying compensations to the landowners. The government opines that a good part of these 400 acres of lands are still vacant and therefore it must take control of it.

On September 5, 2017, more than 20 persons were injured when the residents, officially deemed as an irate mob, clashed with the police during an anti-encroachment drive at Ghurdaur Road that passes through these 400 acres of lands. Several policemen were also injured and the 'mob' set of fire three JCB machines and a police vehicle. Unable to control the situation, the police made a retreat.

Again, on 19th January 2019, while police tried to launch an eviction drive on the 400 acres land site, a violent protest broke out and 12 policemen reported injured when angry local residents attacked them. This drive was to take possession of the 6 acres land of the 400 acres, that the Housing Board sold to the central government organizations the SSB (2.5 acres), and the CBSE (2.5 acres), and also for the purpose of shifting the Rajeev Nagar Police Station (1 acre) close to the disputed site. The police finally took these 6 acres in their control. Nine families have claimed compensation for this 6 acres land, but as per media reports, none of them received any compensation. Similarly nearly 339 families have applied for compensation for the loss of their land and homes on the 400 acres site whereas none of them received any compensation. The excuse put forward by the state authorities is that the land in question is under title dispute in Court and only after the disposal of the cases they can disburse compensation.

As per a news report published on May 18, 2018 (Shahbaz, S.M. 'Digha land tussle erupts afresh', The Telegraph India, May 18, 2018), landowners have filed a case in the Patna High Court as per the new law on land acquisition passed in 2013 by the Union government that suggests that in the case of non-payment of compensation amount for more than 5 years, the acquisition shall be deemed nullified.

The Digha land dispute is certainly not what appears on the surface as a case of eviction of "illegal settlers" or "land grabbers" by the state. Instead, is a case of long drawn process in which competing social forces have been seeking greater numerical consolidation of social power and domination in the area which is now very much part of the Patna Municipal Corporation. Digha is one of the largest urban wards in Patna urban local body and elects representative periodically. In the manner the state allowed for those numerous housing cooperatives to buy land from erstwhile settlers and farmers on the East part (600 acres) of the 1024 acres notified lands and also register themselves even from other districts having no jurisdictions in this area, shows that a predominantly lower and working class neighborhoods that once were part of the industrialized Digha were slowly allowed to be replaced with their new occupants. These administratively well connected and networked middle class of gentrifiers not only reconstructed the entire built environment along the middle class residential colonies with multi-storied housing apartments and buildings but also induced displacement pressure on the remaining working class population.

With the state formally recognizing the middle class consolidation over more than half area of the disputed site, and criminalizing the working class residing on the leftover 400 acres land, led to further increase of displacement pressure in Digha area. Land in Digha became major attraction of investors to make windfall gains through multi-storied housing and real-estate construction. Those working class localities with very small residential plots in each family's possession became attraction of investors to consolidate them into multi-storied housing projects and middle-class neighborhood development. The State itself participated in this process of gentrification of the predominantly working class, deindustrialized Digha area at all levels and at all stages, from the creation of a speculative housing market to forced eviction and displacement to the legal displacement through compensation. But it did not stop there. It went on to create and develop a predominantly middle class neighborhood itself, at the expense of the working class, right on the 400 acres area of the disputed Digha site.

In 2007, the Bihar State Housing Board sold approx. 6.49 acres of land to the Central government for the General Pool Residential Accommodation (GPRA), as Patna till then had no General Pool Residental quarters for the Central government officials and employees. This new central government housing colony, right next to the 400 acres land site, presently consists of the tallest housing structures in Digha, as these five apartments in eleven floors each accommodates 314 residential flats. The middle class families who are occupying these flats are not part of the networked social class of Patna who shaped the middle class neighborhood developments until recently. Instead, they are the *new middle classes*, with the great majority having no previous connections with Patna or its networked social classes. They are mostly college-educated, bilingual, and well-connected through advanced, internet based communication technologies. But the focal difference lies in the realm of neighborhood social interactions. They are not part of the competing segments looking for consolidation of political and socio-spatial positions in the area through the networked and numerical domination. (On 'the theory and history of territoriality as power', see, Sacks 1983; 1986; 1992). They are not obsessed with the "people like us" and the "neighborhood like ours" syndrome afflicting the middle classes of the pre-liberalization era. To these new middle class residents the upscale neighborhoods and residential colonies in the Boring Road area lands or in Patliputra housing society has no symbolic meaning.

They, instead, tends to have "post-national", globalized, "world-class" aspirations (On the "postnational urbanism and India's middle class" see, Srivastava 2019:210-221, also, Brosius 2010:72-79). They share economic liberalism more than the cultural nationalism and economic nationalism (as opposed to socialism) with their traditional coonterparts as an element of "common grounds" for "mobilization" (the Marxists don't recognize this type (of class) of mobilization similar to their a "class-for-itself". See, Portes 2010:73-74), however, this diferrence of grounds is only a matter of degree and therefore, may be contentious. Their source of meaning and identity is more constitutive of their capacities as modern, globalizing consumers who love to do shopping in big stores, in malls and online stores, avail services that are similar to those in Delhi or Bangalore, and connect through internet and mobile applications. Their choice of Patna region for residence is borne out of necessity of better education and health care facilities and also flight and train connectivity with other cities. Their sense of neighborhood is more abstract, fluid, co-evolving and unsettled, and, therefore, it is not merely territorial, i.e., "a human strategy to make places instruments of power" (Sack 1992). Rather it is everyday negotiation of territory, mobility and security. And with any of these aspects falling short of expectations in any specific area or a locality, the new middle class led housing growth in those areas are either slow or the spatial organization has taken a different route. Karbigahiya, Punaichak, Mithapur, Jakkanpur are some of those middle class neighborhoods where the new middle class have not shown much interest and, therefore, these neighborhoods, despite their convenient locations have remained comparatively "less developed" and "over-crowded" due to sizable lower/working-class residences. Some of these areas were previously considered as "unsafe" and a den of petty criminals.

Sanjay Srivastava (2019) summed up this post-national conundrum in the larger context of India's modernity, in which he pointed the manners in which the ideas deployed against the colonial tyranny of the British rule like "civil disobedience", "revolution" and "Satyagraha" or the notion of the consolidated force of "people" aginst the brute power of state, no longer hold its original intent and meaning vested in the furtherance of the "national good" (Srivastava 2019:212). On the contrary, the popular public discourses today are characterized by economic liberalization and consumerist modernity. However, he cautions to conflate the notion of the *post-national* with the insignificance of the nation-state, instead, defines it terms of the "articulation of the nationalist emotion with robust desires engendered through new practices of

consumerism and their associated cultures of privatization and individuation" (ibid:213). He further alludes to the likely changes engendered by this "post-national turn" in the notion of the "ordinary person", also the quintessential "Aam Aadmi" that makes the middle-classs as the representative of the common class (ibid.).

Digha- The Urban Phase

With the advent of this new middle class, which is more glaringly visible in the present day private, open housing market in Patna metropolitan region, the gentrification process of the deindustrialized Digha area has taken a definite shape and greater convergence with the other urbanized zones within the Patna metropolitan area, and one can predict outcomes based on experiences of similar changes in other metropolitan regions. The charecteristics of these outcomes may be considered as the following changes:

- 1. It is towards the *vertical growth* of the urbanizing landscapes with greater pace and intensity. One of my key respondents indicated that, until 2010, there weren't even 5 high-rise residential buildings (10 floors or more) across the length and breadth of Patna city. (see, also Rash Bihari Prasad Singh 2005). But today there are many high-rise residential apartments and gated colonies, and, particularly in the Digha-Phulwari-Khagaul-Danapur area in the North-West and Far-West of Patna, nearly two dozen big housing or mixed-use projects with apartments consisting 14 to 21 floors are either on unveil or are at various stages of development. These developments suggests a firm arrival of the neoliberal market, presently in the housing, health and education but progressively entering into the all major socio-spatial organizing spheres of the Patna metropolitan city regions, including in public transports and infrastructure projects.
- 2. Another fundamental change is the drive *towards total commodification and securitization* of the Digha spaces, and accelerated reduction in the urban commons, most importantly, open spaces.
- 3. On can now clearly notice the complete withdrawal of the Bihar state government from the public housing development, and, instead, the shift of focus towards the infrastructure projects. This shift instead of diminishing the *role of state in propelling the market speculation* has further *intensified* its capacity to induce speculation. Now only a simple announcement of feasibility studies of a transport corridor or link rail-road or search of

new airport sites or the riverfront development projects fuel speculation in land and housing market.





Left: (Figure 11.) Digha-Ashiana Road, Patna. Right: (Figure 12.) Upcoming residental apartment in Digha,

The above characteristics, though indicative of the larger neoliberal trends, have something specific to say on the Patna's urbanization process. Why the private investors are not forthcoming in the infrastructure development? Most of the highway projects, or, rail projects or other transport-road connectivity projects in Patna are funded by the state government or in partnership with the central government. But private capital is not very attracted. While we try to answer this question we may appear to suggest that the question as it is posed has been unfolding at a concentrated level of urban development: Why private capital in housing, but not in infrastructure development? Without proper grasp of the regional and the political histories one may find it difficult to approach this question. A simple answer may start with suggesting that since nearly a decade, the divisible pool of taxes to be given to the states by the Centre have substantially increased and Bihar government is now in a position to invest in public infrastructures in a big way. But that leaves much to be explained.

A more integrated approach would suggest that

1. The state and the market are complementary forces under the present neoliberal phase and they both work towards maintenance of certain non-transparency in the urban development process. This can only be achieved through a mechanism of state-market relations fueling speculation based growth.

- 2. Aligned to this understanding, another factor points to the nature of Patna's growth itself, that is of, for and by housing growth. This housing industry led growth put the neighborhood development into a special light where an integrated, multi-modal, highspeed, advanced-technology transport systems would not be as profitable, especially in terms of the operation and maintenance costs, as the investment in the housing sector. The most critical requirements of the settlers in Patna is better schooling for their children and better health care facilities for the women and the elderly. Only certain advanced planning or certain spatial/area-based redevelopment schemes can easily cater to these needs. Unsurprisingly, the private schools and private hospitals themselves are major sectors for the private investors whereas the state government has miserably failed to provide both to the satisfaction of the urban living. One may get to hear a regular complain about the availability of the incompetent, junior/trainee doctors in the state-run Patna Medical College Hospital, whereas the majority of senior, experienced doctors are either running their private facilities or simply unavailable to the poor, needy patients, a great majority from the faraway rural places. This is yet another complementarity between the state and the market, I which state create room for private players by reducing the quality of services and public goods and infrastructures.
- 3. It is now increasingly visible that the middle-class housing sector is a priority sector for the investors as it serves two important market functions: a) it brings certain predictability and stability in an otherwise intrinsically volatile, risk market. Investments in infrastructures are more prone to risk than in the housing, even if the former may bring greater profitability and rent. And, b) the housing and mixed-use building projects are the most important medium of creating urban assets that not only bring profit but also prestige and visibility to the private corporations. There are umpteen numbers of important corporate functions that needs these assets permanently close to settlement areas in a clustered, concentrated forms for easy access to human and physical resources and services. Financial works, market research, research and development are some important function that may not be entirely possible from remote locations.

The Mobility and the Security

Transportation infrastructures, right form the days of river transports, have played a definitive role in the spatial organization and reorganization of Digha's built environment. When the Gandhi Setu reduced the importance of Digha port operations, it also took Digha off the radars of industrial entrepreneurs and investors. Instead, a new process of self-initiated housing settlement growth took over in which both the upper classes and the lower classes competed for sociospatial control and domination. This competition to a great extent was exacerbated by Digha's contiguity and proximity with Patna city and the role of state in fuelling speculations. However, speculations need not be entirely untrue or unfounded. There must be some ground for speculation activities to take off. Bihar government's announcement to develop a housing society in Digha may not have enthused the region much as it did in connection with few other announcements, including a river road cum-rail bridge on Ganga connecting Digha and Sonepur, the passage of the rail-lines between Danapur and Digha and not along the pre-existing Patna-Digha rail-line, and elevated road and a service road along the Danapur-Digha rail-line connecting AIIMS Hospital in Phulwarisharif with Digha road-cum-rail bridge. Even though the Digha Housing Colony project of the Bihar Housing Board never took off, the infrastructure projects in rail, road and bridge materialized as per the expectations and with each of these infrastructure projects making progress on the ground, the interest in Digha and the adjoining regions soared up, and the land prices also sky-rocketed.

The pressure on Digha land became so huge that the State government and the Central government had lengthy, years-long negotiations to settle the 7 kms defunct Patna-Digha rail line. As the traffic situation in Patna went from bad to worse, the State government decided to construct a road on the pre-existing, but now un-used rail-line to ease the traffic situation in Patna. This 71.25 acres of land was finally transferred by the East Central Railway (ECR), a Central government enterprise to the Bihar government for Rs. 221 crores for the construction of a four-lane road project. But as I already mentioned in the previous discussions, that right since the time of the 1975 floods the hundreds of families settled on both sides of the railway tracks, including hundreds of *diara* herdsmen families along with their cattle-sheds and house-hold dairies. Therefore, eviction of these families throughout the 7 kms stretch has become a contentious issue for the state administration. "In the affidavit submitted in the court, the district administration claimed that 514 huts and 186 Khatals (cow-sheds) have been removed". ('The Case of R Block-Digha Railway Line Slum', http://antievictionsupport.org/case-studies/).

Before the innaugration of regular operations of the scheduled passanger trains on the Digha-Sonepur Rail-cum-road Bridge on 3rd February 2016, the Rajendra Setu in Mokama (128 kms East of Digha) served as the only rail bridge connectivity on the Ganges, connecting the North and the South Bihar. This rail-cum-road bridge at Digha of 4,556 metres length (connecting Patliputra Junction in Digha and Pahleja Ghat in Sonepur) is next to the India's longest Bogibeel Bridge in Assam. The Patliputra railway junction is also meant to ease the pressure on the Patna Junction through which roughly 350 trains passes daily. This is bound to turn it into one of the important stop-over and transit railway station for the passenger and goods trains entering to North Bihar while running through the Delhi-Kolkata main route and also other important routes and destinations in South Bihar, Uttar Pradesh, and Jharkhand. By virtue of this new, high volume, high impact connectivity, the area close to Patliputra Station in Digha has become one of the busiest locations in Patna. A new bus depot close to the station area is proposed and one of the probable sites are the 400 acres disputed land on the West of Digha-Ashiana Road. A four lane approach road connecting the Bailey Road to the Patliputra Station is to be further extended to the Digha Police Station and the Ashok Rajpath. All these developments have turned Digha into a 24/7 working zone. Important is to note that all these major transportation and road connectivity projects are government funded as private investors are more interested in the real estate investments.





Left: (*Figure 13*.) A sign board for the proposed site for private residential apartment in Digha region. Right: (*Figure 14*.) A gentrifying Digha landscape.





Left: (*Figure 15*.): The elevated highway over the Patna canal and parallel to Patliputra railway station, connecting AIIMS, Phulwari Sharif to the JP Setu. Right: (*Figure 16*.) The changing urban landscape between Digha and Danapur.

Closely mirroring the above physical and the territorial developments are the everyday lives of the people that have made Patna a destination for their dreams and aspirations. In the past two decades, there has been a revolution in Patna in the school and the higher education sector. Even though sectors like the health care and the hospitality industry has made a great leap, the education sector stands out in terms of their role in making Patna what it is today: one of the fastest growing cities in the category of cities over a million-plus population. Since the days of the coaching institution boom in the 1970s and 1980s, when the rural youth started coming to Patna for a limited period for training to pass the exams for the government jobs, a system that still thrives today, Patna is now witnessing a school revolution. A 2012 (Rangaraju et.al.) Report on the phenomenal mushrooming of private, English medium schools in Bihar suggested that there were 1574 schools in Patna whereas the government statistics calculated only 350 schools. This report seemed only plausible as the official data apparently had a huge mismatch between the total eligible population of school-going children and the aggregate capacity of the existing recognized schools, meaning approx. 2,38,767 school going children to be identified in the study-report as "missing" out of the total eligible 3,33,776 students from the official DISE data. This study came to the conclusion that the three quarters of the schools in the city of Patna and nearly 68% of school going children were excluded from the official DISE data. Mostly these "missing" schools are unrecognized, charge low fee and cater to the poor and low income, lower class families and found to be often clustered around or in the vicinity the government schools.

These researchers also did household survey in which they found that nearly 70% parents prefer to send their children to these private unaided schools. Nearly 90% of these unaided private schools were found to be charging low to medium frees, which though were relative much higher from the charges in the government run schools, were still "affordable" for the large majority of the low income families vis-à-vis the fees in the recognized private schools. This report was compiled in 2012.

The School Buses, the Traffic Snarl and the Verticalizing Buildings: Gentrification inprogress

Today, one can witness yet another revolution in the schools in Patna: the boom of the "branded", "world-class", "international-standard" multi-affiliation, multi-recognition private schools. In the line of those 9 to 10% schools charging higher fees, these schools post-2000 are only an extension of the existing divide between two classes of school education that existed before 1990s, i.e., the private and the government; and the three classes of schools that came though the revolution of the unaided, unrecognized, low-fee, private schools, i.e., the government, the unrecognized private, and the recognized private.

It shouldn't be an exaggeration to suggest that while in the rest of the country the quality school education appear to be an urban function, in Bihar it is a combination of an urban and a city/metropolitan function, for the most of the families across the vast expanse of rural Bihar do not consider even their respective district headquarter towns as preferred locations for quality English medium schooling. Except for those living in big towns like Gaya, Muzaffarpur or Bhagalpur, mostly parents look up to Patna, or industrial/developed cities in the neighboring states of Jharkhand and eastern Uttar Pradesh, as a destination for life-changing, career-rewarding, proper English-medium school education. A combination of historical, socio-cultural, political and economic reasons led to this present situation, and some of these have found reflections in earlier discussions. A concern for the various aspects of human security (physical-territorial, life-chances-mobility, emotional-social and psychological) intersects through all these historical, socio-cultural, political and economic reasons pervading the system of education and socio-economic mobility in Bihar.

It is this aspect of human security that in the present neoliberal market dominated economy of Patna city region, has combined with the territorial and mobility related aspects, for a renewed push towards greater commodification and intense securitization of lived and neighborhood spaces. The recognized schools today impart an ambience for leaning together with safe and secure environment for the middle class children. This environment is available only at a cost. One of the most important aspects of this environment is the open spaces in these schools that allows for various physical, sports, socializing and interactional activities in a safe manner. It helps in an all-round development of students which is not possible in cramped spaces, a condition for most of the unaided, unrecognized, private schools.

The increasing commodification and securitization of spaces in Patna through fast growing housing industry has found its natural expression in the rising market in spacious, "world-class" schools that provide the middle class students not only a promise for good education but also only avenue for open, interactional spaces for recreational and creative development. These schools not only allow for use of space in the school-hour but extend to the periods beyond the study-hours, till the late-evenings. While all of these spacious schools provide assured transportation from the door-steps of the homes or very close-by places, they also are, generally, under intense surveillance, less to keep an eye on their own student and more to check any outside disturbances or threats.

These middle class schools with closed, loop-like system of door-step transportation and provider of recreational secure, open spaces are an important anchor of the gentrification process in Patna metropolitan region. In large majority of cases, the selection of schools for students are parental choices, not only based on their socio-economic conditions, as the 2012, India Institute Report also suggests, but also based on neighborhood relations. Safe and secure transportation, in a city where public transport in close of non-existent and highly toxic and unsafe, is one of the key considerations. These differences based on socio-spatial segregation of housing, school and neighborhood interactions are bound to bring differential outcomes of results in the overall development and life-chances of the students. Deborah Wilson and Gary Bridge (2019) made a similar finding in relation with the social and spatial composition of schools in the broader socio-spatial dynamics of cities. They noted that,

"With increasingly marketised education systems, parental choice of school is a key mechanism affecting wider urban processes such as gentrification. ... We find that school choice is associated with higher levels of segregation of pupils from different socioeconomic and ethnic backgrounds between schools. This finding is consistent across all types of choice mechanism, in different countries and cities, and across choice systems that have been in place for different lengths of time. The reasons behind the observed relationship are, however, highly localised and contextual, including particularities of the choice mechanism, social composition of neighbourhoods and mix of school types in a city." (Wilson and Bridge 2019: 3198).

The Education-Learning Paradigm, the Unfolding of the Agency and the Personhood

How can one not notice a paradoxical situation here? One the one hand, it is the hunger for education that became the rallying point, almost like a war-cry, for the urbanization and growth of Patna, whereby people thronged from all parts of Bihar to the city, and led to the incorporation and transformation of the distinct neighborhoods and clustered settlements into a present growing and visually-aesthetically homogenizing metropolitan region; and, on the other hand, there is a visible decline in the socio-spatial expressions of high-culture and literally and artistic sphere, the civil society and the regard for the public and commonly shared social good. One may argue that isn't education itself one of the greatest public good. Undoubtedly, education is a public good, but if it is spotlighted against the stark realities of the quality of urban life in Patna and the former's contributions in its improvement or decline, one may get thoroughly confused for how to make sense of things around.

Market works but only for the few. This is the standard template for the critic of the neoliberal market policies. However, actual expression shall go as this: the market works for a great majority but with differential means and broadly corresponding outcomes. It is through education that the market, in active assistance with the state, structures the system of neoliberal economy of space and the city-communities. In essence the marketized education trains their clients, the neoliberal subject, in the rules of participation in the economy of space and society. These rules are the codes for segregation and differentiation of which the subjects are not fully aware, including the parents who make choices over the selection of school. At least, this can be said about the 65-70% Patna parents, of which a good percentage came from different parts of Bihar over last few decades and, who together ended up sending their children in those more than 1000 unrecognized private schools with an expectation of an-English medium, quality education. Many of them certainly may have opted for a different city-destinations, or, perhaps, even within the same destination (i.e., Patna) the other choices, if were aware of what other

places could qualitatively offer in the same cost they are paying for these cramped, ill-equipped, unrecognized schools. Did they, then, choose for wrong options? How do we know, that the parents didn't know, what is best for their children in the given circumstances? How can we know, that we are making a close assessment of the reality? Outright questioning of the parental choices as uninformed or poor tends to stem from the simple, linear thinking about the function of the market. Life moves not merely in a linear, utilitarian fashion, or based on the economist, wage-paradigm, where the output is a direct, rational consequence of the input. Market and life, both have elements that defy simple, linear, causal explanations.

Here I would like to take recourse to a framework that I am inclined to call, the *education/learning paradigm*, in which a man's social relationships are fundamental to the self-awareness and, consequently, one's own notion of a dignified life and place in society. It is contrary to the atomistic notion of the individual man as its own value. It is valued only as social being and performing social functions, which is indispensable for the formation of self-worth. Performing social functions require skills and skills are attained through education and learning, both involving application of mind.

Charles Taylor (1999) made use of Bourdieu's notion of *habitus* to present a more nuanced understanding of the function of the human agency. If accorded a sense of physicality, this mode of agency may be understood an interplay of both "internal" and "external", and it is this embodiment of the *intensive* and the *extensive* as inseparable from one another that makes it far more complex to read and comprehend. The use of this seemingly unusual concept-Bourdieu's *habitus*, for the extrapolation of the role or function of the agency in Charles Taylor, is to overcome "our dualistic inability to account for purposeful, intelligent behavior that is not the following of explicit conscious rules". (Shusterman 1999:4-5). He achieves it not by according the agency a sharp distinctive name or an outward, fuller expression, *the doer* possessing conscious will and mental representation of ideas or rules, but, by conceptualizing in the manner that, it "not only provides a middle-ground for purposeful behavior without explicit purposes or rules consciously in mind, but it also offers a better way of understanding personhood. For it includes two crucial aspects that intellectualist first-person accounts of agency neglects: the body and "the other". The *habitus* acts through its *bodily* incorporation of *social relationships* and

meanings (i.e. those involving reference to *others*) but without needing to articulate them in terms of explicit rules or reasons." (ibid:5).

There are two aspects to this Bourdieusean reading of human agency in Charles Taylor. First, it is set against the *background* of modernity, tied to the Nineteenth century vision of science and rationality that filtered-down through the Enlightenment. And second, it challenges that dominant notion of agency and personhood, "the various forms of methodological individualism" of the present times. (Taylor 1999:32-33).

Drawing heavily from Bourdieu's *habitus*, Taylor refers to his own views of agency, against the reified notions of it, not only in relation with the *body* but also involving reference to the *others*, which, then, he set out to explain in reciprocal relation between rules and action; and, may be seen as combining all: the non-representational, the dialogical, the *rule-as-representation*, the act-as-embodied *social practice* and the learning of the conducts (*habitus*). While outlining the key, salient features of *habitus*, Taylor, citing Bourdieu, notes its explanatory-potential as complementary to another concept the *institutions*, as the "two modes of objectification of past history," He writes:

"The latter (institutions) are generally the locus of express rules or norms. But rules aren't self-interpreting; without the sense of what they are about and an affinity with their spirit, they remain dead letters or become a travesty in practice. This sense and this affinity can only exist where they do in our unformulated, embodied understanding. They are in the domain of the *habitus*, which "is a practical sense in which reactivates the sense objectified in institutions".

....Express rules can function in our lives only along with an inarticulate sense which is encoded in body. It is this habitus which "activates" the rule." (ibid:43).

Going by the above accounts, in order to make sense of the salient yet under-articulated or unexpressed parental choices to settle *only-in* Patna, at times defying many odds and involving huge "personal/physical/emotional costs", are akin to Charles Taylor's *following the rules* even though they didn't fully understand them. These rule-followings are pre-condition or a baseline for negotiating a share in the social goods, both tangible and intangible, that Patna, in contradistinction to the other district-towns and hinterlands, had been offering to their inhabitants on a regular basis, without much interruption or breakdown. Patna even in days of the extreme agrarian crisis and the regional economic sluggishness had better access to electricity and telecommunication, had better connectivity with trains that students and job-seekers frequently

use for low-fare travels. Moreover, it had what parents are most perceptive of, called the "mahaul", a conducive, peer-based, expressive atmosphere (also, environment) for learning, which, in practical terms, implied an interactional learning field that facilitated conversations and expressions in Khadi Boli, a dialect close to the standard literary Hindi, and also, but less frequently, in English; but certainly not in the rural dialects of Hindi, such as Magahi, Maithili or Bhojpuri widely prevalent in the rural education/learning environment of Bihar. The latter inflection to one's educational, linguistic and communication development is considered as sign of backwardness and inferiority. Undoubtedly, this difference of learning environment in which one grows, not only in the academic the sense, but in the overall sense of a personality or personhood formation, cast a spell on the life-chances outcomes, and set the benchmarks for what is regarded as socially valued and economically rewarding, as one progresses into the adulthood.

Homogenization, Segregation and the Depletion of Civic Environment: The Bane of Gentrification

The increasing homogenization of schools based on socio-spatial segregation is only another, yet key marker of the drive towards: (a) delocalization of production and consumption, (b) total commodification, and (c) securitization of spaces, resulting in the systematic decline and erosion of the open spaces. Today, it is hard to find an open playground and interactional area in Patna, except for those little enclosed parks within some select middle-class housing colonies. The environment in one such "free-for all" playground area outside the Moinul Haque Stadium is so overcrowded that one may find even difficulties in breathing properly. Also, the mere sight of it is enough to tell the story of acute scarcity of such spaces across the city. A Master Plan prepared under the Patna Regional Development Authority (PRDA), as per the mandate of Bihar Regional Development Authorities Act, 1982 (now repealed), for the delineated Patna Urban Area (PUA) of nearly 14579 ha. or 145.79 sq.km. (the present-day Patna Municipal Corporation, PMC area is 109.21 sq.km.), for the period 2002 to 2021, that was not implemented, made a succinct observation on the sorry state of open spaces in Patna, that since then has only got worse. It noted that,

"The total organized and incidental open space (which includes parks and playgrounds, water bodies, green areas) within PUA is only 128 ha. (1.28 sq.km.). The agricultural land is in the

urban fringes is 2423 ha. Although the total open space is 2551 ha (25.51 sq.km.) which is 17.49 percent of the total area of the PUA, over 90 percent is agricultural land. The Gandhi Maidan and Sanjay Gandhi Biological Park are the two large open spaces. Besides these other open areas are Bagh Jafar Khan, Binodanand Udyan, Dunbar Park, Vir Kunvar Singh Park, Harding Park. The only stadium in Patna is the Moinul Haque Stadium. This indicates that there is acute shortage of organized open space within Patna. (Final Master Plan 2002-2021, PRDA Patna, pp.88).

The Table.2 (below) shows the overall land-use break-up in the PMC area. The data is from the current Master plan-2031, which might be older by at least half a decade or more from today. My own impression of the pace of change in the built-environment, with more high-rise building projects adding every year in the Patna Urban Agglomeration Areas, including the PMC area, suggest that the agricultural lands and orchards in the PMC areas are almost on the verge of extinction, bringing down all forms of open/recreational spaces drastically. Also what goes under the name "vacant lands/agricultural lands", shown to be 17.66% cumulatively, have for long served as the alternative sources of livelihoods for a huge number of urban and semi-urban households and families, as the parcels' size owned individually are mostly very small. Many of my respondents claimed that even with a very small single plot of agricultural land in possession, families have managed to survive by producing and selling vegetables in the local markets in Digha and Patna. When the industries and port activities dwindled from Digha and Danapur areas by 1970s, these small parcels served many families to sail through the difficult times. Since the last decades these smaller land holdings are under severe pressure either from the land mafias or the local builders (generally with political nexus), because the working class owners themselves are in no position to construct multi-storey buildings on their plots. Many of these families have either succumbed to the pressure or got lured by the prospect of good money. As a result, the pace of loss of these "vacant lands" has severely increased, propelling the overall scarcity of the open spaces higher up.

Table 2: Existing Land use – PMC Area

Area Land Use	Area (sq.km)	Percentage (%)
Residential	49.56	47.55
Commercial	4.65	4.46
Mix Use	3.52	3.37
Industrial	1.09	1.05
Public and Semi-Public	10.61	10.18
Open Space / Recreational	3.20	3.07
Transport / Roads	6.15	5.90
Airport	1.10	1.05
Brick Kiln	0.73	0.70

*Note: Total Area is subject to change based on cadastral information		
TO A LIDIMO A	104.22	100
Forest	0.67	0.64
Vacant Land/Agriculture Land	18.40	17.66
Water Body	1.06	1.01
River/Flood Plain	3.49	3.35

Source: Patna Master Plan-2031 (pp. 5-6)

In large parts, this scarcity, therefore, is related with the unregulated housing growth in Patna and surrounding areas and lack of spatial planning over the period since late 1970s upto the present day. But there is also a more insidious hidden mechanism at work that helped nurturing a subjectivity that paid certain collective indifference to these developments. The civil society in Patna was for all these periods not only failed to make an intervention but also were complicit in the process of unplanned, unregulated growth. Except for certain injunctions passed by the High Court of Patna on the role of the state government at some occasions of public out-cry over natural calamities or road accidents, or the dysfunctional hospitals, the intellectuals or the academicians rarely came forward with credible reports indicting the government and other agencies of lapses and inefficiencies. Even the state of record-keepings and documentation is so poor and full of bureaucratic stonewalling that a research may not find it very conducive to venture into investigative and archival works. I was fortunate enough the find the first volume of the two volumes (2nd volume contained "only maps" as I was informed) plan-document of the Patna Improvement Trust (Master Plan 1962-1981), and also the second plan-document (revised Final Draft of Master Plan 2002-2021) by the Patna Regional Development Authority. The current plan document (Patna Master Plan-2031) for the Patna Metropolitan Authority, however, is easily available online.

Coming back to the question of subject-formation, one can sense a kind of chaotic and layered system of symbolism pervading the Patna spaces that do not allow for easy, open interactions. It is rather, in small, segmented, loop-like, networked units that, even though have a capacity of recombination and reorganization along multiple axial lines, lack a unifying code of urban culture. It reeks of certain provincialism for which commodification and delocalization of production and consumption has brought mixed results, on the one hand, of masking the cultural parochialism, and on the other, the generalized disregard and indifference for the common, public and the social good. The intolerable levels for air and noise pollution in Patna cannot be

explained without getting into the socio-historical reasons behind the commodification of spaces and gentrification resulting in increasing disregard, in fact, stark indifference to the open spaces and green cover.

Chapter 6: The Neighborhood Planning of Patna: Issues and Trends

The Social Landscape: From the Feudalism to the Familism

Whereas the predominant discourse on the origin and growth of identity politics in India and Bihar is attributed to the democratization of castes through the latter's socio-political mobilization for share in jobs and resource distribution (though the early mobilizations in the 1950s and 1960s were mainly around the tenancy rights but soon incorporated the homestead lands and higher wages for the landless and the bonded labors), it misses on some fundamental questions that need to be asked simultaneously. What is it that made caste and not the other identities like the religion, greater instrument for political mobilization in the decades following the Independence, especially in the 1960s and 1970s, when the wounds of the Partition were still greatly visible for everyone to see and experience? K. Chadha (2018), for example, in "From Caste to Faith: Contemporary Identity Politics in a Globalized India", highlighting the shift in political mobilization of identities from caste to religion, also made this point, however, relatively less provocatively.

Unlike the dignity-related mobilizations of the colonial era, in my opinion, the issues of economic inequities as the rallying point for the caste based political mobilizations in the electoral arena since late 1960s, were the manifestation of a *reaction* against the growing consolidation of a brand of politics in which, following the breakdown of the socio-economic feudal order, the ideology of caste and the ideology of family, or *familism*, also, *familialism* (on "familism", see Knight 1960:134; Heller 1976; Yuval Elmelech 2008:87-108; Esping-Andersen 2011:125), for the first time in the region's history joined hands for the reproduction of the privileges and advantages of the dwindling former-feudal-order. In large parts this unprecedented alliance of the ideologies of the caste and the family achieved socio-spatial synthesis in the big towns and cities. These growing urban centers, specially the national and the state capitals, became the anchor for physically and materially reproducing the pre-existing forms of social, political, cultural and economic capital into the newer forms. The important ones among these

newer forms include: 1. the *networked-social capital* organized along the urban concentrations through the air-rail-road transport and telecommunication linkages and networks, and relatively better infrastructure for the last mile delivery of assured electricity supplies; 2. the *human capital*, through educational and skills' attainments, especially in the modern legal, medical, and educational professions that started thriving in the capital cities as the home for the multiple courts and the high courts, big government and private hospitals, health-care and nursing centers and the English medium schools, colleges, universities and other institutions of learning; and, 3. the *linguistic capital*, most importantly by ways of learning the English language- the international lingua franca, that opened the world of global business and professional opportunities, but also the languages of high Indic and the Mughal-feudal cultures, namely the Sanskrit and the Urdu offering strong regional cultural basis.

Together with the other two forms, this new form of networked social capital played an important role in perpetuating the marginalization and backwardness not only of the rural and the agrarian communities, but also of the urban working class communities, as the pre-existing feudal hierarchical order now had a newly transformed socio-spatial dimensions for capital and cultural appropriations and accumulations. While the other regions in India began to pull-up through better, relatively equitable deployments of resources, both in the rural and the urban areas, especially in rural roads and electricity, Bihar witnessed a steady degeneration of rural infrastructure and economy and the per acre agricultural productivity ranked amongst the lowest in the country. It is against this background that the Bihar's agrarian unrest since 1970s and the force and the fierceness of the political mobilizations of the backward and the lower castes for electoral power, mainly caricatured as the identity politics, need to be contextualized. The emergence of the alliance of the ideologies of the caste and family in the urban centers among the privileged groups and networked communities in the early decades following the Independence, primarily identified with the emergence of the Congress-system, provided a much needed socio-ontological rationale for making it an ubiquitous, general template for the rural and agrarian mobilizations, in which naturally the backward and the lower caste populations had a greater share and visibility.

While the dominant discourse on the identity politics in Bihar associated it with the growing criminalization and corruption in politics that was very much the case since the early 1990s,

particularly in Bihar where "seizing power" meant the effective control of the election-booths and the electoral ballot-papers, the current shift of the critical focus on the growing "parivaarvaad" or the "dynasty politics", meaning the inter-generational dominance of one family-rule over the respective political parties, gives a misleading impression. Chronologically, it appears that the criminalization and corruption in the politics now has approached towards its more benign form in the growing "dynasty politics". Whereas, in reality, it is the convenient marriage of the ideologies of the family and the caste in politics in the 1950s and 1960s, that has degenerated into all forms of later expressions that, consequently, prevents the growth of the intra-party democracy in the most of the political parties in India.

While trying to explain the challenge to democracy in the context of the relation/asymmetry between rationality and power, as explained in his ten propositions (see original text), Bent Flyvbjerg (2003) noted:

"Given the problems and risks of our time – environmental, social demographic; globally and locally – I suggest we consider whether we can afford to continue this fundamental weakness of modernity. The first step in moving beyond the modern weakness is to understand power, and when we understand power we see that we cannot rely solely on democracy based on rationality to solve our problems." (Flyvbjerg 2003:325).

Although the debate on the effectiveness of democracy in solving our present day challenges that, fundamentally, originate from the ways in which modern societies rationalize their social exchange and transactions is an ongoing one (also inconclusive), yet the activists and the social scientists, more often, have advocated the role of decentralization in the creation of a new and just social system. For example, *The Ecologist* (1972) in their special issue on "A Blueprint for Survivial", that became the source of considerable debate, clearly outlined the role of decentralization as the most radical measures in the creation of a better social system. (The Ecologist 1972: 14-17). They outlined this role by forwarding four fundamental reasons in support. These include: (a) the cultivation of internal/inner control (also meaning "self-rule") to minimize the system and exercise of external coercion, (b) the promotion of local whereby the (niche)-jobs and the (niche)-beauty will not be viewed as a dichotomy and both be made as equally desirable, and thus harmonized in a balanced, just, humane order, (c) the creation of a humane-scale of community-living whereby the individual goals are not at cross-purpose with the social goals and the repression and modification of the individual aspirations to the benefit of

the greater good of the community are easily attained, and (d) to strike a healthy balance of population between the rural and the urban by making available the important facilities to all, in order to minimize the burden of the social systems on the ecosystems that sustain them. (ibid).

Understandably, therefore, in large parts, the problems of urban governance and planning are related to absence of effective decentralization that, among the several factors such as the average educational attainments of the general population or the level of the regional development or the size of the revenue collection or the ethnic/racial conflicts, is also aided by the social-structural (also includes ethnic/racial) and the institutional dimensions of the political practices. As a result of which the devolution of effective powers to the local bodies is prevented and the development of the bottom-up, participatory politics and democratic decision-making in effective, genuine forms are also stalled. The present or the new urban sociology need to pay more attention to the theoretical as well as the empirical understanding of the ideology and the working of the family and its relations and interactions with caste, class and gender based social and identity formations, in order to uncover the roots of the governance related problems or structural deficiencies.

The forces impeding the flowering of the genuine forms of social and political empowerment through seemingly "participatory politics", can be observed in Bihar, more clearly, in the context of the family and gender, where the reserved seats for the women of the weaker sections become source of the *de-facto* power for the husbands, brothers, fathers, uncles or other close malemembers of the family. The Ward No. 1 of Patna Municipal Corporation, situated in Digha itself, is a reserved seat for the women of the weaker sections. It is no secret for the people of Digha that a male member of the family of the present elected representative M/s Rama Devi (name changed) actively monitor, supervise and delegate developmental works assigned or granted to her constituency. Whereas this kind of male proxy-rule is not uncommon to the all parts of the urban and the rural Bihar, a reverse scenario in which a woman-member of the family taking care of the public responsibilities of the elected male representative is very rare. In either case, the alliance of the caste and the family ideologies work towards inhibiting the genuine empowerment of the individual actors and participants in the governance processes. This fragmentation of the socio-political agency of the individual women actors of the lower and the working classes under the influence of the ideology of the family synthesized with that of the

caste and class, in my opinion, serve great disservice to the marking and the preservation of the artifacts and traces that serve as the texts and also resource for the public landscape memory.

The fragmentation and loss of the public memory, in turn, render the local communities helpless with their articulations of the problems and issues, even in the face of imminent suppression or marginalization. In the urban context, together with the explicitly violent forms like forced evictions or dislocations of the urban poor and those at the bottom of the economic pyramid, living in slums, shanties, jhuggis, or near the water-bodies or riverbeds, in a scenario where the options for the democratic contestations and legal recourse exists only within the reach of the privileged classes, today, even the working classes have been subjected to the processes of dislocation and displacement. However, the mechanism in the case of working class dislocation and displacement tends to be less explicitly violent and more hegemonic in the form of displacement through gentrification where the state and the market actively collaborate towards changing the neighborhoods' class characters and physical built-forms conforming to requirements and tastes of the newer, middle classes. As a consequence, more and more high-rise buildings replace the squatter like settlements and dwellings.

These new middle class families committing themselves into paying home loans for 20 to 25 years or even more, for a dwelling space in these upcoming high-rise buildings, permanently transforming the social characteristics of the pre-existing working class neighborhood, become an ideal ground for the neoliberal capital to convert the productive land into extractive assets for not just rent or profit but to structure the entire landscape into the circuits of accumulation and corporate control. Once this control over the "second circuit" of capital is achieved, the foray into more personalized, private domains of human social life, such as health and well-being, becomes easier for the private, transnational corporations. Throughout these processes, the delocalization of production and consumption continue to manifest and enter into local systems of production/consumption, for the latter's assured destructions and eradications.

The Breakdown of the Feudal Order, Familism and the Urban Spatial Patterns

Based on the Census, and other study reports, the growth of population in Patna since Independence has been phenomenal. (Yadav 2005:250). The decadal growth rates have been 44.32 percent (1951), 28.61 percent (1961), 30.36 percent (1971), 64.12 percent (1981), 18.14

percent (1991) and 50.12 percent (2001), respectively (ibid). However, the capitalist urbanization in Patna emerged late. Even in the early decades of the post-Independence period, there is very little to suggest the urban growth on capitalistic lines. On the contrary, the main growth over the three decades after 1947, up to mid-1970s, was due to the public sector led employments and the infrastructure and housing developments. However, some early, although very weak, trends of capitalist urban growth may have started right after the Independence, without large impact on the existing residential behaviors or patterns. Despite the low impact, these early trends, since the beginning of the 1950s, need some analytical elaborations, in order to frame Patna's urbanization of the subsequent periods. Sociologically speaking, the post-1947 period of Patna's urbanization is marked by two factors:

- 1. In the spatial terms, the patterns of urbanization and residential developments are direct and immediate consequences of the breakdown of the *feudal order* in the region of Bihar, following the Bihar Abolition of the Zamindaris Act, 1948; and the transition to the capitalist urbanization, initially at slower pace due to the prevalent state-socialism, and later, with a greater pace, through market-capitalism, mainly after the National Housing Act, 1988 (also, see Mehra 2019:161-171), which designated the housing sector as industry and enabled the private realtors enter the urban housing constructions. Until then, the public sector, the Bihar State Housing Board (BSHB) and the private cooperative societies were the main drivers of the housing sector growth. Subsequently, with the liberalization of the national economy through the New Economic Policy of 1990s, the capitalist urbanization found another stimulus, that found spatial expressions in the present growing *verticalization* of the metropolitan Patna skylines. However, even under the period marked by the state-socialism (from 1950s to 1980s) the overall rate of urbanization of Patna remained significantly high. The decadal growth rate of the population of Patna as per the Census of India report in 1951, 1961, 1971, 1981 and 1991 were 44.32%, 28.61%, 30.36% 64.12% and 18.14% respectively. (see, also Mitra, S. & Bhattacharyya, H. 2018:156; Singh, R.B.P. 2005:121; Yadav, Sheo Kumar 2005: 250).
- 2. In the non-spatial terms, the urbanization of Patna in the period after 1950s and 1960s started to reflect the initial yet irreversible trends in the family structures and the family ideology, marking a clear shift in the very constitution of the social structure itself, that was, the *post-feudal* social order based on the centrality of the family. In fact, this shift

can be considered as the key to the understanding of the nature of capitalist development in the region. The 2 or 3 Bedrooms (BHK) flat culture and the nuclearization of the family structure made almost simultaneous inroads in the urban areas of Bihar, in Patna slightly earlier, in the late 1980s and the early 1990s, and subsequently in other cities and towns in the region.

While much of the literatures trace the changes in the Indian cities to the development of the state planning and state-socialism, the breakdown of the feudalism itself, do not find much analytical elaboration. It is later, in my opinion, that has greater bearing on the emergent social constitution of society in the region of Bihar, in which the feudal ideology of the preservation and maintenance of the feudatory titles, statuses and rewards (the British colonial or any other, non-official, self-styled etc.) to which the notions of the personhood and the idea of the selfpreservation acted subservient, metamorphosed into the ideology of the family, and, to which the notion of the self and personhood came to be identified much more clearly and intensely than with any other groups, ideologies or social categories. The individual in this region, in this sense, and, unlike the individual under the welfare state in the West, therefore, was never entirely free, atomized social units, either in the state-socialism of the 1950s up to 1980s or under the present market-capitalism. It is mediated, shaped and firmly anchored to the institution of the family. Or, to be safe, one may contend that the degree of freedom an individual in the region enjoys depends on the degree of prosperity, education and sociability attached to the family as a whole. Here, without delving further, in any ways, into the merits of the propositions, I would like to recall the notion of "familism" as understood by Frank H. Knight (1960), American economist and one of the founders of the Chicago School of economic thought, who contradicted the dominant binary between individualism and familism (or, the ideology of family) that existed in the West. He writes:

"There is a basic fallacy in the whole idea of society as individualistic in any literal sense, as I have said before. What is called individualism should be called familism, and a most crucial freedom is freedom of family life." (Knight 1960:134).

An Individual-Man, Or, a Family-Man

The breakdown of the feudalism, right after the Independence, therefore, transformed itself into the development of the ideology of the family, which came to denote a reduced sphere of influence and the striated conditions of existence, that, then, made a significant number of families flocking to the cities for a renewed socio-spatial organization of the privileges and positions, mainly as the state government employees but also as real-estate owners, professionals, educationists and social and political activists, and to a lesser degrees, traders, entrepreneurs and businessmen. In some of the professions like, trade and commerce, non-modern medicine, legal-judicial, priesthoods, real-estates, they could also find or identify with their status, kin, sect or caste peers who were part of the existing urban order in Patna and elsewhere. Initially these families mirrored the pre-existing modes of families with several members of the extended families and kins. But as soon as the transition to the cities unfolded at the higher scales, the extended families by the 1970s gave ways to the separated, smaller units along the nucleated-household lines. The growth of the nucleated families also denoted a greater weakening of the feudal cultural mores and conventions, which also found reflections in the breaking of the taboos of joining the creative professions like cinema and performative arts.

The spatial preferences concerning the residential choices were determined by several factors, including the distance from the work-places, or, the availability of land, and prices of land, in the same locality, but the proximity with the kin and familial networks played the most important role. The caste and religion, therefore, became another important factor in the early decades of urban growth in Patna, beyond the state-led housing colonies' growth. The neighborhoods that took shape in these periods until late 1980s and early 1990s, mirror this trend in the significant manner. Even some of those state housing colonies are starkly organized along the privileged-castes' lines, in which the lower castes or the marginalized communities do not have any significant presence.

However, some caution needs to be flagged here, for the caste alone was not the main or primary motivation behind the urbanization patterns but it was more a consequence of the metamorphosis of the ideology of the feudalism into the ideology of the family. And, therefore, this trend as a general condition of existence for the whole of the urbanizing society, picked itself up really fast and even the families of the less privileged communities could find ways to organize themselves spatially, mainly aided by the impulses of the collective political mobilizations and democratization, but mostly away from the traditional, prime, central city locations. This, in a way, also account for the non-existence of the state policy related to the slums, until the

beginning of the last decade, due to which the urbanization of Patna, beyond the initial planned development of some residential neighborhoods in Rajendra nagar and Kankarbagh, is largely considered as self-initiated, uncontrolled, squatter-like and haphazard.

A study published in 2005, titled as "Residential Apartments: A New Dimension of Patna Metropolis", contains some empirical findings that may help appreciate some of the points made above. It made a random survey of 175 occupants to investigate the principal cause for the purchase of apartment (Singh 2005:124-125). Of the 16 types of factors that the responses generated, the seven major responses emerged as:

- 1. Need of a permanent occupancy for a nucleated family (10.9%),
- 2. Lack of time for house construction work (15.4%),
- 3. Willing to live in the heartland of town but unable to get land due to very high cost (11.4%),
- 4. Nearness to workplace (18.6%),
- 5. Due to security reasons (6.9%),
- 6. Due to loan facility (6.3%)
- 7. For investment and rental purposes (6.3%).

The responses are certainly diverse because they indicate the recent trends and not those of the 1960s and 1970s, but the fact that the nucleated families seeking separate permanent residential occupancy is today a significant trend (10.9%), established as firmly among Patna's middle classes, shows the continued importance of the institution of the family, passed on to the present generations as well. Another 11.4 % also showed their preferences to stay close to their families or relatives (though not explicitly cited) in the older or inner city areas, but unable to purchase the land due to rising costs, also meaning paucity of habitable land. None of the occupants replied as single-member, independent individuals or, in the non-marital cohabiting.

In terms of their professional break-up, the share of government employees is not more than 50 percent. Nearly a quarter of all occupants are the bank and insurance employees, suggesting the easy availing of loan facilities driving significant housing demands. This also suggests the growing liberalization of the housing industry. Professionals and other groups include, the government officers 6.9 percent, lawyers 5.7 percent, doctors 8%, university- and college

teachers 9.1 percent, businessmen 11.45 percent, rural landlords 2.9 percent and contractors 8.6 percent. (ibid:126).

However, my argument that the study of family and household formation are critical to understand urbanization in Patna is not to suggest that the household as a category to analyze the restructuring of the cities didn't exist previously. On the contrary, the household remained an important parameter, together with the other critical contexts such as the city and the community, within which the world's households reside, on the basis of which the global economic restructuring are visualized and evaluated. Michael P. Smith and Joe R. Feagin Eds. (1987), for example, in the Introduction part (pp. 13) of "The Capitalist City", visualized "five basic types of urban restructuring that are part of the global revolution that analysts since Marx have called the 'new international division of labor": economic restructuring; state restructuring; household (including migration) restructuring; community (and community politics) restructuring; and, spatial restructuring, in cities.

Also, the nature of household formation of families is the context specific to the other macrolevel socio-economic development of the respective regions. Some of the broader aspects in the context of India and Bihar have been discussed above. The process of a nucleated family forming an household, a radical departure from the past forms of family-structures, is a development in the context of Bihar that is as critical to the understanding of the urbanization processes, as, say, several of those gentrification studies in the Western contexts that linked it with the singleperson household formations due to various reasons, including the educational opportunities during the post-war decades that benefitted largely the daughters of the middle-class families (Butler 1995, Bourne 1993). While arguing that there is considerable debate around the consequences and effects of the gentrification, and also that, the scope of gentrification studies has been widening in the light of new empirical data alluding to the complex realities, especially with respect to the continuing and perhaps growing inequality, Tim Butler (1995), in "Gentrification and the urban middle classes", however, assertively writes:

"What is clear though from various research studies is that the household formation of families has changed considerably with an increase in single-person households through non-marriage, divorce and old age and, at the same time there has been an increase in multi-earner households." (Butler 1995:189).

Warde (1991), following Rose (1984), termed gentrification as *chaotic* conception, also distinguished between two forms of gentrification - by big capital and by individual households – and called for different approaches towards their explanations.

After having discussed aspects of the economic and household and community (caste/class/gender) restructuring of Patna, we shall now turn to the state/spatial restructuring.

The Role of Urban Planning: A Reflection

Spatial Planning or planned development of spaces has been an important feature of urbanization and urban development since the ancient times. It is done primarily as governance measure of the densely populated settlement areas along the desired lines of maintaining and facilitating healthful, safe and comfortable living for the inhabitants, migrants and visitors, while also to facilitate trade, commerce and mercantile activities. There are several factors that have permeated the imperatives of spatial planning:

- 1. Political
- 2. Outbreaks of disease
- 3. Buffer/safeguards against hunger and natural/calamities
- 4. Trade and commerce
- 5. Port-functions
- 6. Revenue collection
- 7. Manufacturing, art and crafts
- 8. Aesthetic
- 9. Crime, delinquency and social unrests
- 10. Improvement of existing social and built environment

These factors are not exhaustive but only suggestive, and, therefore, it is possible that any one or the combination of two or more of these factors may dictate the terms of any particular spatial planning measures.

The acts of spatial planning are an exercise of power that requires control and resources mobilization. One important resource is the skill and knowledge required to carry-out the design and the execution of the planning. I do not wish to discuss here various types of spatial planning.

I only wish to suggest that the acts of spatial planning have a long history and many of the aspects of the act have been also passed on to the later generations as folk wisdom or written records. In the modern times, the growth and development of various academic and learning disciplines and the fields of knowledge specialization have contributed towards the knowledge of spatial planning. The specialized disciplines such as archeology, architecture and aesthetics, geography, population and demography studies, road and surface transport, housing studies, urban and industrial studies, geological and seismic studies, engineering studies, migration studies, communication studies and criminology and security studies have enriched our understanding of spatial planning. Also, the technological developments have played an important role in shaping the acts of planning as a highly skillful and specialized domain of knowledge, demanding resource and capacity mobilization based on different scales and time-frames.

However, we need to understand that, sociologically, the spatial planning is an exercise of power in its benign forms. Benign, not because there isn't any coercive or violence related elements present. In fact, policing and coercion is very much part of the planning process. But to a large extent this is exercised in the name of the public interest and social good, as a model of legitimate mode of governance. With time several participatory models have evolved and enriched the process of planning and spatial governance through democratic and decentralized exercise of power. As the role of the cities and the urbanization into society have evolved and also based on specific cases such as industrial towns, or port-cities or metropolitan cities, the participatory roles of citizen have also evolved. In the modern times, the market is an important addition of the processes of spatial planning. The most visible sign of this new mode of planning processes involving complementary roles of the state and the market is the destruction of the nature's regenerative and life-sustaining capacities. Today, in the sociological literature, what we know as the "risk society" or the phenomenon like the climate change or the unsustainable development are the manifestations of how spaces of all kinds: the physical-natural and the social- the private and the public, have been invaded and put under controlled use and access for the advancement of the social and the capitalist power.

What is striking in the present, from the preceding phases of the spatial planning, not much earlier than half a century, is a clear loss of innocence. This loss is no small loss. It speaks of the

two contrasting planning phases in the modern times: The earlier phase was full of idealism, positivity, optimism and hope, whereas, the present phase is simply devoid of any logic except the logic of capitalist accumulation. The vocabularies or the concepts that pervade the planning documents today are so technical and jargonized that it does not convey any meaning except the one in the service of the capital and the social power. Resource optimization is viewed from only one perspective: the potential for capital gain, and not for nurturing life or caring nature. The idea of marking the physical spaces as prohibited from external, mechanistic interventions simply does not exist. Even the so called *open spaces* are today subject to clear demarcation and legal-technical subjection of authorization and regularization. Nothing is non-regulated. In fact, every inch of physical space is today subject to multiple regulations, at least as many as the techniques as well as sources of land mapping and spatial imaging that today exists. The domain of the police, civil and public administration, earlier considered as relatively powerful vis-à-vis other civilian domains such as trade or commerce, are today only cogs in the wheel of the process of market domination and subjugation.

With respect to the case of Digha and its relation with the process of spatial planning and governance, we need to look at how the Patna city folds expanded over time and merged with Digha, in the present form of urban spatial 'non-distinction'. Even though the most parts of the Digha area is incorporated into the Patna Municipal Corporation area and the present plan area of the Patna Metropolitan Authority extends much beyond, I am not inclined to call it as suburban extension or peri-urban development or by any other terms of planning documents. Rather, I want to emphasize the unique nature of Patna's metropolitan growth, mostly without planned interventions, that is, through a "muddling through" phase (discussed in the previous chapter), leading to the present multi-centered, multi-nucleated urban region, in which Digha's own locational history and development as distinct neighborhoods plays a vital role. One of the important functions of the present neoliberal capital has been the erasure of the local histories through the notion of space as resource that is external, continuous, homogenous, tradable and transactional with respect to its only nature as commodity, for extraction of profit or rent.

However, there is a problem here. On the one hand, the task of a scholar is to identify the mechanisms and processes of the exercise of power and unravel its role in the socio-spatial restructuring, on the other hand, one also needs to present the perspectives that are meaningful to

the people and that help them negotiate their daily lives through the multitudes of social conditions of existence. The role of governance, thus, has at least two layers of *blindness*. In the first, a common sense of a person on the street is blind to the expert commanding data and information as a source of power to shape the former's relationship with social and physical space. At the same time, or secondly, the expert is shaped by a techno-managerial domain of work that blinds him to the nature of earth as an interconnected whole, sustaining all forms of lives living in close eco-systemic and environmental mutual interdependence. A researcher needs to see through both these blindness to be able to read the nature of reality more closely yet broadly in its fullness and complexities.

For the policy makers and the planners alike, the problem of combining conflicting objectives and values and evaluating them against various policies/planning alternatives persistently occurs. Charles E. Lindbolm (2003) in his paper, interestingly titled as, "The Science of 'Muddling Through'", suggested that between the two common tendencies in arriving at the policy formulation, namely "By Root or By Branch" approaches, the first (root) approach is not suitable for the complex problems and yet, he remarked that, "the literatures of decision making, policy formulation, planning and public administration formalize the first approach rather than the second, ..." (Lindbolm 2003:197). Outlining the reasons for this fixation, he further mentioned that,

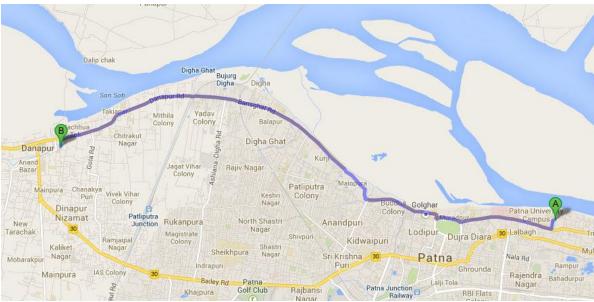
"The common tendency to describe policy formulation even for complex problems as though it followed the first approach has been strengthened by the attention given to, and successes enjoyed by, operations research, statistical decision theory, and systems analysis. The hallmarks of these procedures, typical of the first approach, are clarity of objective, explicitness of evaluation, a higher degree of comprehensiveness of overview, and – wherever possible – quantification of values for mathematical analysis." (ibid: 197-98).

The idea behind mentioning Lindbolm's formulations is not to bringforth any evaluative framework for the test of "good" policy, but to set the background for a more open and analytical discussion on the nature of spatial planning in Patna, in the past and as it is unfolding today, and their impacts on the Digha and surrounding neighborhoods.

The Patna Improvement Trust and the Spatial Planning Process

The boundaries of the Digha region, form the Ganges on the North and the Bailey road in the South, and touching the Patliputra Housing Society in the East and the Patna Canal in the West

that flows parallel and along the Danapur Digha rail-line and road, today mirror a vast expanse of the urban territory, also forming a contiguous relation with the *urban fabric* (Lefebvre 2003: 3-4) of Patna city region, is considered by several of my field respondents, particularly of the middle class gated and semi-gated colonies and housing apartments, as *New Patna*. This understanding of urbanization of Digha region is reflective of the aspirations of people coming to Patna in the hope of not only better education and services but also a new identity. Digha's local history doesn't enthuse them much, and, therefore, the conscious mechanisms or efforts that seek to preserve the memory, artifacts or traces through preservation, archiving, public display and documentation and recording in print, audio-visual, or artistic forms, open to viewing and public display, are non-existent.



(Figure 17.) A Google map of Patna City (Source: www.sourcedigit.com)

The first planned intervention in Patna (1962-1981) even though was restricted to Eastern fringes of Digha, made passing remarks on the need of preserving the mango-groves of Digha. They noted that, "The existing mango-groves at Digha are proposed to be retained and eventually incorporated with the district park proposed in that area" (Master Plan, Patna Improvement Trust, 1962:VI/57).

However, the intent was not really beyond the land-use restrictions, either for preventing the homogenization impulses or, the environmental degradation due to the loss of natural enclaves. But this is exactly the point I wished to empirically highlight in order to explain what I mean by

a marked loss of innocence, otherwise visible in the initial planning efforts, as mentioned above in the chapter. For all the other, *contested*, values of the mango groves as culturally unifying and historically rooted, *i.e.*, the *heritage value relating to the under-privileged*, *working classes*, might have appeared too far-fetched in those times, when the planners, actually, thought that the expansion and housing growth of Patna would stabilize by the end of 1970s or the beginning of the 1980s. And, therefore, simply couldn't see any threat to those mango-groves, least of all, from the force of "free" market-capital on the back of burgeoning middle classes.

The Patna Improvement Trust (PIT) phase (1962-1981) was filled with two impulses that were intently *modernizing* yet of different origins. Closely mirroring the economic orientation of those times anchored in a vision of an independent, non-aligned Third world nation, the planners of the PIT appeared to be enchanted with the notion of the mixed-economy model. They were at ease with the five year centralized planning measures adopted by the Nehruvian regime at the Centre, and, therefore, also seeking to align their spatial planning goals in terms of its various phases of execution with the ongoing and the successive national planning tenures. At the same time they were also enchanted by the modernization theory of the Anglo-American origins and exhibited the hope and enthusiasm that the correct application of this paradigm of economic growth and development might translate into: a linear, techno-managerial, historically-culturally neutral, staged growth of economy. Their demand assessment for resource amenities and service deliveries were based on the hope of a "take-off" stage (On 'take-off stage', see Rostow 1960), that the Indian economy was likely to attain by the end of 1970s.

Underlying one of the basic assumptions in the projection of Patna's population characteristics, the Master Plan, 1962, notes:

"In keeping with the Government's plan programmes, the 'take-off-stage' in the national economy will be reached by the year 1971, that is by the end of the Fourth Five-year Plan, when the national economy is expected to stabilize and start paying dividends in terms of domestic savings, which will partly be utilized for furtherance of the means of production and partly for the betterment of the lot of the common man" (Master Plan, Patna Improvement Trust, 1962:IV/29).

In the same breadth, it also noted that, "By 1981 the problem of housing shortage is likely to ease considerably and the migrant male workers will be able to bring their families to the City" (ibid:IV/30).

The point here is not to recount the critiques of the modernization theory, or the Soviet-era Fiveyear Plan mechanism, or even the miscalculations of the spatial/urban planning instruments. The post-facto analyses of the spatial planning can certainly yield divergences between the actual and the intended. Rather, the aim is to highlight the nature of the "intended" itself, much similar to Lindbolm's (2003) "root approach" (discussed above) in which "first the ends are isolated, (only) then the means to achieve them are sought", and also, analyze the language, the wrapping of the positivist, instrumental reason, in which the Five-year Plan instrument was apparently understood as true to its socialistic proclamations, wherein the benefits of the national savings or resources would get equitably disbursed or allocated for the betterment of the "common man". The role of politics or dialogical communication or even education/learning, then, supposedly, would be only cosmetic or secondary to the top-down planning regime, and the latter would guide virtually everything with the precision of a "machine", from the pinnacle of the command economy. An impersonal, external machine that acts as bulwarks against "disintegration" impulses generated through unplanned and unrestrained intercourse that the modern urban societies freely indulge in. Taking this notion of external, impersonal 'machine' as synonymous to the democratic way of executing the Plan, interestingly, the Master Plan, 1962, under the subheading, "Planning: A Democratic Process", states:

Generally speaking every man lives somewhere and within the limitations of his experience knows what the living place means. Starting from public side-walks, night shelters, and hovels to big mansions, each one of these are places where men live and strangely enough love to live. But studies on human sociology conducted in recent years indicate that the tendency of disintegration that has now crept in in the modern urban societies, have their origin in the undesirable living conditions of the people. Re-integration of the human society can be brought about only through the process of proper physical planning. The 'machine' has, for the first time in human history, brought the concept of democracy in the field of planning, which is now primarily meant for the people, to reach the home and hearth of every individual. This is a big change from the past and a big task, but one that will pay dividends in terms of human happiness and contentment. The soaring population must be housed healthfully, the slums accumulated over generations and consolidated by world wars must be eradicated. An environment for healthful living, that will at once take cognizance of the complex needs of man and his society and also put humanity in its proper perspective, must be created. In fine, a balanced 'osmosis' of man's physical needs and emotional aspirations must be effected through proper physical planning of the human environment. This indeed offers a big challenge and perhaps the biggest opportunity of peacetime." (Master Plan Vol.1, Patna Improvement Trust, 1962:II/9).

The above quote is both illuminating and interesting, in many respects. First, it clearly fits in the tradition of the social ecologists who envisioned the role of planning in how the soaring population be housed, an understanding drawn from the social/urban ecologists' view that the

basic unit is the family. It also maintained the space as abstract, neutral and continuous physicality, similar to the absolute notion of space, to be "molded, retrofitted, renovated, created or improved into "an environment for healthful living" for the communities (formed by a group of families) to be placed in the neighborhoods, that may channel the emotions towards desired social outcomes and proper behavioral patterns.

Unsurprisingly, therefore, one can see a great emphasis in the Master Plan, 1962, on how a neighborhood should be like. And this quest, then, naturally refers back to the familiar sources and "standard practices" of those times, known to the planners and administrators. While elaborating some of these practices and the issues associated with the ruling elites' attempts to shape the urban sector as part of the overall development of the nation, concomitant with Jawaharlal Nehru's modernist ideals and socialist beliefs, Sanjeev Vidyarthi et al. (2017) writes:

"On the one hand, they conceived a state-centered spatial planning and development model that employed the latest (but imported) concepts such as land use planning and comprehensive master plans. One the other hand, they used a combination of state power and existing institutions and routines that the colonialists had left behind, such as the engineering oriented Urban Improvement Trusts (UITs) and compulsory acquisition of private lands, to operationalize the adopted model.

However, the combination of shortage of resources and the ambitious scope of the state-led planning agenda severely constrained the chosen approach but not enough to block the institutionalization of the modernist parameters and procedures in India's planning practice.

But this 'top-down' and largely socially insensitive planning process excluded both the anticipated beneficiaries and the many poor including those that built these places. Lower rungs of the bureaucracy routinely colluded with local politicians and conniving intermediaries while playing lip service to the Nehruvian promise of modernistic urban transformation but definitely safeguarding their administrative, business, and political interests (Gupta 1995; Jeffrey 2002). No wonder then, that a complex web of divides, exclusions, and contestations shaped India's settlements more than formal planning efforts." (Vidyarthi el al. 2017:xxii-xxiii).

Planning the Neighborhood Units in Patna: Motivations and Sources

Here, I would like to start by reviving my initial puzzlement with the low-levels of sociological engagements with the city of Patna. As my research on Patna's urban sociological conditions could barely find any scholarly works beyond the usual, nondescript contents from the poorly compiled historical, journalistic or biographical accounts, my interest in the topic often returns to this riddle. I, now, tend to identify the answer to this lack of engagement in the wide disconnect between the intent of the neighborhood planning as recorded in the Master Plans for many Indian cities including Patna, and the very contrasting outcomes in Patna, even when compared to the

perceivably similar planned interventions and outcomes in the other (comparable) cities to that with the Patna's.

To begin by formulating this disconnect in simple terms, I would like to suggest that the intention of many of the urban planning agencies in the early Post-Independence period was to use the instrument of the neighborhood planning or the built spatiality of planned neighborhoods "as an appropriate incubator for grooming and sustaining a modern citizenry." (Vidyarthi 2010:263). This entailed educating the uneducated new urbanites into the democratic affairs of the new nation, tacit spread of civic virtues, cleanliness and inter-group cooperation and maintenance of the public order, and to promote moderation in behaviors of the diverse working class groups. (ibid). All these had to be achieved by way of housing the diverse social groups in the new neighborhoods. While the success of the outcomes can be argued from various standpoints for the various Indian cities, but in the case of Patna this effort was defeated squarely due to lack of understanding on the extent of the cultural strongholds of feudalism, backwardness and rurality in this part of the Indian sub-continent. Therefore, while the intention was to house the modernizing citizens, the planners of Patna, in many cases, rechristened those spatial units as neighborhood units, that in reality, were the blooming clusters of the social networking families and of the social ties extended along the caste affinal lines, or slightly improvingly, were reproducing the class- "exclusivity of the Civil Lines". The Samantas (the feudal ranks, also means: the "neighbors") and Zamindars (landlords), native officials and professionals (lawyers, doctors, professors) of the colonial and the Mughal era orders, many of them already living in and around Bankipore settlement areas of Patna, negotiated their ways easily to fit into the planning narrative of the seemingly top-down created modern neighborhood units.

This low-levels of diversity of social groups in the respective neighborhoods units together with the cultural strongholds of the colonial feudal orders and the overall educational backwardness of the region of Patna district, gave Patna's urbanity its distinct characteristics, most immediately marked by a very low level of *anonymity* and further, by the general backwardness or conservativeness of interactions and the provinciality of the outlooks, tastes and behaviors. Perhaps for a city of this magnitude and scale of population, density and size, there bound to be much higher degree of anonymity, cultural and creative attainments and ethnic diversity. The city growth having its basis in the strong intra-regional influx of population caused the urbanity

of Patna a great damage, for whatever mixed ethnic flavors it had due to sizable presence of the Bengalis and Punjabis, got diminished rapidly with the corresponding increase in native population.

It was not the case that the planners were totally oblivious of the ground reality with respect to the provincial character of Patna's Post-Independence population growth. As I said earlier, the issue is not the lack of understanding but the marked "innocence" that emanated from the belief that modern planning of the *urbs* will eventually produce the urban *civitas*.

Specially, in the Patna's case, the planners acknowledged that, "the basic concept of the emerging urban pattern for Patna, is based on the principle of 'organic growth'; that is a growth related and geared to the day to day living needs of the people. The physical manifestation of this principle can be found in the 'cellular form', which envisages that the city should comprise of a number of 'cells' each with a distinct identity and function of its own, but to coherently integrated with each other to give the city its total form and function." (Master Plan, Patna Improvement Trust Vol.1, 1962:VII/61). They, further, envisaged that that the smallest unit of the neighborhood cell (a self-contained residential unit where a group of people would reside and within which all day to day needs of living would be met and a 'sense of neighborhood' would prevail), "a 'micro-cell' as it may be called, will then approximately correspond to and serve the purposes of the traditional 'mahalla' of the old Indian towns." (ibid). Comparing the neighborhood micro-cells with the "traditional 'mahalla' of the old Indian towns" clearly shows that the planners were acutely aware of the provincial baggage of caste, joint-family and native affinities that were to be fixed or tolerated in the overall scheme of the spatial planning. The idea that emerged, then, was to "coherently integrate" a number of these micro-cells or mahallas to form a 'sub-neighborhood', and in the stage higher up, two or more sub-neighborhoods to be grouped "around a more potent unit of social service element, such as a high school or a community centre, to form the complete neighborhood." (ibid:VII/62).

While the overall neighborhood design or vision, in itself, appeared to be guided by care for details, the *Patna planners* (together with a concern for convenience, the term is to reflect a "fact" that the early days of planning were full of hope and idealism, as informed by one of my key respondents, when the planning team used to burn midnight oil in the Patna offices with the aim of locally accomplishing masterful art of urban plan-making) missed on the very crucial

points. That is, how to make space for diversity and anonymity amidst strong affinal, cultural and social familiarity, and also that, with the already existing bases for the strong social, provincial, native ties what should be emphasized to infuse the new environment with the air of liberalism and spaces for creative freedom crucial to cultivate the modern citizenry: "education" or "(more) exchange". In fact, in order to strike a "compromise formula" between the competing visions of the "indispensable social service element" that was to form the basis for community relations within the cellular or sub-cellular units, the planners took both the elements, the basic school in the Clarence A. Perry's (1929) "neighborhood unit" or in Frederick Gibberd's (1953) "town design", and the *shopping prescient*, together to form the social service core, as they felt that the "school basis for the theory of the neighborhood unit has been built up around a children's community and it affords an inadequate concept of a neighborhood unit in which adults are going to live." (ibid). Supporting their views, the planners further argued that, "this grouping of the children's school and the shopping prescient at one place will offer a possible added advantage that the housewife or the attendant can do the daily shopping while out to reach the children to school or back home." (ibid). Looks like the planners had envisaged perfect roles for every individual member of a family, except, perhaps what the child would opt as a suitable career choice: sciences or humanities!

Polemics apart, the significant curtailments by design, of the chance-encounters among children of different families and class-backgrounds, and of the freedom to negotiate their own independent ways between the home and the school, indicate that some of those technomanagerial planning prejudices that Jane Jacobs (1961) vehemently criticized, for the unimaginative functions assigned to the streets and sidewalks in relation with the school going children in the urban middle-class neighborhoods, have reasonably sound basis. Patna's popular image as a big regional hub for "coaching" centres to train the young aspirants into cracking the competitions for the government and public sector jobs and the strong preference for the government jobs among Patna's youth and families themselves, undiminishingly over the last seven decades, and the near total absence of the "creative class" (Florida 2002) in the city, speaks a volume on the patterns in which the neighborhoods shaped and developed over this entire period, barring the last one or two decades. This perceived absence of the "creative class" in the present make for a much harsher reality when people knowing the city's past fondly remember how vibrant Patna's cultural landscape used to be until the 1950s and 1960s. The

arguments presented here is not to suggest that these are the sole factors for what all pervades the present cultural landscape of the city, but is to give a sense of one of the possible ways in which the present chaos in the city may be approached, that is, by reading between the lines of the planning documents. Set against a background firmly anchored in the city's past, the details and the empirical observations of the unfolding of the trends in the present day neoliberal urban phase would be easier to organize and contextualize. The next section will further elaborate this point.

Why Study Planning Document?

Together with the vision documents of their times and places, the planning documents are also artifacts, rich in color and contrasts. Reading them can help us to see though the different motivations and expectation of society at the respective periods and also to analyses the layers of values and meanings that are bestowed upon those motivations and expectations. In this context, apart from the essential ideas used in the plan for their implementations, there are also, as Brent D. Ryan (2011) suggests, "additional levels of meaning relating to a) a plan's place within a larger intellectual sphere, b) a plan's statement on the social and political values of the time, and c) a plan as a part of the history of the planning profession and the life of cities." (Ryan 2011:309). Ryan (2011) has identified the three levels of meanings that one should look for in a plan, namely as, (i) factual meaning, (ii) contextual meaning, and (iii) temporal meaning. The content of a plan represent the first. The knowledge of political, social, economic, and physical contexts of the plan and applying this knowledge to our understanding of the content of a plan, shows the contextual meaning of the plan. And the third level corresponds to an additional layer in the context of the planning history of the city, the city-history, the planner's life/careerhistory, or the societal history and their embedding, of which the plan is an embodiment. (ibid:313).

The Three Plans for Patna

1. The Patna Improvement Trust (PIT) *Master Plan, 1962-81*: The plan was prepared (proposals for a period of 20 years, that is up to the year 1981), and adopted under Section 33 of the Bihar Town Planning and Improvement Trust Act, 1951 (Bihar Act XXXV of 1951), as amended in 1952 and 1955, in which the important objectives as stated in the plan document were, namely:

- a. Removal of overcrowding.
- b. Clearance of slum and urban obsolescence.
- c. Planned urban expansion
- d. Reclamation of low-lying and waste areas.
- e. Segregation of industrial areas from residential areas.
- f. Provision for an integrated water-supply system.
- g. Provision for an integrated road system.
- h. Provision for an integrated drainage and sewerage system.
- i. Provision for metropolitan green belts.
- j. Provision for open spaces in built-up areas.
- k. Development of residential areas on neighborhood principles.
- 1. Reservation of suitable areas for various community needs.
- m. Utilization of natural amenities.
- n. Stoppage of ribbon development and recovery of ribbonated roadside lands.
- o. Preservation of historical monuments; and
- p. Any other proposal bearing on the health, convenience and comfort of the people of the locality.

As previously discussed (Vidyarthi et al. 2017), and also apparent from the stated objectives of the PIT plan, that the Patna planners broadly relied on the "standard", "scientific" parameters of those days which, of course, were imports from the West, namely the master plan based on "comprehensive surveys" and the engineering oriented land-use planning along with the residential area development on the "neighborhood unit" principle. "Man is the central theme of all planning work", stated the Plan (*Foreward*, PIT Master plan Vol.I, 1962). Also that, "The Master Plan has been formulated on the basis of comprehensive surveys of the problems and conditions now obtaining in the urban areas of Patna. The major recommendations have been formulated after a very careful study of the City's present needs and future requirements, by a panel of technical experts of the Trust who has requisite training and experience in the field of planning"

The statistical and the engineering methods were widely used in the preparation of the plan. The Patna planners also consulted several literatures that also guided generations of planners in the different parts of the Western world. On the land use planning, for example, their main guide was F. Stuart Chapin, Jr. (1957, pp. 397) "Urban Land Use Planning", published by New York: Harper and Brothers. Chapin, Jr. was the single author for the early two editions (1957 and 1965), and was joined by other co-authors for the subsequent third and fourth editions (1979, 1995). "Sometimes called the bible of land use planning" (Review: *Urban Land Use Planning*, Godschalk 2012), the early reviewers themselves considered it not as a general treatise on city planning, rather "restricted to the most scientific part of one phase of city planning" (Review: *Urban Land Use Planning*, Gilmore 1957).

The Patna planners, however, were more concerned with the control aspects on the use of land than the fixity/finality or determination of the urban land use outcomes. While delineating on the "Land-use Planning Principles", they noted that, "A characteristic feature of the urban land-use is its transitional character. There is no finality of the use to which a particular land is put to-day, that it will remain so for all times to come. Changes always take place, and the frequency and extent of such changes depend upon the relative shift in the degree of importance of the factors that control land-use patterns. These changes, however, should not be left to take place in a manner that may be prejudicial to the wider interest of the urban community. Control on the use of the land is necessary." (Master Plan Vol.I, PIT: VI/51). They outlined the five-fold purpose of such control, including, "to regulate the dis-use of land (e.g., taxation to enforce developments, clearing of un-marketable titles, restraining owners of occupied dwellings from discontinuing their use etc.) and "to guide the re-use of the land for more appropriate purposes (e.g., urban redevelopment, slum clearance and re-housing). Behind the primacy of "control" objectives in planning the land use there was two major considerations: Patna's growth this stage of development was very much in the form of uncontrolled sprawl (a feature that didn't go away till now), and, the acute awareness of the topographic conditions of Patna surrounded by rivers from almost three sides (and Patna Canal on the fourth side), with plenty of urban land being lowlying and flood-prone.

Despite the stated socialist goals of the Nehruvian era, and the "man as a central theme of all planning work", Patna planners were very much interested in ascertaining that the "marketability" of the urban land shall improve. As cities were viewed as the growth engines/machines/motors to the sub-regional, regional, national or global economy (Molotch

1976; Logan and Molotch 1987; Scott 2008:130), what one were to expect as an outcome from this "growth machine" notion, Logan and Molotch argued, that the "fusing of public duty and private gains" would "become much less acceptable, both in public opinion and in the criminal courts". (Logan and Molotch 1987: 50-98). No wonder, the elites in the professedly socialist dispensation like India of 1950s, therefore, discovered the instrumentality of centralized planning as most preferred means to insulate themselves from the socialistic policy structures. This though may appear as a contradiction or even an anomaly from the present day understanding, the urban planning in those days, and even later, was immune to such criticisms.

It is in this context that the class-relational approach towards reproduction of privilege, stratification and socio-cultural differentiation through the ownerships of urban spaces, e.g., assets like housing (either for dwelling or rent or both), shops or commercial spaces, become much clearly visible, as the planners and the decision-makers, also, the state bureaucratic class, in a socialist regime, at individual (household) level were not constrained by the idealism imposed from the top, and were interested in creating means for reproducing their privileges. The most obvious of their strategies, then, were creation of fixed yet transferable urban assets. However, the critical, Marxist literature tend to downplay this aspect by locating the more fundamental logic of class and social reproduction in the labor market, and simultaneously problematize the category of the assets. (Hamnett 1995: 257-272; Savage & Butler 1995: 345-357).

An asset (a broad term, having both immobile and mobile components comprising economic, cultural, organizational dimensions) owning, rentier middle class might also be contributing to the process of gentrification with logic of their own: to reproduce their class based privileges, mainly through the ownership of the real-estate like housing and commercial spaces. However, surprisingly, even the non-economist critiques of the neoliberal capitalism tend to ignore the "urban" and the "city" as factors of analysis. A more focused study on these aspects may throw some interesting findings.

For the planned development of the residential areas, the Patna planners adopted the "neighborhood unit" principle, aspects of which have already been discussed in the above sections of this chapter.

This plan phase was later termed as "quick land use exercise" (Master Plan-2031:6). On purely technical grounds (Ryan's [2011] factual meaning of the plan), this characterization seems only appropriate as, on the question of plan-area under delineation, the then planners had only broad observations. The city municipal limits at the time of making of plan were about 11, 506 acres (46.5 sq.km.). The proposed ultimate extent for the city growth in the plan covered an area of about 21, 636acres (87.5 sq.km.), nearly double the then existing municipal limits. They also noted that after 20 years of the present plan, as the growth will not cease to occur, the possibilities to develop the neighboring smaller urban settlements such as Hajipur, Maner, Fatwah, Masaurhi etc., into satellite towns will have to be explored. Only to get a sense of how these smaller settlements are doing today, consider this fact about Hajipur: Spread over 20 sq.kms, Hajipur on the North bank, across the Ganges, today is the second fastest developing city of Bihar, only next to Patna, with a total population of 1.47 lakh as per census 2011. However, on the other merits such as on a comparative basis (Ryan's [2011] temporal meaning of the plan), between the later plans (especially the present Metropolitan Master Plan 2031) with that of the PIT phase, the doubts need to be raised whether the characterization of the PIT phase as "quick land use exercise" is similar as what may be termed as the "broad-brush land use exercise", and if not, in what ways they differ and why. We will return to this question in the later parts of this chapter.

2. The Patna Regional Development Authority (PRDA) *Final Master Plan*, 2021: This master plan was conceived to address the problems arising from the unplanned development of Patna after the PIT phase. Earlier, the Draft of the *Master Plan 1981-2001* was prepared, with a delay of five years, in 1986, to be approved still later, in 1990. This plan could not be notified as incessant delays and moving further through the sub-committees, the plan period neared its point of completion. In the face of severe challenges of meeting the basic amenities, such as housing, sanitation and connectivity, to a vast population of the organically, fast growing city-sprawls all over the available lands in Patna-neighborhoods and the surrounding areas, a Draft Master Plan 2021, prepared by the PRDA in the year 2006. But, before its approval, the PRDA was dissolved due to the repeal of its enabling piece of legislation, i.e., Bihar Regional Development Act (BRDA), 1981. In the absence of the apex institutional framework and further delays, the unplanned urban growth with surmounting problems of sanitation, drainage, water-logging,

water-supply, road-connectivity created a condition of doom and gloom for the onlookers of the Patna's urban affairs.

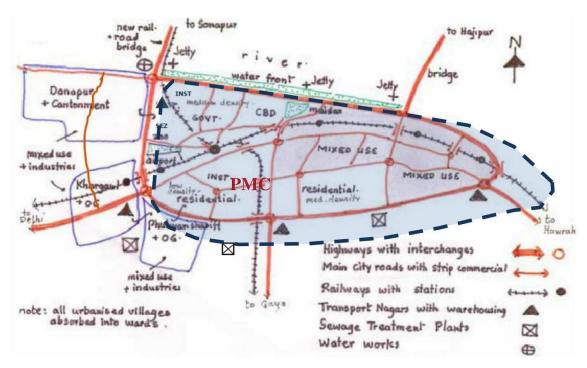
The revision of this Master Plan 2021 was later taken up by the Bihar Urban Planning and Development Board (UP&DB), mandated under the newly enacted provisions, namely, Bihar Urban Planning & Development Act 2012, and Bihar Urban Planning and Development Rules, 2014. The Urban Development and Housing Department (UD & HD) Patna handed over the Master Plan 2021 to the Center for Environment Planning and Technology (CEPT) University for revision. The final result of this ongoing exercise came out in the form of a new Master Plan, i.e., Patna Master Plan 2031, and a new enabling body the Metropolitan Planning Committee (MPC), having both elected and nominated citizens as members together with the statutory members, is created in the year 2016, for the preparation/implementation of the area/sub-plan level development plans.

In total, there are 30 members (12 members from rural local bodies and 18 from the urban local bodies) in the MPC and a few ex-officio members, mainly the government servants from different departments concerned. After its first constitution the MPC was soon reconstituted in October 2017 as the terms of the members who were the elected representatives of the local bodies (only for 5 years' term), got over. The MPC in its present form, as reconstituted in October 2017, is supervising the works of the metropolitan planning of Patna. Due to infrastructural and budgetary constraints, that was also reported by some newspapers, the progress of work done by the MPC can be considered as less than satisfactory. For the initial first year term, the MPC budget as proposed was Rs.23 lacs 70 thousand. In the absence of timely release of funds, the MPC meetings were deferred several times ('Patna News Metropolitan Planning Committee Not Found Even After 14 Months', Dainik Bhaskar, See the source as date on website reads- 'Two years ago'). In September 2020, a Hindi language news report repeated almost the same story, stating that even after four years the MPC members have not conducted any business as they still lack a proper office/work space (Prabhat Khabar Print Desk, 'Patna Mahanagar Yojna Samiti Did Not Even Have Its Office The Meeting Is Closed For Four Years', Prabhat Khabar, Sep 4, 2020).

As other agencies/bodies and development vehicles are involved in different aspects of city/smart city/urban development, it appears as if the state government is still managing the

affairs largely through them. This also suggests that the most of the urban development works are being delegated through the bureaucratic means or in a top-down manner.

3. The Master plan- 2031, prepared by CEPT University, Ahmedabad: This plan can be considered as ambitious in scope as it covers an area, also Patna Planning Area (PPA) of 1,167 sq.km., that is almost 10 times the municipal area. It covers 13 Community Development Blocks (C.D. Blocks) of the district of Patna. In total there are 575 revenue villages (rural administrative units) and 6 urban administrative units in the PPA, with Patna Municipal Council being the largest urban unit with the population of more than 1.6 million and Maner Nagar Panchayat being the smallest urban unit with the population of 40,068, as per the 2011 census. PPA has total population of 3.6 million in 2011, comprising both the rural and the urban.



(Figure 18.) Existing Land Use Pattern in PMC. (Source: Patna City Development Plan 2030)

The guiding principles broadly outlined in the Master Plan 2031 (descriptions of which I have tried to summarize in few words) are, namely:

1. Multiple Nuclei concept: With the projected PPA population to the tune of 6 million for 2031, that is, nearly double that of 2011 fugure, the plan suggests that creating multiple nuclei centers/sub-centers would reduce the burden from center/core nuclei.

- 2. Urban Rural continuum: It is understood as the change in terms of intensity of development moving in the direction from the core city area towards the peripheral area. Studying the changes of the settlement structure over the period of time help in the overall assessment, that is the evaluation of the degree to which the rural-urban dichotomies persists or form a continuum.
- 3. Transit Oriented Development (TOD): It is compact, mixed use development within easy walking distance form transit corridor, to minimize use of private vehicles and facilitate and promote commuting by mass transit.
- 4. Urban Growth Boundary: Or, urban service boundary is an officially demarcated line that circumscribes a fully urbanized or rural area, and growth is augumented by amenities, utilities and policies only in the demarcated boundary area and not in the outside area.
- 5. Peri-Urban Development: As per the UNDP (1996) definition, the activities that produce, process, and market food and other products on land and water in urban/peri-urban areas, by deploying sustainable methods.
- Provision for social amenities: Social amenities related to education, health and finance at the village level are proposed as per URDPFI guidelines for 2021 and 2031 year respectively.
- 7. Environmentally suitable development: Having elements of proper zoning with buffer zones between residential commercial and industrial land uses. Industries under criterias such as type of waste generation, to be clustered.

Also, the Master Plan 2031 mentions as adopted, the different levels (socio-spatial scales) for developing the various facilities as per the planning norms and standards, namely as: Community level facilities, Neighborhood level facilities, Sector level facilities, Node level facilities, Zone level facilities and Central Business District (CBD) level facilities.

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The Master Plan 2031 is in several ways consistent with the changes in the approach ("A salient shif?", see, Vidyarthi et al. 2017) to spatial planning that India witnessed in the period after liberalization. An important one among them is that, it focuses on both the urban and rural areas, which shows consistency with the changes in understanding that improving the rural conditions may also spur growth. What was coined as PURA (i.e., providing urban amenities in rural areas)

by the former president of India A.P.J. Abdul Kalam, also became a national policy of the Ministry of Rural Development, Government of India, since 2003.

However, the core issues, accumulated and compounded over time, remain the main anchor of the measures and methods envisioned in the planning: to tackle the problems associated with that of rampant growth of housing and squatter settlements, meeting the localized needs and service amenities of the high-rise residential buildings and gated apartments and improving the overall condition of urban commuting and living.



(Figure 19.) Patna City Growth Direction. Source: Patna City Development Plan 2030

While the methods of data collections have multiplied and new imaging, survey and mapping technologies used in the cadastral planning have found a place of prominence in the Master Plan 2031, the narrative aspects, the idealism of the 1960s are certainly missing. It now appears a purely techno-managerial, professional consultative exercise devoid of any professed political ideology, except some renewed concerns for the environment. The land use of nearly half of the PPA, 49.89% (or 582.19 sq.km) has been marked as non-developable area out of which 134.06 sq.km area of the PPA is proposed to be maintained as urban agricultural area and the rest of the near about 448 sq.km area to remain as non-urbanisable, for water bodies, nalla, green cover, bio-conservation, etc. (Master Plan 2031:68). Given the pressure of urbanization on the agricultural land one can only wonder how long the area earmarked as the urban agricultural will maintain its form. If the previous developments are any guide, nearly all the lands previously

identified to be preserved as agricultural/orchards have been converted into residential/mixed-use/commercial areas.

The Master Plan 2031 assessed the housing shortage in the PPA to be approximately 21, 414 houses, as per the 2011 census. Based on the projected population of 6 million by 2031, the additional housing need can go up to 474941 dwelling units. The present (2011) and the projected need, together with requirements of upgrading the dilapidated/kutcha houses can add up to the total housing need of 516355 dwelling units. The Master Plan has only general prescription like cross-subsidization of housing construction for the urban poor/Economically Weaker Sections(EWS), earmarking the land for EWS housing in the implementation of Area Development Schemes in new areas, construction of night shelters etc., and not clear directives to the state government.

In essence, the housing need is largely to be catered by the private or semi-private (cooperatives etc.) routes. In addition, what was earlier a contested issue, that is "existing slums to be relocated to the "alternative sites", has found clear place in the Plan proposals, even though the in-situ upgradation and in-situ redevelopment continue to the part of the narrative (ibid:136). The prescription that resettlement should be the last option is bound to be violated. The redevelopment instruments such as Transfer of Developmental Rights (TDR), which are readily used in the mega metropolitan regions like Mumbai for slum rehabilitations, have been brought in as the redevelopment strategy (ibid:138), clearly giving the market forces an edge over the public interests.

The other aspects of planned developments like sewage plants or public amenities like water/electricity is increasingly outsourced to the private companies and the process leading towards their fuller privatization is fully on. The role of the information and automation technologies, and big data and internet based service/delivery systems are increasingly getting influential and dominant in shaping the urban environment (some landmark measures of the adoption similar systems, like SCADA, in Patna, are already discussed in the previous chapters), which, then, give clear edge to the private corporations owning these advanced technologies, systems and applications.

Given the limitations of my field-work on the governance related matters, the point that I would like to raise here, as a closing argument, is that, as the city-spaces became much more liberalized and later neoliberalized (also meaning as, urban spaces getting much more contested, as they opened to the predatory market speculations through the politicians-realtors-land-mafia nexus), the plan concept of neighborhood (as fundamentaly linked to the unit-level spatial planning under the state-socialist/mixed-economy regime in India), form the 1970s and 1980s onwards, turned out be not much of an use. While this was very much the case with the urban redevelopment since 1980s in the US and UK (Fainstein and Campbell 1996:11-13), also apparently in tension with a separate movement called as "New Urbanism" (Campbell and Fainstein 2003:10-11), the second or the third phase in a city's planning (depending on their planning history) in the developing regions like India was also marked by less enthusiasm for the comprehensive development of residential colonies or the neighborhoods. In effect, the neighborhood-unit concept in the present, has been almost subsumed under either much broadbrush spatial exercise of "land-use planning" or under somewhat more detailed "town/area planning/development schemes (TPSs/ADSs)".

For example, the present Master Plan 2031 for Patna metropolitan planning uses the Area Developemnt Scheme (ADS) and defined it as a "broad-brush development vision for the city" and a "dynamic document". (Also see, Patna Master Plan 2031: 143). As stated in the Plan, the ADS route act as a technique guided towards achieving a specific urban form, in which newly allocated large areas subjected to development are put to use by dividing them into smaller areas in the proposed grid-iron road network. (ibid). While this official plan document calls its own, present ADS based urban land-use as "broad-brush", it also in its assessment called the previous PIT plan (1962-1981), that used the neighborhood unit method, as "quick land use exercise" (ibid:6). While in reality the abandonment of the comprehensive —level neighborhood-unit plan method was no small change, the official expressions made no qualitative difference to register this important, methodological, instrumental shift. On the contrary, they use a language that seems to obfuscate the actual difference between the two approaches.

Similarly, calling its own ADS vision as a "dynamic document" depends much on how best the plan is implemented on the ground, most importantly in terms of the preservation of open spaces designated in the plan as non-developable. Whereas, the broader context, i.e., the land use

allocation, does not display much scope for the "dynamism", instead mirror the functionalism and foundationalism of the urban ecology tradition, and, perhaps, also the linear belief in the *urbs* making the *civitas*. At least the *factual meaning* that one derives from the land-use allocations of the Patna Master Plan 2031 (49.89% of total PPA area is non-developable. See, pp. 68), appears to be quite similar to *Le Corbusier's* plan of the city in which the greater density of population (coupled with the other factors, practically unsupportive of the construction of residences as per the pattern (a.) sky-scrappers; or the pattern (b.) luxury dwellings) allows for the third residential pattern(c): residential blocks on the *cellular* system, that leaves out the least, "48% of the ground" as open (non-developable). (Le Corbusier 1974: 36-37). The other two options make available 95% and 85% of the ground, respectively, as open. (ibid.)

Also, the grid-iron road network of the ADS method of planned development of streets and roads go hand in hand with the the cellular residential pattern, quite similar to Le Corbusier's city plan. (ibid:32-33). The cells created by the grid transport networks are to be filled-in by the residential buildings (Bourne 1971:273), whose patterns, i.e., the blocks or the quarters or the sectors, may vary depending on the scale of the size of the street net, and as per Le Corbusier's vision, the grid become less restrictive with the increase in the size of the street net, as it further opens the possibilities of new building arrangements and may lead to the restoration of the balance between the buildings and the streets. (Martin 1974: 182-183). However, in the case of metropolitan Patna's Plan 2031, with the third option at hand that spares the least amount of land as open, the question of increasing the size of the street net is practically difficult to arise. Instead, the likely scenario that may arise, then, is to construct flyways and/or bypasses to ease the traffic congestions, which actually may act more restrictive to the free movement than ease it and may also make neighborhoods and walkways as self-contained, separated, isolated, insular, "self-ghettoized", homogenizing cells than a friendly, mixed, vibrant, happening, creative, meeting, interacting, welcoming, evolving, regenerative space.

Two historical processes with respect to the town and urban planning are important to be discussed in this regard. In the first, the city and the urban planning themselves underwent a legitimation crisis, though not to the extent that the instrument ceased to exist, yet the appetite and the confidence for intervention into the neighborhood-unit level detailed residential planning got diminished. While the legislative changes enabled private developers take over the

housing industry in the late 1980s in India, the state from its earlier interventionist role, simultaneously, shifted to the role of a facilitator and collaborator of the private developers/capital, even as the city/urban charecterestics began to resemble more and more of an *informal city* (meaning more insecure low-wage jobs, more slums, more disparities, more poverty and more displacements). As long as this growing informalization of cities' growth process did not become a threat to the rule of law governing the enclosures, private property in lands or other similar fixed, spatial assests, the state institutions appeared to be less inclined to regulate the land use, the most unlikely in the manner of the comprehensive planning norms and directives, e.g., the neighborhood-unit plan.

The sources of this change in approach or abandonment of the neighborhood unit plan approach was neither totally "voluntary" nor completely based on the "opening-up" of the market in urban housing, though the later factor definitely played a role in actualization of the change. This was, in an important way, due to the growing criticisms of the discipline and the act of spatial planning itself that began significantly earlier than the actual restructuring of economy and the planning practices. In other words, the abandonment of the unit-level neighborhood planning was a response to the legitimation crisis of the field of urban planning, most importantly of its claim of scientificity similar to the discipline of engineering. This disciplinary criticism also later merged with the crisis of socialism in the earstwhile socialist bloc countries, but this merger in effect, is similar or only the other side of the coin, with respect to the opening/liberalizing of the housing market. The criticism of the neighborhood level planning from the early 1970s onwards deserves merit and careful consideration in its own right, as its is through these criticisms contributing to the delegitimation of the planners' claim of the practitioners of science, that the new movements either in the vision of refashioned, revitalised neighborhoods (New Urbanism) or as a call for "Non-plan" (Banham et al. 1974: 244-252) or for "permissive planning" (Webber 1974: 214-236) or even the movement for decentralization (The Ecologist 1974: 252-258) began to take ground and shape.

J. M. Simmie (1974) discussed some of the faulty assumptions related to the neighborhood unit based planning and contended that in the most cases, even in those that advocated a blanced social mix in the neighborhoods, the plan based on neighborhood unit principle are primarily devices of administrative convenience, in order to benefit the planner rather than the planned.

(Simmie 1974: 29-30). Simmie pointed that the assumption of the proponents of this method of urban planning to achieve the functional and organic integration of urban individuals, and to effectively tackle the problems of anomie was not supported by the empirical evidence and also that the planners' selective use and characterization of anomie, and not alienation, for mapping the urban pathology has no demonstrable basis. (ibid:30). There are other equally important criticisms of the urban planning based on the neighborhood principle but I am presently more concerned with the key qualitative shift that these led to the planning practice, that is the weakening of the claim of scientificity of the discipline.

The result of the growing criticisms of the role of neighborhood planning in addressing the urban problems made available the proponents of bottom-up planning and decentralized form of governance much need empirical and logical grounds against the top-down planning practices to negotiate legislative and institutional changes. The adoption of the *multiple nuclei model*, besides the traditional concentric zone model and the sector model in the practice of urban planning might also have stemmed as a result of the later days realization that there can't be one basic pattern common to the ecological structure of different cities. (see, Murdie 1971:280-282). The sector model itself, though explained initially in 1903 by Richard Hurd, came into prominence by 1960s as a consequence of the study of the development of neighborhoods along the socioeconomic axes of housing/ground rent, income groups and residential qualities (ibid). These aspects, in the context of Patna's urbanization and urban governance, need more detailed study and analysis so that a proper contextual assessment of the role of neighborhood-unit based planning (initially originated in the context of planning the American cities), from its evolution and growth upto the decline in the Gangetic region of Patna, can be made. Equally important would be to map the the local level shifts in the understanding of the planning techniques and processes that might have emanated from the previous experiences of planning practices.

Conclusions

In this work, I set out with broadly two set of questions, one that relates to the understanding of the growth of some of the understudied Indian cities like Patna, and second related question was to look for an appropriate theoretical response to the imagining of the cities as we have been witnessing them changing and transforming over the last two decades. My second set of questions took me to look at closely three important aspects related with the theory, namely, the appropriate understanding of the theory of space, the nature and the study-object of the discipline of urban sociology, and an appropriate framework that may combine these two aspects with the problematique of the neoliberal urban development. My interest in Patna's urbanization inevitably led me the questions of the loss of enormous amount of agricultural and fallow lands and orchards to the creation and development of the new urban spaces. But this was only one way of looking at the reality, which essentially was the gaze of an onlooker who did not possess, until then, much interest or knowledge of the local history of the region or the *longue durée* perspective on the current events and developments, or, to put it slightly differently, "the *longue durée* cycles of sociospatial creative destruction" (Brenner 2019:61).

Two learning processes helped me enormously in reformulating my questions with respect to the present work. First, was a kind of *Lefebvreian turn* (after Henri Lefebvre) in my thinking process that forced me to interrogate not only the term urban and urbanization *afresh*, in relation with Patna, but the notion of the space itself. Although the connection of the present-day Patna with the ancient city of Patliputra is widely known and recongnised in the popular imagination, the interrogation of the urban and urbanization in relation with Patna opened to me the vast "hidden" pre-modern world of Gangetic trade and commerce, connecting the *entrepôt*, the "forwarding station", and a "great central godown" city of Patna (*Patan* literally means the port), and the most famous and busy ports of this region at Digha and Danapur, along with their connections and interrelations to the regions as far as Europe, Africa and Central Aisa. This "discovery" of the Gangetic river navigation connections of the flourishing city of Patna of the medieval

periods, a part of which survived till late in the early modern times, say, until the Railways took over the major loads of the inland trade-related transportation, made me rethink the whole approach to the study of urbanization and city-formations in India's north Gangetic plains.

And, the second process can be similarly termed as the *Castellsian turn* (after Manuel Castells), that made me take a back-step from, otherwise, perturbing questions of the loss of nature in agricultural lands and orchards, and instead, forced me to look at the other, fascinating aspect of it, that is, the enormity of the urban edifice, and the logic that sustains it in this part of the world, even taking it to newer heights. This further opened to me the questions of sustainability in relation with the resilience of the neoliberal capitalism and the growing middle classes in India for whom, at least in the imagination of the vast majority of them, the city is the ultimate aspiration. This ongoing process of the shift in India's characterization from a country with a rural/agrarian outlook to the urban nation of metropolises and megalopolises, is, sometimes referred as a "revolutionary urban transition". (Patel 2019:1). With the tectonic shift in India's urban population, more so in the Western and the Southern states (ibid), the seemingly insurmountable problems of pollution or scarcity of life-resources like potable water are, today, appearing as no longer a question of merely distributive justice or behavioral changes, but also a techno-scientific question, for how soon technology can come to our rescue, importantly, in meeting the pressing challenge of reducing and bringing under control the exponential rise in the carbon foot-prints and the irreversible damage that this rise might inflict to both the social "lifeworld" and the physical Earth's regenerative capacities of sustaining life. If at all the direction of change, as exemplified by the key processes like the planetarization of gentrification, was suggestive of something as its physical manifestations (i.e., the fast unfolding of the urban implosion-explosion at the planetary scale) it was basically an indication of a movement in the reverse direction, that the social, scientific and behavioral changes are certainly taking place but not to live in harmony with nature, instead more and more in conflict with it. The level of urbanization in India as per the Census of India 2011 report was found to be 33 percent, whereas The World Bank in a 2013 report puts it at 52 percent (ibid). Notwithstanding the differences in the assessments of the extent of the present urbanization, the share of urban population is bound to grow, with as many as 404 million population between 2014 and 2050, as suggested by a UN report, are expected to join the India's urban fold (Mehra 2019:162).

These altered subjectivities, having the oddities and peculiarities of a dangerous levels of tolerance and passive acceptance for the awful surrounding environment, adaptive of sickening levels of pollution and ecological degradation, then, appear to us as committed networked agents (e.g., long term payments of the EMIs for home loans) of the system of capitalism in its most vicious and virulent form, the neoliberal urban form. These agents or neoliberal subjectivities share among them a sense of space (vertical residential apartments, gated colonies) and a sense of belonging by ways of consumption and leisure afforded through their deep pockets (also as worthy customers of the credit –cards and bank loans disbursing companies), in the manner that pay scant regards to the local contexts of a sustainable living and mass/public well-being. The past solidarities of the industrial working classes are no longer a force that can resurrect itself any time soon as the very conditions that helped them come together simply do not exist anymore. The urban theories that continue to pin their hopes on the possibilities of the political mobilizations of the "neoliberal subjects" for just and alternative socio-spatial arrangements/conditions for their social reproduction, to me, fall in the category of the wage paradigm. I argue that this framework needs to be urgently complemented with another paradigm rooted in the theory of relational space, in order to bring some critical interventions in ways the physical, the mental and the social space have been seen as interrelated, even interdependent.

Based on Carlo Rovelli's loop quantum gravity theory of relational space, that reformulates the notion of space, as distinct and away from the absolute and relative space notions but also distinct from the earlier notions of relational space itself, this quantum-gravity theoretical relational space recast the physicality of space into completely new lights, not as relations between external, quantifiable entities, but as a measure of relations between occurrences and events. This amounts to no simple tweaking but a radical reformulation of ways in which realities are approached and perceived. I call it *radical* because Rovelli's scientific-mathematical formulation (a notion of space without time!) is yet to be experimentally validated, and yet, because of the proliferation of the Earth's gravitational and electromagnetic properties-based technologies (GPS and similar wireless, micro-electronic tracking devices etc.) profoundly reshaping our everyday lives and the sense of the *social*-(space), his ideas have strong resonance in my thinking of space and time, as *relational*. An important aspect of which belongs to the domain of consumption, (but not consumption alone), when Ritzer (2019), since his first essay

on McDonalization appeared in 1983, *today* reflexively presents his basic assessment of change in his updated ninth edition of "The McDonaldization of Society", now with addition of a self-explaining, new subtitle "Into the Digital Age" by asserting that,

"From its inception in the early 1950s, and for several decades beyond that, the heart of the McDonaldization process lay in brick-and-mortar structures devoted to consumption (most notably, of course, the fast-food restaurant). However, its center has increasingly moved to the digital world, especially its consumption sites (most importantly, Amazon.com)." (Ritzer 2019:14).

The digitalization of the ways in which commodities and services are availed highlights another interrelated factor that further intensifies the capitalistic hold over the forces of global production and the global value/supply chains, that is the *delocalization* of production and consumption practices.

Also, away from the 19th century scientism that dominated the knowledge paradigm for much of the 20th century, and unlike a return to Georg Lukács "objective idealism" or "absolute idealism" (Rasmussen1990: 24), this new notion of granular, discreet (quanta or grain) space organized as relations/networks of gravitational fields (similar to the electromagnetic Faraday lines/loops), being firmly grounded in the quantum understanding of non-determinacy and probabilistic thinking, take us closer to the distinctive physical dimensions that constitute our social and mental landscape formations (which are, in our practical encounters, largely counter-intuitive, reminding of the elusive "real object" in the theoretical debates [see Saunders 1986:175], in urban sociology), in order to illuminate aspects that in the past were not considered as topics of fundamental importance in the traditions of materialist realism or dialectical materialism. The concepts like traces, memory and agency together create an ensemble of relations, the real object (ibid.), also mirroring as the *potentialities*, that brings together the epistemology of thinkingspace and the ontology of becoming-space, as experientially undifferentiated unity and totality of the life-world. Even though the mechanisms of this merger (or, superposition) remain hidden to the senses, yet the micro-level occurrences, in the system marked by its degree of (low-level) entropy/disorder, through the actions of agency in relation with traces and/or memory, get transformed into perceivable information, that in turn give rise to the macro-phenomenon of culture and biology. The (human) agency, i.e., the subject of Althusserian "interpellation" or "hailing", or Foucauldian "subjectification" or Massumi's "(neoliberal) subject of self-interest",

devoid of a real understanding of its actions, or the unity of their senses, becomes merely a cog in the neoliberal capitalist-wheel, or worse, a *data* to be put on spread-sheets and subject to the market analytics for selling of the packaged holiday in Dubai or an anti-ageing face cream.

Thus understood, I tend to call the alternative yet complementary framework (as complementary to the wage paradigm) as the education/learning paradigm, that is based on the above mentioned quantum understanding on relational space that reimagines its relations with the mental and the social space, not as an externality or epiphenomenon or co-occurrences, but as a methodological and epistemological approach towards the understanding of the sociospatial-movements, rhythms, tonalities, vibrations and flows. This paradigm is more than a synthesis of the Chicago school's urban ecological model and the critical/Marxist political economy school, in the sense that it opens the field of urban sociology to the innovative use of the advancing of knowledge from the different disciplines, most importantly from the physical and the life sciences. In this sense, the education-learning paradigm calls for a truly interdisciplinary urban sociology. This framework serves two important functions in the study of the urban and the cities. First, it gives us some grounding in the non-foundational understanding of the spatial at the (complex)-system level, whose characteristics are extrapolated not by the measure of its constitution, but by the degree of control over the randomness/disorder, i.e., the entropy. This, to my understanding, is an appropriate template or a framework for an entry into the issues and the problems of the neoliberal (a system) spatiality, also marked by disorder/crisis. Secondly, it also gives a foot-hold or at least, a toe-hold in the "nature of the socio" (similar as Hussrel's "life-world", see Werlen 1993:214) of the sociospatial, by way of an ensemble of three inter-related yet distinguishable concepts: the traces, the memory and the most important of all, the agency. With an understanding, even if slightly loose, of the agency (also as potentiality), built into the theory of the neoliberal sociospatiality, offer the discipline of urban sociology its first clear anchor, i.e. the human subject (somewhat more than a real object like agency, action or space). From here, the education/learning paradigm opens to the myriads of possibilities of mobilizing, selecting, synthesizing and integrating- case studies with case studies, neighborhoods with neighborhoods, cities with cities, regions with regions, in which the social importance of the settlements and historical spaces would be acknowledged as critical in the making of the primary sociospatial complex, i.e., the neighborhood, both as a complex network of social and spatial ties- the lived

spaces, and the repository of architectures and monuments for the preservation, transmission and development of elite and/or vernacular aesthetics and culture.

In most of the critical, Marxist and scale-based urban theories the unit level analysis of space yields to only one reality/category: the local. In essence, the local or locale is an empty, ahistorical category. This is not a very helpful comparative category for the humanistic social sciences, even though the term itself is used in many ways and contexts. The efforts of the previous theorists like Anthony Giddens (1984), to make it a more useful category for sociological inquiry, in my understanding, has met with only partial success (for Soja's critique of the Giddensian version of spatializations, see, Soja 1989:138-156). It may still be useful as a relativistic category for building on the multi-scalar analysis of the neoliberal urbanization, or to explain the uneven geographical development through the reworking of the dialectics of temporality and spatiality as one finds in Harvey's space-time compression or in Giddens' spacetime ditanciation. But in the relational, historical context of the *neoliberal spatiality*, this does not seem to offer much analytical pre-conditioning or grounding. Urban sociology, instead, should offer more imaginative unit level categories. To me the neighborhood is one such urban sociological category, that I attempted to develop or reformulate, also as distinct from the abstract, spatially fixed, cartographic, closed neighborhood- mired into the absolute space notion- of the urban ecological tradition. In this re-conceptualized, relational neighborhood, the focus is not on the form (i.e. the concrete) but on the process, i.e., the neighborhood change. Therefore, what we mainly are dealing with is a *procesual* unit, like a line (a relation) between nodes in a network or a curvature of a field, and not a structural unit or building block of the unit-level analysis method.

The delineation of the neighborhood boundaries are not based on purely physical territorial limits, but as a triad of *territory*, *mobility* and *security*, (all three themselves in the state of flux) enabling or activating the human agencies in order to give rise to a discernible pattern of individual and collective action, of which the collective consumption is greatly useful to our purpose of studying neoliberal urbanization and gentrification. The middle class neighborhoods by ways of their distinctive patterns of collective and individual consumption patterns, often found to be favorably linked to the working of the neoliberal capital and free-market, calls of a closer look into how they are organizing themselves in to the new urban spaces, their forms of

dwelling units, learning and educational spaces, forms of leisure (spaces), means of mobility and security (also, assets) and, not the least, use of internet and micro-electronics based technologies and associated restructuring of the everyday world. Peter Jackson (2002) in "Consumption in a Globalizing World" aptly puts the issues involved with theorizing consumption in relation with the agency, as he writes:

"Consumption is a social accomplishment, an active process involving practical and discursive skills..., And yet the very terms of our engagement as "consumers" imply a lack of agency, signaling a world where consumers respond passively to market forces, as though consumption were an anonymous and disembodied process, unshaped by our classed, gendered, and racialized subjectivities." (Jackson 2002: 284).

Here, in terms of locating or identifying the *study-object* of urban sociology, my quantumgravity relational space based education/learning paradigm approach put a great emphasis on the process than the form, but not to undermine the phenomenon of the city and city formation but to take the critical gaze back on the city itself, as it is in the cities where we find the traces of the things past, the fractured identities, the dystopian societies, the passive subjectivities, the livedexperiences. We sociologist cannot communicate without the mnemonic aid of these traces and also of the memories that in many cases appear to be at loss with itself. Therefore, the second important task for an urban sociologist after advancing an appropriate theoretical approach is to find a methodology that place us safely against the neoliberal currents and flows, also at safedistance with the statist surveys, government files and NGO-reports. Together with the fieldworks, we need to enter the smelly, dusty world of archives and libraries, to find our resources (I was fortunate to find several of my important archival documents online, in the digitized forms), in which lies the traces to resurrect lost voices and fuzzy public memories. An appropriate methodological approach, for example, attuned toward working through the pastmemories/traces/agency, i.e., the longue durée background understanding encapsulating into it several aspects of the past and the present "life-world", that the processes of conspicuous consumption oriented neoliberal forms of urbanization/urban development tends to transform and ultimately dominate and colonise, can be found in Dolores Hayden's urban historical project- approach, as also presented in her 1995 published work: "The Power of Place: Urban Landscapes as Public History". Thus combining the approaches presented above, I tend to call the study object of urban sociology as the relational-historical neoliberal-spatiality, a refurbished notion of the sociospatial thorugh which the different processual aspects of the

present day urban changes, such as gentrification, delocalization of production and consumption, the middle-classization, can be brought under a systematic, relational inquiry.

An urban context, increasingly, unbounded by the traditional notion of city, inward looking, without making connections with the rest of the city, region and the world (read against Gottdiener and Hutchison's 2011, multi-centered metropolitan regions, or the MCMRs), opened the scope of gentrification studies for the globalizing cities in the regions of the global South. The planetary gentrification thesis proposed by Loretta Lees et al. (2016) offered invaluable insights that helped me in linking the present process of neighborhood changes in the erstwhile Gangetic port areas of Digha, Patna and nearby areas, some of them previously having significant industrial base, with the process of gentrification. Of particular importance in the case of Digha, Patna (the place of my fieldwork) is the role of the state- since the last decade and a half empowered with certain combination of social, political and historical conditions, in leading the change in the region's class character, from a vastly open, dispersed, semi-urbanized, predominantly working-class, region famous for its mangoes, into a densely populated, blistering residential and commercial, gated and semi-gated apartments' construction zone with a web of rail/highway/flyway networks on all sides (at the expense of the centuries' old orchards), which aptly resonates with the planetary gentrification thesis. On the question of gentrification and location, Loretta Lees et al. (2016) in "Planetary Gentrification" write in the "Conclusions" of one of their chapters, titled- New Urbanizations:

"More recent innovative and path-breaking thinking of the urban and urbanization at multiple scales has steered our attention to a rethinking of center-periphery relationships and also the diverse nature of urban development that results in multiple centralities." (Lees et al. 2016:49-50).

They, further, argue that:

The onset of neo-Haussmannization is perhaps the beginning of a planetary gentrification that no longer makes a distinction between central and peripheral locations, between neighborhood scale and metropolitan scale real estate projects, between incremental upgrading and wholesale redevelopment, between physical displacement and phenomenological displacement, and between residential and commercial make-over. The underlying commonality is the logic of capital accumulation, especially the ascendency of the secondary circuit of real estate, which enables multiple forms of gentrifications, thus gentrifications in a plural sense, taking place around the world in a variegated way. The place specificities of this process are important, as many critics highlight in terms of emphasizing the contextual understanding of concept and phenomenon, but an equally important emphasis is on the 'order and simplicity of gentrification', which allows us to move form localized neighborhood transformation to the greater picture of

actually existing capitalist accumulation that brings together not only (domestic and international) gentrifiers but also urban social movements that challenge the existing social, economic and political order. (ibid:50-51).

The term "Neo-Haussmannization" signifies a sweeping process of urbanizing landscape, "turning each land parcel and landed property into virtual commodities floating in the air, to be snatched by speculators" (ibid:50).

Further, the education learning-paradigm at the operational functional level, as it seek to position itself as a framework for critical engagement with the neoliberal urbanization, ought to be ingrained with the two impulses that reinforce and illuminate each other in their creative applications: the Bourdieuian (field, habitus and capital) and the Habermasian (communicative dialogic action, in The Theory of Communicative Action). In discussing Taylor's (1999) "To Follow a Rule ...", a piece of appreciation of Bourdieuian philosophical frameworks and methodological innovations, through the latter's concept of habitus, I wished to emphasize how the practice of sociology should avoid becoming an act of distortion of vision. By seeking to ground our approach towards an understanding of the social, not in any external objective reality, but in our efforts to put together the pieces of the fragments of history, culture and identity, we can avoid the dualist traps. It is like "acting together" to reach a common goal of understanding (not the absolute one, but the probable/contextual and evolving) with the minimum of hierarchies between the subject and the object of study, for which, therefore, the dialogic communication becomes an important, critical requirement. This, then, brings us close to Habermas's approach towards ethics and philosophy reflected in his discourse ethics (or, the ethics of discourse) and communicative reason (importantly, as against subject-centered reason. See, Rasmussen 1990:5).

In retrospect, I contend that my work may be considered as a much needed addition to the field of theoretical urban sociology and also lays grounds for the economic sociology of the Gangetic region of the Patna Metropolis as it articulates the relations of the social class, e.g., the new middle classes, with the second circuit of capital and the speculative market in housing and relaestate assets. It also proposes to visualize cities' economy as organic, evolving, reciprocating ecosystem (e.g., the one advocated by Jane Jacobs in how social organization at the neighborhood level give rise to sociability and friendliness, wherein the open, interconnected and accessible streets and sidewalks can be a civilizing and educating to the uncivilized and the "uneducated"/school-going children) that needs to be safeguarded from the brute, exclusivist,

enclave-minded, neoliberal armies of planetary gentrifiers and the mechanistic speculators. The state and the civil action in this endeavor in Patna have not evolved in the dialogic fashion, instead, are at cross-purpose. It is for the civil society to subject the state to the logic of sustainable, decentralized, bottom-up development and the social and environmental justice.

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by Yashwant Singh

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Participated / Chaired the Session in the Research Committee / Presented a Paper / Poster

of Housing: Growth Processes of Patra City

in the 44th All India Sociological Conference on Reconstructing Sociological Discourse in India: Perspectives from the Margins held on December 27, 28 and 29, 2018 at St. Philomena's College (Autonomous), Mysuru.

Prof. R. Indira

President
Indian Sociological Society

Prof. D. R. Sahu Secretary Indian Sociological Society

Prof. M. Raphael
Organising Secretary
44th AISC, Mysuru



PARTICIPATION CERTIFICATE

This is to certify that

Mr. Yashwant Singh

Presented a paper titled How Neoliberal Reforms Have Organized Housing in Patna City in

Rural-Urban Entanglements Workshop organized by







On 23rd and 24th July, 2018

Prof. Priti Ramamurthy University of Washington

Pur Lanan

Prof N. Purendra Prasad, Head University of Hyderabad

Description of the Module

Items	Description of the Module
Subject Name	Sociology
Paper Name	Classical Sociological Theory
Module Name/Title	Marx, Marxist Feminism and Socialist Feminism
Pre Requisites	Marxist theory of political economy, alienation, surplus value, class and social feminism
Objectives	To comprehend on which points the feminists critique Marxist understanding of exploitation.
Key words	Alienation, class struggle, socialist feminism, Gender equality in wages

Module Structure

Marx's method of political economy	Marx and human nature, Marxist theory of the
	economy, Marxist theory of society, Marx and
	alienation, reification, commodification,
	objectification.

Team Details

Role	Name	Affiliation
Principal Investigator	Prof Sujata Patel	Dept. of Sociology,
		University of Hyderabad
Paper Coordinator	Vishal Jadhav	Dept. of Sociology
		Tilak Maharashtra Vidyapeeth,
Content Writer	Mr. Yashwant	Dept. of Sociology
		Central University of Hyderabad
Content Reviewer	Vishal Jadhav	Dept. of Sociology
		Tilak Maharashtra Vidyapeeth,