DAMUDĀ: SACRED WATER

Narratives on Environmental Loss and Conflict in the Upper and Middle Damodar River Basin

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To the people of Jharkhand
Thank you for your stories,
Support, hospitality and friendship

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Author's Note

I visited the banks of the Damodar, in Bokaro district, Jharkhand, in the year 2003. The sight of the river embedded in a landscape charred by coal mining has haunted me ever since. As we discussed the problems related to drinking water in the village, which was precariously situated over underground mines, a poet recited a poem. Filled with nostalgia, the poem was about how his 'green' village had regrettably turned into a 'black' town.

Some years later, in 2009, I visited the village again. This was after meeting farmers and forest dwellers who were part of anti-mining struggles in other parts of the country (Goa, Tamil Nadu and Odisha). Given how their worries of the future were often discarded as weak arguments against mining projects, I decided to go back to the banks of the Damodar, a 200-year-old industrial site, a projected future of industrial development located right in our pasts. What could the communities living along the banks of the Damodar, who were now no longer in deep forests or on farmlands, tell the people, resisting large development projects in other parts of India on what the environmental future holds for them?

A retired editor of a leading Hindi daily in Bokaro made a troubling statement in his interview, which stayed with me. I was looking for young artists, writers, singers who may have written about the changes along the Damodar like the poet I had met earlier. "It is all gone," he said, sitting in his small courtyard surrounded by mine worker colonies. "This courtyard has seen many tears, we have lost our culture." Is it really possible? I wondered. The complete loss of culture!

I went back looking for the poet I had met in 2003 in Dhanbad

after five years, and others who may be writing about the transitions in their own village along the Damodar. But I could not find the nameless poet there. Maybe he had migrated outside for work. People in the village had forgotten him and the poem. Gauging my disappointment, the residents directed me to an amateur artist who lived in Nagdah. His talent in pencil sketching was remarkable I was told.

The artist had not completed primary schooling and was living in an abandoned mine site in Nagdah. An earlier bustling place thronged by people and workers, now lay deserted after a massive mine accident that had killed many workers. The mine was abandoned. When I met this young artist, I was amazed at his self-taught skill. But in the paintings he put forward there was very little he said about his own village. The paintings were mostly portraits of leaders and of the rich and the famous. The editor's words were ominous in this depiction, I thought.

A few months later, at home, while re-reading John Berger's *Ways of Seeing*, in Kolkata, I came across Lowry, a self-taught artist drawing the industrial landscapes in Pendelbury, Lancashire between the 1920s and 1930s. Lowry depicts people in 'matchstick figures' amidst these industrial landscapes, sometimes deserted and isolated, depicting the sadness of war post-1930s. I went back to the Bokaro artist's pictures and I sifted through the photographic images of his sketches again. I found amidst all the big leaders in his paintings, four portraits probably reflecting his own surroundings. This was a point of epiphany for me. The portraits were of children—a child in oversized clothes eating his food from a small earthen pot, a young shepherd boy, carrying a goat, and a march of people in their traditional attire, they were marching towards some place, maybe in resistance. There was some hope I believed, for not everything the editor said was true.

Thus, with members of a small community-based organization residing in Bokaro and Dhanbad, we tried to form a group to implement a project titled "Landscapes of Dislocation" which would work around issues of environment and cultural expression along the Damodar which could bring together researchers, artists and poets to draw about their own village and articulate these

transitions. The processes in that work inspires much of this work, especially the questions that were raised during the course of this creative project with the community-based organization.

In this monograph, I try to look through the narratives of environmental loss and conflict, and different cultural resources to weave a story around the key moments of environmental loss along the Damodar River Basin. What lessons does it provide us for the future and especially on perceptions and wisdoms related to conservation and development? Can retelling this story through different voices help people residing around the river relook at their pasts and, hence, re-nurture their present environments? Does the story of loss around the Damodar River Basin hold relevance for those confronting the same issues in the other parts of the country as well? Though this work offers just one slice of the larger reality, it is an attempt at reflecting on these questions and finding possible ways to heal us and think of new avenues amidst harsh realizations on environment and development that industrialization brings.

Introduction

Before starting to unfold the story of what happened along the industrial belt in the Damodar Valley, I would like to share a bit about how this work has been conceptualized. The title of the research project was "Narratives on Environmental Loss and Conflict along the Upper and Middle Damodar Valley Tract: A Spatio Temporal Analysis." There were several concepts therefore that informed this work, particularly important in this was the notion of 'loss' and the idea of 'environmental loss'. This introductory chapter, thus, tries to explain some of the key ideas underpinning the project, such as 'narrative', 'loss', 'conflict', 'space' and 'time'.

Understanding Narratives

The word 'narrative' has been used in its broadest sense to include oral and textual narratives or written or recorded oral narratives that say something about the subject, in this case the river Damodar and the people and environment around it. Material that has been used is literary or historical, descriptive or factual, fictional and non-fictional, scientific or poetic, contemporary and traditional which may give an idea on the meaning making on environmental issues around the river Damodar. Here, an in-depth study of narrative structure has not been conducted though some ideas from 'narratology' have helped to delve into the thematic issues of 'environmental loss and conflict'. The idea of a narrative structure has been used to unfold a larger story on ecological degradation around the river Damodar for this project, while culling out perceptions in existing narratives, keeping in mind

the tropes and conventions that they are structured within over specific landscape altering moments along the Damodar Valley Tract. Each of these landscape-altering moments comprises a single chapter, unfolding the story of loss along the landscape.

While studying texts on the Damodar, I have tried to understand conceptions around 'loss' and 'conflict', and the kind of material examined—transcribed interviews, travel accounts, biographies, policy papers, folktales, petitions and literature produced by local social movements and my own conversations with residents, activists, decision-makers living in the area. The outcome of this study is thus aimed not so much at a theory of narrative interpretation but rather a wider understanding of what this narrative analysis tells us about environmental issues and environmental action along the Damodar.

Engaging with the Idea of Loss

A common and repetitive question that constantly resurfaced through this work was why the narrative of 'loss' has been privileged over that of 'gain'. Moving through the ravaged mined sites in Jharkhand, loss was the most predominant idea in the mind. This work may be classified within the genealogy of ideas pertaining to loss and as a study on 'loss' alone. It is important, however, to state that there may have been situations where individuals have experienced 'material gain' even though there was 'environmental and other losses' in the space around them. In short, the understanding of loss was not uniform. These ambiguities are reflected in the work, though focus of inquiry was on how people have related their own sense of loss to environmental loss or the ironic contradictions of their gain in spite of the environmental loss around them.

The focus on loss comes from the striking landscapes in this watershed tract which are barren, black landscapes, large craters left behind by mining, black dust and pollution not normally witnessed in other habitats and the embedded history of several phases of displacement of people in the area for the sake of industrialization. These striking changes in landscape, while

travelling through this area, resulted in a preoccupation with the idea of 'loss' and 'environmental loss' in the work.

The vanished forests, people, animals, fish and their lands along parts of the banks of the Damodar, hold stories and legends and wisdoms of a previous time which contain locked in them an understanding of the environmental problems we face today. Thus, engaging with the idea of loss on this landscape, in my opinion, helps to resurrect the subjugated knowledge, which has been suppressed as major ecological transformations took place in this tract. Sumathi Ramaswamy successfully justifies the theoretical notions of 'loss' for her study on Lemuria for instance where her "preoccupation with loss is in the fascination with vanished homelands, hidden civilizations and forgotten peoples and their ignored pasts".[1] Here she tries to unpack what it means to categorize a place as lost and that which resides in the place making imaginations that converts a place or place world into a 'lost place'.

A more recent work on loss that has gone into inspiring the notions of loss used in this research is from the edited volume titled *Loss: The Politics of Mourning* by David L. Eng and David *Kazianjan*. The anthology which works on the losses of the twentieth century, uses 'loss' and 'melancholia' as a placeholder for topics such as 'revolution, war, genocide, slavery, decolonization, exile, migration, reunification, globalization and AIDS'.[2] Using the counter intuitive technique of relooking at the past apprehended by loss almost simultaneously necessitates the need to look at remains; in the anthology, three categories are explored—bodily remains, spatial remains and ideal remains. The ideas around 'spatial remains' are useful in my exploration of environmental loss and conflict along the Damodar Valley.

[1] Sumathi Ramaswamy, *Lost Land of Lemuria: Fabulous Geographies, Catastrophic Histories*, University of California Press, 2004, p. 1.

[2] Eng and Kazanjian, *Introduction: Mourning Remains, Loss: The Politics of Mourning*, Edited by David L.Eng and David Kazanjian, University of California Press, Berkley and Los Angeles, California 2003, pp. 3-5.

The essays collected on spatial remains investigate the "intersection of subjectivity and space, questioning the politics and aesthetics of territorialisation".[3] In the anthology, David Jonson's essay on the Griqua land claims in South Africa talks of 'material loss', here the loss is loss of land, where mourning the lost object does not mean detaching oneself but probably finding ways to get it back. Furthermore, Jonson clarifies that this melancholia is not necessarily associated with a 'love object' or 'person' as described by Freud but could refer to 'material loss' as well.[4] I put forward in this work both the tangible and intangible aspects related to 'environmental loss' where loss is not just loss of land or 'material loss' but also includes intangible aspects such as cultural psyche and memory attached to the environment and landscape that it constitutes. Thus, in my exploration of the 'spatial remains' in this watershed tract post-industrialization, I locate narratives embedded within them, unpacking the notions of loss and exploring how an engagement with loss leads to the 'hopeful' and 'hopeless'. I engage with the notions of 'environmental loss' to locate how it may 'propel' or 'inhibit' environmental thought and action.

Space and Time, Nature

Since the work tries to conduct a 'spatio-temporal' analysis of changes along this tract, it became pertinent to look at the different ways in which the concepts of space and time may be used. While a very broad outline was made of the space, where, in this case, it was the bioregional space of the watershed region of the Damodar Basin, with more emphasis on the upper and middle valleys. Temporality was defined by the key markers of ecological transformation most commonly identified under environmental and developmental history; specifically man-induced transformations. The concepts of space and time have had

[3] Eng and Kazanjian, *Loss: The Politics of Mourning*, University of California Press, Berkley and Los Angeles, California, 2003, p. 20.

[4] Eng and Kazanjian. Ibid., p. 278.

a far more important influence in the work than earlier imagined and, therefore, I elaborate on some ideas that have influenced the work.

The primary assumption is taken from Henri Lefebvre where 'space is a precondition and result of social superstructures. Though a product to be used, to be consumed, it is also a means of production which cannot be separated from productive forces, technology, knowledge or social division of labour.' When looking at the imaginations on space, social superstructures determine this imagination, I argue.

I try to make the distinctions where Lefebvre points to 'spatial practices', 'representational spaces' and 'representations of space' or the differences between perceived, conceived or lived spaces, locating some of the ideas within the theory of spatial dialectics and marking the differences between 'absolute' and 'abstract spaces'. The 'lived space' and 'spatial practices' are important concepts through which I try to understand the meaning of the environment and of environmental loss.

Andy Merrifield in the book *Critical Introduction to Lefebvre* argues that while Hart and Negri dissolve the local politics within the concept of the Empire, Lefebvre upholds that the local can never disappear. Negri's concept of "Empire" is a neo abstract space, which Lefebvre's absolute space (springs, rivers, trees, mountains) counters.

It is spatial practices which are important in the mediation between the abstract and concrete and which keep the global and local scales together and yet apart. Spatial practices hence make the local seem local and the global seem global and are able to subvert the 'conceived' or abstract space. Lefebvre highlights that the relation between nature and space is immediate, in the sense that it does not depend on the mediation of an external force whether natural or divine. In contrast, for living bodies the basic spatial features are qualified by that living body, taking a spider and spider's web for example, whereby the body itself creates basic spatial indicators such as high-low, centre-periphery, the other. It is clear from Lefebvre's theory of production of spaces thus, that our place making imaginations have an important role to

play in our spatial practices. And our spatial practices are the lived insights into how we engaged in the production of spaces. This is an important thought when we think of environmental action. In narratives, thus, I try to explore these imaginations, production of spaces and spatial practices, which determine meaning making on the environment and transform the landscape.

David Harvey draws a direct connection between the theory of space and the dialectics of social and environmental change and tries to trace the origins on the 'domination of nature' and the emerging discontents in Western thought. While tracing the inherent contradictions in Western philosophy born out of the Enlightenment phase, Harvey draws out the conceptual tensions that began to emerge and the discontent among those belonging to the Malthusian tradition that believed that nature cannot be mastered. Montesquieu, who believed in environmental determinism where passions and abilities were shaped by the climate, and those who were part of the Romantic Reaction (Wordsworth, Schiller, Thoreau) on how nature should be construed are classified as the major dissenters to Western rationalist thought which believed in man's inevitable control over nature. Though outside the main purview of this work, tracing the thoughts of key actors and thinkers discussing environmental issues in this region has helped to see the distinctive shades available in dissent on the domination of nature within this region, which may or may not fall in these traditions traced by Harvey, but are very specific to the local realities in India, specifically the regions through which the Damodar flows and make its contributions to these streams of thought.

Harvey points out that spatio-temporal scales are forever changing and largely depend on the scales of operation of the ecological agents and, hence, it is difficult to really define where an ecosystem begins and ends. Harvey's dynamic concept of spatio-temporality has been kept in mind in this work especially when assessing money and commodity flows, which arise out of the practices of capital accumulation.

Temporality used as markers in transformations on the landscape due to different kinds of place making imaginations

coming to play has been situated within the political and historical context when these transformations took place. Obviously there were changing aspects of political economy that thus began to influence commodity flows and practices of capital accumulation, and hence our place making imaginations and meaning-making on the environment.

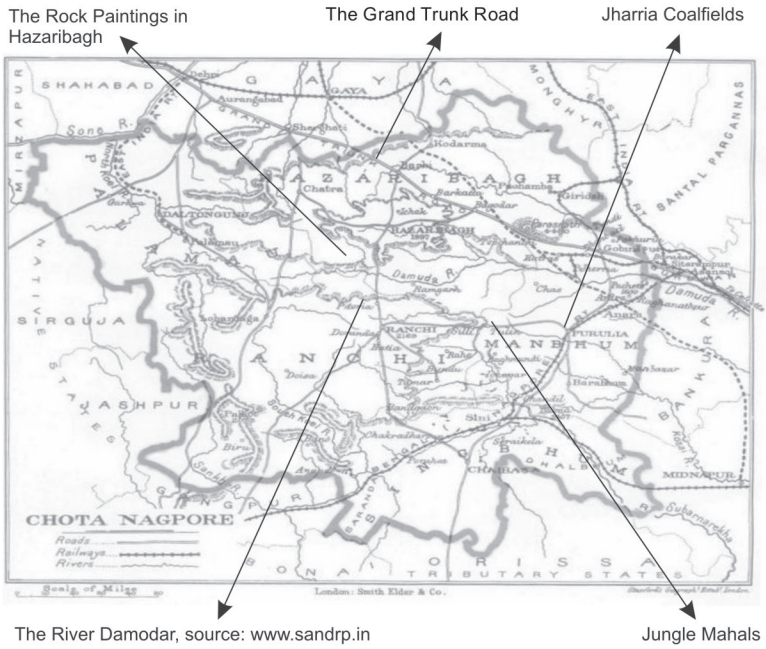
Unfolding the Story along the Damodar Valley

Pooling all these concepts together, an attempt has been made to place the environmental history of the Damodar Valley Tract, within the major moments of environmental transitions set within world environmental history and India's environmental history. When contrasting basic transitions, we find the maximum transitions took place in this area during the eighteenth century. Thus, using a map, when the area first got visibility in secondary documents, spatial remains, have been plotted which give a symbolic indication of the times they belong to in that area. These include the Grand Trunk Road, the Jharia coalfields, the rock paintings of Hazaribagh, the forested lands in the Jungle Mahals, and the dammed sites of the Damodar. These spatial remains were actually important sites that I engaged with when travelling through the landscape and found to be landmarks in how they tell the story of transitions along the river basin.

The broader narrative outline in this work which, combines smaller narratives of how the landscape changed through time starts with how the river is described in different texts first and then looks at specific imaginations located during the moments of major transformation on this landscape. Some freedom and liberty has been taken in reconstructing these moments and building a fresh outlook on the transitions in this river basin, given the unique complexity of our time.

Since the first major change begins around the eighteenth century, and this is also when the region gets copiously written about in wider available texts, a map is picked from the eighteenth century, a time when the most radical human induced changes were just beginning to take place. The map outlined, thus, shows

FIG 1: THE MAP AND PEGS IN THE STORY



Source: Francis Bradley-Birt, *Chota Nagpur: A Little Known Province of the Empire*, Smith, Elder and Company, 1903.

the specific location of the contemporary markers used along the landscape, which I identify as 'spatial remains'. These are: the Grand Trunk Road, the dams built on the river amidst huge charred landscapes and collapsed mine sites around which one can still weave the story.

Environmental Conflicts

Environmentalism and environmental action in India has very conflicting conceptions and values that we have attached to nature. The popular belief is that nature is bountiful, with an innate capacity to regenerate itself; it is sacred, with a rare ability to always reproduce itself no matter what is done with it or to it.

It is supernatural, with powers beyond humans and hence always carrying a supernatural message when it behaves awry or deviant. These belief systems sometimes prevent common people from adopting 'conservationist' environmental approaches.[5] Baviskar acknowledges the harsh truth, that many environmentalists in India have to face up to, that a slow decline in resources and the lack of control of people over this declining resource base, has led people to lead contradictory lives, 'hence mining their future for the present'. Baviskar points out this ensuing conflict in most places in India. "Beliefs on nature are contradictory as on the one hand there is reverence for nature which suffuses everyday lives, where strenuous efforts are made to secure the cooperation of nature whose uncertainties rule fate and yet these efforts do not necessarily translate into sustainable practices or address ecological degradation—a concern that those living on the very edge of survival cannot entertain due to a lack of resources."[6]

"Geographies are active participants in the process of social change. The way space is identified draws critical boundaries between identities, self and other."[7] The landscape of Chhotanagpur is a symbolic terrain for contested identities in the context of cultural and ecological change and, thus, in this context of extreme ecological degradation the "remembered landscape fuels a long cycle of protests"[8]. For scholars writing on the geographies of power or space or place making, various uses of the concept of landscape have been used to explain these ideologies. Landscape is, thus, assumed to be an ideological

[5] Amita Baviskar, *In the Belly of the River: Tribal Conflicts over Development in the Narmada Valley*, 1997. Oxford University Press, 1995, p. 148.

[6] Amita Baviskar, Ibid., p. 230.

[7] Derek Gregory and Allen Prad, *Violent Geographies: Fear Terror and Political Violence,* Routledge, 2007.

[8] Vinita Damodaran, *Gender, Forests and Famine in 19th Century Chotanagpur, India.* Indian Journal of Gender Studies, Sage Publications, 2002. access date 3.9.2012

concept, or a 'way of seeing'[9]. "Landscapes are shaped as much by the ideologies and philosophies of the peoples who create them as by the practical work that brings them into physical existence. It is a composition of space through certainty and geometries."[10] Thus, to understand the role of meaning making in environmental action, 'landscape' becomes an important concept to work with. In the work I, therefore, do not only focus on the river Damodar, but the Chhotanagpur region.

The Damodar Valley Tract also experiences similar conflicts in smaller and larger scales, highlighted in various sections of this work. Engaging with these conflicts and tensions is almost imperative when trying to work with conservation in these areas. It is for this reason that we begin the story with the understanding of the environmental conflicts that informed into the formation of a separate state of Jharkhand, the home of the upper and middle valley tract of the river Damodar.

Locating the Moments of Environmental Loss Along the Basin

Arnold and Guha, in understanding environmental history in South Asia, state that along with emphasizing the human role and relation with environment, "one of the undoubted attractions of environmental history is its ability to draw upon the insights and techniques of several disciplines, and then to combine them in novel and often provocative ways of its own."[11] "The task of environmental history is the study of human-nature relationships through time with natural communities of which they are a part, in order to explain the process of change that affect that relationship.

[9] Phil Hubbard, Rob Kitchen and Gill Valentine, Daniel Cosgrove, *Key Thinkers on Space and Place*, Sage, 2004.

[10] Brayshay and Cleary, *Imperial Landscapes, Geographies of Empire: European Empires and Colonies c 1880-1960*, Robin A Butlin, Cambridge University Press, 2009

[11] David Arnold and Ramchandra Guha, *Nature, Culture, Imperialism: Essays on the Environmental History of South Asia*. Oxford University Press, 1995.

As a method, environmental history is the use of ecological analysis as a means of understanding human history. It studies the mutual effects that other species, natural forces and cycles have on humans and the actions of humans that affect the web of connections with non-human organisms and entities."[12] Broad trends in environmental history have been mapped across India, and hence the different pegs or spatial remains located to unfold the narrative of environmental transformation along the Damodar River Basin may be located within this broader history.

Some historical facts are put forward in the works of Hill and Stoll[13]. To summarize the broad trends of key shifts in environmental history, one may mark the broad changes and relevant insights given by the authors as follows. Early settling of hunter-gatherer societies are noticed in the Middle and Upper Paleolithic Period by 30,000 B.C.E. During the Mesolithic or Middle Stone Age (10,000 B.C.E), stone tools are found along the banks of rivers indicating primitive and sedentary cultivation and observations in Balochistan indicate that forest clearing and grazing led to siltation.

The end of the Indus Valley Civilization is marked at 1700 B.C.E when there were massive floods and earthquakes due to tectonic shifts, which led the river to change its course as dramatic climatic changes took place at this time. Aryan migrations took place from 2000-1500 B.C.E; there was domestication of the cow during this period and the entry of Vedic religions. The first centralized government during the Mauryan period (326-184 B.C.E) is noticed and this also marks the period of the first commercialization of nature. There is also a flourishing of disciplines such as Mathematics and Science and the first construction of large irrigation projects and religious philosophies entwined with deep ecological considerations, hence underpinning the importance of

[12] Johnson Donald Hughes, *An Environmental History of the World: Humankind's Changing Role in the Community of Life*. Routledge, 2001.

[13] Christopher V Hill and Mark R Stoll, *South Asia: An Environmental History*, Nature and Human Societies, ABC-CLIO, March 2008.

studying Asokan edicts and the study of religious texts dated in this period to understand our ecological histories.

During the period of rule by Delhi Sultanate and later the Mughals, drought and famine were commonly observed. In this period, between 1540-1545 AD, or the time of Sher Shah Suri, a major change in the environment is the construction of great roads and bringing in irrigation, and waterwheels which facilitate cash crop cultivation. Under the Mughal Empire, a centralized agrarian and administrative system and the introduction of cash crops are seen. The Mughal rulers are credited with bringing in a new aesthetic sense, to overcome their homesickness by building gardens and special buildings in their capital cities. The authors, however, note considerable environmental degradation and deforestation at this time.

The miniature paintings during Akbar's time are excellent sources to understand this aesthetic and underscore the equation of nature with heaven. It is Akbar according to the authors who truly expanded the notion of human-environment relationships but we must also make mention of Dara Shikoh whose painstaking translation of Sanskrit texts into Persian actually inspired the transcendental movements and Romanticism in the West, an essential part of understanding environmental ethics within Western thought. This forms important agendas for furthering environmental studies in South Asia. It has been pointed out, however, that since the rulers came in from a West Asian origin, a recognizable ecological sensibility, defined by the garden, the sepulcher (*dargah*) and the water related spaces particularly in the Deccan region is noticed.

The entry of the British East India Company and later the British Rule brings in the Eurocentric view of nature where India becomes a laboratory for testing of post-Enlightenment political ideologies and there is a greater emphasis on European utilitarianism which led to massive deforestation, failed western oriented irrigation projects, and these find expression in different ways such as the misunderstanding of South Asian approaches to disease control, adaptation to famine and drought leading to catastrophic histories.

Clear demarcations are made by historians on worldviews

during this period, on the point of 'difference' where European traditions were rational and modern while anything 'other' was 'exotic, mystical and oriental'. During this time there were changes brought into the 'wild moffusil landscapes' brought under cultivation and the British believed in leaving no 'fallow lands'. High prices and regular famines meant frugality during this time, but several things happened in Britain, which changed the situation in India. First, Adam Smith's break away from monopolies changed trade conditions in India (around 1833) which had profound impacts on resource conceptions among local elite in India; secondly, severe deforestation in Ireland led to the formulation of Protection Laws which were also implemented in India around 1860 which had repercussions for conservation histories and land use. Both these histories are closely connected with the Damodar Valley discussed later.

Post-1857, Royal engineers of the military units set about fortifying territories to secure their goods and maximum changes in the area of Public Works took place between 1860-1920, they claim. At this time, a new kind of residential segregation took place, as the British tried to avoid climatic diseases during the monsoons and 'climate' and 'place' greatly affected the colonial view of nature. Cities were segregated into the 'old' and 'new', there was racial segregation adopted in these spatial practices. There was also an attack on pilgrimages, which was seen as a mass distribution for 'disease' and nuclei of 'insurrections'. After 1857, new social legislations on forestry, irrigation, canals and railways were passed. Education systems were built to support technologies that would support these projects. Engineering colleges and institutions were set up for this primary purpose.

It is not to say that what happened in the colonial period did not take place in smaller measures before that. A lot of work has been done on Indian cultural practices, Hindu religious ideas and indigenous religious ideas that are assumed to be holding the potential to support ecological awareness in India. In fact this creative looking back at the past often distinguishes environmental histories in South Asia in comparison to the West, as many utopias are placed in the past rather than in the future.

Looking at these broad trends in history one wonders how events and incidents related to regional, national, colonial, or global histories resulted in the transformation of the Damodar Valley tract. May be the broad changes marked out in the environmental history in India are similar or dissimilar to those above. A separate engagement, therefore, reveals many nuances when looking at transitions more context specific to the Damodar river basin and delving deeper gives us a notion of how even environmental histories may be contested histories.

The environment in South Asia needs to be understood as a contested space, a site of conflict and confrontation, of flight and evasion between competing economic activities and social groups.[14] Benjamin clarifies for the historical materialist that "the class struggle always has a retroactive force which will constantly call in question every victory, past and present, of the rulers". Thus, the task at hand is not the mere chronicling of history which records events which have causal linkages but rather each of the 'moments' or 'moments of danger' which affects the content of the tradition and its receivers. In the inquiry, however, nowhere is the contemporary forgotten, 'the present' throughout the text questions 'the past'. Moments of 'loss' in the ecological transformation of the landscape in the Damodar River Basin have been chosen as pegs to unearth this history.

My emphasis remains with local narratives rather than what is available in administrative documents and contrasts the work done by many scholars in the past. It is for this reason that the materials and mediums that I, thus, use for each of these moments, rest heavily on folklore or folk narratives, on the living memories of residents today, on literature produced by social movements and contemporary Bollywood films representing popular culture, so we may get the popular notion or conceptions around the environment. Hence, rather than just recounting historical change I depart into a narrative analysis presenting the numerous kinds of

[14] David Arnold and Ramachandra Guha, *Nature, Culture, Imperialism: Essays on Environmental History of South Asia*, Oxford University Press, 1995.

meaning making attached to environmental loss through different histories. "The true picture of the past flits by. The past can be seized only as an image which flashes up at the instant when it can be recognized and is never yet seen again." Kazanjian and Eng take this premise to explore the individual and collective encounters in the twentieth century of historical legacies of trauma, war, revolution, genocide, epidemics, famine focusing on the shifting meanings of melancholia and depression through the understanding of these events. In this work, I engage with loss by exploring moments of 'environmental loss' and later 'conflict'.

Within these narratives the evolving nature of human-nature relationships is explored which may have been sparked off by a major change within the physical environments (destruction of forests, changes in the rivers course, loss of animals, disasters such as floods, famine, or drought, dam building, mining, reorganization of state administration, building transportation systems or the discovery of steam engine) or a result of inhabiting a 'thoroughly contested environment or space' and also dependent on the power relations that exist in working the environment. It is around these events then, that text on the practices, ideas and discussions around environment, nature and environmental loss is understood in this work.

Thus, in the broad mapping of loss and conflict, the spatial remains identified are:

1. A trade route that came in the Mauryan period (a road or the Grand Trunk Road)
2. Clearing the forests during early British period (deforestation)
3. Coal mines in the later British period (mining)
4. Building a multipurpose power project before Independence and post-Independence (dams)
5. Resource conflicts on a transformed landscape in contemporary times (conflict)

PART 1

The River and the Landscape

Jharkhand 2001: Eco-Cultural Identities and a Separate State

It has been a confusing day. I have been travelling with the CBO (Community Based Organization) leader on his motorbike from village to village along the banks of the Damodar in Bokaro district. We are travelling to explore what the river looks like for an ordinary person and understand people's everyday perceptions on the river Damodar flowing through Bokaro and Dhanbad.

At some points, such as Petarwar, the dry sandy riverbed lies exposed. Illegal sand mining has spread like a plague and changed the face of the bed. Some people point to a higher area saying that that was the older riverbed. It seems like a shift of almost 40 ft. vertically then, we reflect. The sight is ironic, given contrasting reality of the dry riverbed, now being mined, against the symbolic largeness this semi perennial river has with the lives, minds and the culture of people in Jharkhand.

It is unnaturally hot as the scorching dusty winds blow in our direction over mining pits and coal dumps at our next stop in Gomia. I cover my face with a scarf as the youth from the village stare at me quizzically. It is odd to complain about pollution in these parts.

One of the residents from the village nearby is washing her clothes in the river. She is just a few footsteps away from a pipeline that comes out surreptitiously from an underground outlet. This pipeline empties black contents into the river. Tracing its path we find that it is from the well-known coal washery with its looming black gate about 5 km away from where we are standing right now. 'Is it clean?' I ask the middle-aged woman busy washing

clothes in the water by the riverside, 'Clean?' she exclaims in amazement, 'these are the sacred waters of the Damodar. We worship the river!" and to prove this point she wades into the river till the water is waist high, cusps her hands and drinks some of the water in deep reverence.

I am not sure if the awe on her face or this spontaneous performance is one of shock due to a defying of deep embedded traditions of calling the 'pure river' as 'impure' or of mock sarcasm on the incredulous question, on a river, known to have several constraints in terms of access for people living in the area. But her emphatic emphasis on the river's sacredness, despite the effluents flowing into it, is characteristic of popular perceptions on rivers as well.

At another point, Somvari, who is Mundari, has walked all the way to the river to take her bath. "Where do you live?" I ask. "At the labour colony," she shares. "But don't you get tap water there?" I enquire, staring at the small yellow square buildings in the distance, Somvari explains, "Yes we do, but the water in the taps are cold in winter and hot in summer. That is why we prefer bathing in the river," and hence, giving us a sense of the sensitive notion of 'riparian rights' that communities still have living alongside the Damodar. Despite this, one wonders why people are not easily mobilized into environmental action.

A few days later I watch Paranjoy Guha Thakurta's documentary—"Hot as Hell: The most polluted part of Planet Earth"—posted on the Internet site, Culture Unplugged, focusing on Jharia on the banks of the Damodar. I am struck by the resonance the filmmaker's experience has with my own, when he asks this young boy engaged in welding work right next to the raging hollows and burning fires, "Do the fires right next to you frighten you?" The boy looks up, sardonically, and says, "No".

It is perplexing and ironic that while overarching narratives of scholars and activists capture environmental loss in different ways, in our everyday lives, this loss is negotiated to build stronger immunities to a fast degrading environment. Thus, making 'environmental loss' an almost inevitable reality in our everyday perceptions. (Field Notes, 2008).

The Memorandum submitted by Jharkhand Mukti Morcha (JMM) to the President of India, demanding a separate state in 1989, described "Jharkhand" as a 'picturesque area with hills and forest known geographically as Chhotanagpur plateau', clearly giving the aspirational value that the natural landscape held for the Jharkhandi leaders then. Through the lens of the Jharkhand movement we may be able to trace how the movement shaped the eco-cultural identities of people in Jharkhand.

The Jharkhand movement for an autonomous state is an example of how dispossession from environmental resources gave way to the need for reconstruction of identities in Chhotanagpur. This was around the notion of what one could call 'eco-cultural identities'. In my reading of the demands and mobilizations in different phases of the movement, I conclude that 'material and environmental losses' were a major reason for the demand for restitution of rights to the homeland by Jharkhandis. In these demands that were thus drawn out, I try to find the outlines to the formation of an eco-cultural identity as well in the following sections.

Though the Damodar River Basin comprises districts in both West Bengal and Jharkhand, the focus is on the upper and middle tract and hence the Jharkhandi eco-cultural identity which is informed by the identities around the Chhotangapur plateau. One can easily locate those aspects of ecology and culture, which were constantly highlighted in the different phases of the movement for a separate state of Jharkhand.

The upper and middle Damodar Valley, which is both a mining and hydropower belt, gave voice to the renewed enthusiasm for a separate Jharkhand state in the 1980s for oppressed and suppressed societies within the broader history of the movement, which started in the 1950s.

The agitations for a separate state in districts around the river Damodar became important in post-Independence history in the 1970s and 1980s, in the second phase of the movement for a separate state when political leaders aimed at bridging the interests of the non-tribal workers (*sadan*) and tribals in the struggle for

a separate state.[1] The territorial identification for the borders of Jharkhand is based on the colonial history of the region, which claims a sense of cultural oneness as well. What was this sense of oneness?

The colonial period saw the seeds of the movement for tribal autonomy. It was during this period that the demand for territorial autonomy arose as the colonizers encountered several revolts while they tried to institute a new administrative system of collecting revenue in these otherwise neglected parts.[2]

The conflicts that emerged at this time have already been substantially proven to be due to a clash of production systems in these otherwise forested non-agrarian tracts. Thus, in the observation of most environmental historians (DD Kaushambhi and Guha, Gadgil, Sivaramakrishnan et al.) a classic environmental tussle arose as forested tracts were converted to agrarian tracts, as collective systems of ownership were superimposed with individual based or privately held systems.

During early Independence, Jharkhand was refused a separate statehood, ironically on the basis, that a state could not be demarcated given the multiplicity of languages existing in Jharkhand.[3] The leaders of the *Adivasi Mahasabha* formed the Jharkhand Party in 1950. They delineated the borders of Jharkhand based on the cultural oneness under colonial rule. The traditional territorial demarcations of the landscapes still exist in the traditional governance system of the tribals through laws (such as the Santal Pargana Tenancy Acts and the Chhotanagpur Tenancy Acts), which were byproducts of revolts by tribals also

[1] The phases for a separate state have been clearly outlined by Ramdayal Munda into the following years: 1769-1915 (Period of Open Revolt), 1915-1938 (Period of Reformation), 1938-1950 (Period of Political Consolidation), 1950-57 (Period of Political Movement), 1957-67 (Decline and Merger), 1967-73 (Renaissance), 1973-80 (Period of Expansion), 1980-86 (Period of Self-Search), 1986-1992 (Reconstruction)

[2] R.D. Munda and S. Bosu Mullick, *The Jharkhand Movement: Indigenous Peoples' Struggle for Autonomy in India*, IWGIA, 2003.

[3] Santosh Rana, "Jharkhand Movement", Ibid., 2003, p. 111.

built this oneness. The traditional governance systems demarcated territories on the basis of natural frontiers among the tribals, called the *Manjhi-Bassi.* The boundaries of these systems do not coincide with the administrative demarcations made of states post Independence.

Some scholars point out that for many in the indigenous leadership, relating the formation of a state with the cultural area of Jharkhand was seen as the persistence of a collective memory of Jharkhand as their ancestral homeland.[4] The statehood definition of Jharkhand was, thus, a departure from the earlier federal state formations made on linguistic and religious boundaries[5] pointing to a broader conception of eco-cultural boundaries as well.

In the first phase of the movement for a separate state, there was a consolidation of the ethnic or indigenous identity where there was a lot of emphasis on what the indigenous leaders meant by tribal culture and identity. In the writings of Jaipal Singh, for instance, and his followers from the Jharkhand Party, one finds positions on the need for assimilation of *adibasi* interests into national frameworks, local development, encouraging literature and research on *adibasi* life and culture.[6]

These goals gradually enlarged themselves during the second phase of the movement in the 1970s and 1980s to accommodate agrarian and worker issues along with cultural identity issues. 'Jharkhand' was articulated by the radical Left theorists as similar to the Gramscian state of 'people-nation' of the oppressed nationalities and suppressed societies within India.[7] Within this radical Left thinking, earlier losses had to be acknowledged, thus the strategies comprised primarily of showing dissent against landlords, moneylenders, contractors borrowing the traditional aspirations from earlier tribal revolts and protests against loss of land, displacement and land alienation due to irrigation projects,

[4] S. Bosu Mullick, "Introduction", Ibid., 2003, 11, p. iv-xvii.

[5] Ignes Kujur, "Jharkhand Betrayed", Ibid., 2003, p. 16-30.

[6] Jaipal Singh, "Jai Jharkhand! Jai Adivasi! Jai Hind!". Ibid., 2003, p. 12.

[7] A.K. Roy, "Jharkhand Internal Colonialism", Ibid., p. 80.

power plants, heavy engineering factories, mines, compensations squandered away by greedy officials and increased prostitution around these power plants.

Important symbolic acts of protest were initiated such as restoring lands, registration of sharecroppers, and fight against usury, by the Jharkhand Mukti Morcha (JMM), and even against alcohol, particularly led by Shibu Soren, (in a call: smash liquor shops, quit Jharkhand) in the 1970s and 1980s. During this phase, where the movement focused on internal colonialism, it addressed the existing antagonism against the dominant development discourse in Jharkhand where such projects had failed to benefit local people—'adivasis' and 'workers'. Thus, the second phase of the movement allowed a bridging of a coalition between the *adivasi* and the *sadan/mitan* communities or the non-exploitative '*diku*' (outsiders). The non-tribal working class and tribals united in this movement. The reality had shown a sharp shift to the tribals, earlier Jaipal Singh's claim in the 1950s that had shown a hope that projects such as the Damodar Valley Corporation once completed, would help the tea garden workers from Assam to come back and settle in their homelands now did not hold true.[8]

The leaders of the movement in this second phase in Jharkhand were slowly beginning to disassociate themselves from the traditional mainstream political parties which supported their cause such as Communist Party of India (CPI) and Communist Party of India-Marxist (CPM) as their ideologies had failed to incorporate cultural and ethnic problems within its fold. There was a basic cultural essence and mode of life that dominant parties seemed to have failed to recognize.

The agitations in the second phase of the movement was against any acquisition of land for large irrigation projects and firing ranges, survey and settlement operations of land, collection of loans, rent and cooperative dues, the nationalization of forest produce and panchayat elections. Thus, we could say it was a clear opposition to how land was being commodified, land use

[8] Sajal Basu, *The Jharkhand Movement: Ethnicity and Culture of Silence*, Indian Institute of Advanced Study, 1994.

determined, and the institutional arrangements around this land use made.

The movement slowly grew around the 'forest question' in 1978. The tribal leaders made structural demands related to remunerative prices for *lac* and minor forest produce, compensation for the damage done to the crops by elephants, payment of appropriate wages for labour in the forest and recognition of traditional rights to reclaim lands and clear jungles. Thus, it is also clear from these demands that tribal demands had moved from the mere understanding of their culture and identity to a more sharpened understanding of their location within resource politics or simply put, 'material loss' in the country. This understanding was in turn put to reconstruction of identity, self-autonomy and the demand for a separate state.

It is not true that the Jharkhand movement did not receive its set of criticisms. The Left intelligentsia considered it a bourgeoisie-democratic demand and on very many counts it was considered communal or secessionist[9] leading to the observation that the Left parties were highly unsympathetic to the question of ethnic oppression.

Those opposing the above criticism of the Left, felt that isolating the tribal identity or calling Jharkhand a nation of exploited peoples was not enough to "question Russian imperialism that had flooded the region through public sector projects".[10]

The Jharkhand movement, which had earlier been denied statehood given its multilingual situation, was now raising questions on democratic foundations, whether language is the only defining factor and whether identities may be shaped irrespective of multiple languages embedded in them.

In this fettered context arose the discussion around Jharkhandi composite cultures and this as Dev Nathan points out came to have a distinct difference from other cultures, which is crucial

[9] Santosh Rana, "Jharkhand Movement"*, The Jharkhand Movement: Indigenous Peoples' Struggle for Autonomy in India*, R.D. Munda and S. Bosu Mullick (eds), IWGIA, 2003, p. 111.

[10] Santosh Rana, "Jharkhand Movement". Ibid., 2003, p. 116.

to understanding the 'environmental question' in the movement. For, in Nathan's distinction of the Jharkhandi culture were also embedded core principles of what the culture encouraged in terms of human-nature relationships. Looking at these core aspects pointed by Nathan, it is made amply clear on how the re-articulation of Jharkhandi culture, which was on the basis of restoring a production system, linked with pre-industrial and pre-state forest economies. Nathan's points distinguished Jharkhandi cultures from other cultures in the following manner:

1. The 'material base' of this culture is distinctly different from the settled or plough agriculture, which is fairly more recent. Older traditions of foraging and food gathering and slash and burn agriculture still existed in the region.
2. Even those *adivasis* who have mostly taken to settled agriculture, like the Santhals, Mundas and Oraons, also continue to engage in foraging and food gathering and hence depend on the forest.
3. Before colonial history the area was mostly under pre-feudatory kingdoms.[11] Thus, the oldest industrial region of a still industrializing India was essentially a pre-state and pre-agrarian society before colonial rule.

Negotiations on the Ecological Compass of the Movement

The sole identification of Jharkhandis as oppressed classes, however, divided the movement. The split was between those who allegedly held that 'the demand for statehood was a bourgeoisie-democratic demand' and among those who were against 'ethnic oppression' till intellectuals like Ram Dayal Munda, Nirmal Minz and others began to talk about the socio-cultural regeneration within the movement. The movement now incorporated those elements of tribal identity that essentially included "harmony with nature, equality in society or collectivism in economic activities"

[11] Dev Nathan, "Jharkhand: Factors and Future", *The Jharkhand Movement: Indigenous Peoples' Struggle for Autonomy in India*, R.D. Munda and S. Bosu Mullick (eds), iWGiA, 2003, pp. 126-127.

as core values, which are being eroded by those in disharmony with nature, stratification in society and individualism in economic activities. [12]

Though this aspect of the Jharkhandi eco-cultural identity was clearly outlined, it does not mean that on all occasions the core values of progressive environmentalist liberation ideology was being played out. Spurts of 'eco extremist' tendencies were also evident that played destructive roles in the movement's history before this.

For instance, K.S. Singh highlighted how bands of Mundas obstructed the felling of trees and plantations by the Forest Department in the Porahat region of Singhbhum district. Towards the end of 1978, however, in the agitations that had spread across Munda-Ho areas in Singhbhum district, there was a resistance to plantation of teak. Teak had become the symbol around resistance in the movement. K.S. Singh accords this movement to 'extremist elements'. The interesting feature of the movement was that its participants had bought into the rumour that the Forest Department was slowly replacing *sal* (*Shorea Robusta*) with teak plantations, and also the idea that elephants did not eat teak leaves and hence would be more prone to disturbing their crops which was a valid concern, but a rumour. *Sal* being a major source of food and ceremonies for tribals these rumours fuelled adequate conflict. The agitators started felling *sal* trees and destroying teak nurseries on the basis that they had the traditional right to fell trees and reclaim lands. The movement turned extremely violent and destroyed forests and human life with incidents of police firing in Goelkira in November 1978.[13] The agitators took the extreme step of destroying forests, which actually held equal value for them as land.

These tussles and tensions and accommodations that needed to

[12] Dev Nathan, "Jharkhand: Factors and Future", Ibid., 2003, pp. 126-127.

[13] K.S. Singh, "Tribal Autonomy Movements in Chotanagpur", Ibid., 2003, p. 102.

be made "to reclaim the (de)colonized homeland"[14] is important to understand, especially when juxtaposing around theorisations on environmental loss, ecological nationalism and liberation ecology. After all, along with movement building, environmental discourses were also entering into the discourse of state building in the demand for a separate state.

It could be easy to confuse this movement for Jharkhandi statehood with a strong ecological character with the 'eco nationalist' movements of the West. For instance, Janet Biehl in her discussion of the German Völkisch movement of the 1920s in Germany exposes the fascism in the movement. Here, Biehl states that it "invoked a nature-romanticism in which closeness to the natural landscape was to give people a heightened sense of aliveness and 'authenticity'. It advanced a new cosmic faith, embodied in 'Aryan' blood, which was to be grasped through intuition rather than science in a plethora of occult and esoteric spiritualistic faiths that abounded in Germany in the 1920… Inadvertently, the romantic nationalists of the völkisch movement became an important source for National Socialist ideology, which ironically drew on its anti-modern sentiments even as it built a technologically modern and virulently nationalistic and genocidal totalitarian state. Demagogically appealing to a very real sense of alienation, the Nazis stage-managed indoctrination extravaganzas that promised 'authenticity' in a mystical, romantic nationalism that was 'closer to nature,' even as they engaged in mass murder. Stressing the need to return to simpler, healthier, and more 'natural' lifeways, they advanced the idea and practice of a 'Nordic peasantry' tied organically to the soil—even as they constructed a society that was industrially more modernized and rationalized than any German society had seen to that time."[15]

In Biehl's descriptions, one can see how one may slip quite

[14] Eng and Kazanjian, *Introduction: Mourning Remains, Loss: The Politics of Mourning*, David L. Eng and David Kazanjian (eds), University of California Press, Berkley and Los Angeles California, 2003.

[15] Janet Biehl, Ecology and Modernisation of Fascism in the German

slowly into a far more complicated version of 'eco fascism' under the garb of eco-nationalism. But was Jharkhand's movement located in such tendencies?

The answer to that actually comes from the liberation ecologists whose theories and work clarify the compass and direction of the movement. Jharkhand was fighting for a status within the nation which was invisible in the nation-state, and this invisibility was accorded to 'internal colonialism and exploitation' which was raised by the movements in the 1970s and resulted in a demand for a separate state in 1989 by different political forces at that time and later. The core ingredients in this internal colonialism were highlighted as the caste system, unbalanced development and hence internal colonization of the weaker sections, discrimination in development, and 'land and forest alienation' and hence what political ecologists would call 'potential liberatory or emancipatory political activity around environment and resources which also included cultural and political autonomy'.[16]

Thus, to summarize, the eco-cultural grains in the movement that shaped the demand for a separate Jharkhand state can be clearly demarcated as follows:

1. In the initial phase of the demarcation of boundaries for a separate state, there was a demarcation of boundaries in terms of cultural oneness brought together by a series of revolts and autonomous movements, which got articulated in legal instruments during the British period. As Nathan points, the cultural oneness was particularly around the fact that most of this area was forested and pre-agrarian in its lifestyle. Jaipal Singh brought this to a pitch of tribal identities during the early Independence of India, asking for a separate state for tribals.
2. Post-Independence local and tribal populations found a

Ultra-Right, http://www.spunk.org/texts/places/germany/sp001630/janet.html, download date: 17th September, 2012.

[16] Peet and Watts, *Liberation Ecology: Development, Sustainability and Environment in Age of Market Triumphalism*, Liberation Ecology, Routledge, 1996.

connection especially around the call by the organizing Left around labour, land and displacement. However, these movements were not able to raise or include the voice of the tribals from a cultural and autonomy perspective. Many lost their voice in the movement and chose to organize separately so the unique articulations were vocalized. These articulations had very clear ecological grains informed from the eco-cultural complex of the tribal.

3. The mobilizations around the tribal identity raised issues around historical marginalization, land alienation, displacement, atrocities and unfair access to ecological resources. However, on the other side, the non-tribal working class was also in an unequal situation.
4. Both the interests of the tribal and working class were then reorganized to galvanize a much larger movement, which not only spoke of resource alienation but also of atrocities, worker issues and labour rights from an ecological justice perspective. The demand to reclaim land, water and resources thus included many more in its fold with a clear reconstructed imagination on how water, forests and land should be conserved and used entering a register of ecological justice and restraint.

A Clash between Eco-Cultural Identities and State-Building

Jharkhand has been in existence for 12 years now. Though the hopes and dreams of activists in the movement were to carve out a state that would appeal to the sentiments of the tribals and working class in Jharkhand, the final formation of the state, brought in by the National Democratic Alliance (NDA), did not necessarily cater to these interests. Bhartiya Janata Party (BJP), which had a major support base of the trading and manufacturing classes, played a crucial role in realizing a separate state for Jharkhand at that time.[17] It is important to note here that isolated environmental

[17] Stuart Corbridge, Saraj Jewitt, *Jharkhand: Environment, Development, Ethnicity*, OUP, Delhi, 2004, pp. 2-3.

movements have also been primarily led by members of the BJP specifically around the Damodar, highlighted later, but with little success.

A series of unfortunate events just after state formation created further disillusionment. The original demands of the movement and the assimilation of *adivasi* demands into state perspectives and the failure to do so is seen recorded in the firing of eight activists trying to obstruct a dam construction on the Koel-Karo rivers in 2001, right after separate statehood. The state signing several MoUs to improve the industrial situation of the state and spur further economic growth was diametrically opposed to the initial interests around mobilizations for a separate state.

While governance in itself has remained a serious problem where the state has seen both Maoist and RSS presence, a period of President's Rule and constant change in chief ministers (nine chief ministers over a course of 13 years), corruption, poor democratic politics and political violence, growing Maoist tensions and armed conflicts have also been projected as the order of the day. Furthermore, the killings of RTI (Right to Information) activists corroborates the lack of transparency and a sense of powerlessness created around any action which would require citizen action and government accountability in the area.

The reasons behind this detachment between a separate statehood and the earlier demands made are not part of this study but it is important to note that most of the conflicts arose over environmental resources. In the power sharing between the Jharkhand Mukti Morcha (JMM) and the Bharatiya Janata Party (BJP), in the course of the intense periods of tension in the state, serious issues were raised around corruption and scams and political violence in the mining heartlands.

Till date, the Damodar Valley is considered one of the first areas to have seen Industrial Revolution. The broader politics of resistance has been determined by the forest areas and tribal areas located in the rest of Jharkhand. However, the mined tracts of the Damodar Valley, a mixed population of tribals and non-tribals who are living in the quickly developing wastelands

make an uncomfortable exercise for engagement. These black scars on the earth, a blind spot so to speak, of industrialization plans and development discourses holds the harsh truth of unpleasant outcomes making it necessary to unravel the politics of transformation around this landscape and what lessons it holds for environmental governance and citizenship for the future.

Narratives of Loss around a River and a Landscape

Filled with great joy,
I came to this city
But I cannot find the whereabouts
of my old relatives!

In Jharkhand, in our own home,
We have become strangers!
I roamed all the lanes and by-lanes
And all the back alleys
I could not find my dear friends!

In Jharkhand, in our own home,
We have become strangers!
Somra and Mangra ran away
Leaving their place
In the same place now
Someone else has built a house!

In Jharkhand, in our own home,
We have become strangers!

Without the Rasika
The Akhra is empty.
Jharkhandis are at the bottom
The outsiders are on the top!
In Jharkhand, in our own home,

We have become strangers!
[That's why], Mukund says,
'Think about -
How will our honour be saved?'
In Jharkhand, in our own home,
We have become strangers!

(The Song *'Jharkhand Banali Pardesi Nij Ghar*' from the documentary film *Gadi Lohardaga Mail*)[18]

The song is sung in a documentary titled *Gadi Lohardaga Mail*, directed by Biju Toppo and Meghnad Bhattacharya. The documentary is a nostalgic ode to the Lohardaga Mail on its last journey across the metre guage line in 2004 before it is to be merged with the broad guage line. As it trudges through the landscape, the gathering of singers, artists and activists in the train reminisce about their memories and journeys of migration, development, dispossession and loss. The Lohardaga Mail helped to connect Ranchi, the capital of Jharkhand, to Purulia, a district in West Bengal in 1907. This track was later extended to Lohardaga in 1911. It bore witness to many out-migrations of tribals to the tea plantations in Assam during this period, a shared history with those residing around the Damodar as well. This particular song and the documentary, is a production mainly by activists in Jharkhand, capturing a broad sentiment found across this landscape—that of nostalgia, a feeling of loss and an inability to recognize the changes around.

Damodar river flows through the Chhotanagpur Plateau in its upper and middle tract crossing over the two states of Jharkhand and West Bengal. The river basin is a repository of 46 per cent of India's coal reserves.[19] The entire basin is dotted with a number of

[18] Translation of the song "Jharkhand Banaali Pardesi Niji Ghar" by Subrat Kumar Sahu. From the documentary film Gadi Lohardaga Mail by Meghnad Bhattacharya.

[19] R.K. Tiwary and B.B. Dhar, *Environmental Pollution from Coal Mining Activities in Damodar River Basin*, Mine Water and the Environment, India, Vol 13, June-Dec Issue, 1994, pp. 1-10.

industries and steel plants. The land use changes have been drastic over the years. The discovery of coal in the region led to the springing up of numerous ancillary industries such as coke oven plants and washeries, which in turn fed into fertilizer and steel plant factories, and was fed by thermal power plants. If we plot the industries that existed prior to the setting up of the multi-purpose hydroelectricity project on the Damodar Valley Corporation dam, the plotting shows that before it was built, there was a presence of major industries which included steel mills, engineering works, paper mills, aluminium works and cement companies. However, after the hydel power project was constructed in the region in the 1950s, there has been a proliferation of industrial enterprises which include steel plants, alloy steel plants and thermal power plants (Bokaro Thermal Power Plants, Patratu Thermal Plants and Durgapur Thermal Power Plants) as well as hydel power plants (Maithon, and Tenughat), medium and captive power plants.

A case study tracking land use changes from 1925 to 1984 gives small empirical evidence of what the trend has been in just a part of the watershed region, Dhanbad, between 1920s and 1980s, where the percentage of mined area increased from 4.7 per cent in 1925 to 26.5 per cent in 1984. Forestlands reduced from 4.9 per cent to 1.2 per cent while agricultural land reduced from 59.4 per cent to only 10.0 per cent in the region of Jharkhand Coalfields itself (extracted from a study titled Socio-Economic Metabolism of the Damodar Valley Area by Center for Study of Man and Environment, Kolkata, for ICAST, Geneva, Switzerland, 1998) [20]. A more recent study on the environmental status of the entire river basin published by the Central Mining Research Institute (CMRI), which tries to assess the *Carrying Capacity of the Damodar River Basin*, shows trends of increase in built-up area, decrease in forest area, increase in mining zones, sand and scrub lands in the Damodar River Basin.[21] Similar trends are substantiated by other

[20] Case Study of Damodar Valley Region, http://www.roionline.org/books/Industrial%20ecology_chapter09_Damodar_Coal.pdf. access date 18 June 2013.

[21] Table on trends in land use patterns, Carrying Capacity of the

studies. For instance, the Wasteland Atlas of the National Remote Sensing Agency (NRSA-2005) clarifies that "Jharkhand has the highest area under wasteland and while most of this area belongs to degraded forests, Jharkhand in particular has the highest industrial wasteland in the country. Nationally the area under mining and industrial wasteland has increased from 1252.13 sq. km to 1977.35 sq. km in a span of just three years from 2000 to 2003 and much of it is contributed by the eastern region."[22] The river embedded within this landscape is only a reflection of what is happening around it.

Expressions of Loss along the Landscape

The feeling of homesickness expressed in the song cited finds echoes in what Glen Albrecht coins the term 'solastalgia' based on his experiences with people living in coal mine areas in Australia. Solastalgia, he stated, was a combination of 'solace', 'desolation' and 'nostalgia'. Solastalgia's Latin roots combined three ideas: The solace that one's environment provides, the desolation caused by that environment's degradation and the pain or distress caused by this loss.[23] While Albrecht's conclusions are debatable creating at

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Damodar River Basin, Case Study of Damodar Valley Region, http://www.roionline.org/books/Industrial%20ecology_chapter09_Damodar_Coal.pdf . access date 18th June 2013.

[22] Pran Ranjan, Restoration of Eco Fragile Zone by Offsetting Anthropogenic Activities: A Case Study of Bokaro River Basin, *Governance of Commons and Livelihood Security, (ed)* Himadri Sinha and Anant Kumar, XISS, 2013.

[23] He uses the terms 'psychoterratic illness' which involves the psyche or mind and terra or earth and 'somaterratic illness' referred to damage done to the human body, its physiology and/or genetics, as a result of the loss of ecosystem health by, for example, toxic pollution in any given area of land. Albrecht thus through his concept was stating that the responses of people living in a changed ecosystem resulted in them viewing the world in pathological ways and located this diagnosis to the losses in the ecosystem. Thus, Albrecht suggested that there may be a wide variety of shifts in the health of an ecosystem 'from subtle landscape changes

once a problematic and marked distinction between 'pathological' or 'diseased' spaces and spaces of well being, he raises the concern on how intricately our psyches are connected to the environment. Of course, this may be differently experienced by different people, which is explored in great detail in the subsequent chapters of the work and may, thus, give rise to how specific gains and losses create different kinds of nostalgia about our environments hence inhibiting or propelling our environmental actions.

While travelling through villages along the river Damodar I too, like Albrecht, tended to categorize my observations made by residents of the landscape as an expression of 'loss'. There were several meetings with people from working class and activist backgrounds, where I found that a discussion on the environment on the whole, on the face of it, was mostly around the notion of 'loss'. These were associated with loss of life, shelter, resources and culture and lost childhoods. Some of these observations are highlighted from my field notes, and other secondary sources available. In a diary entry I, thus, wrote:

Nirmal stands behind the shutdown colliery; behind him a dense fog of coal dust and smoke blocks the horizon. If a silhouette of the landscape were to be drawn, it would be chimneys from industrial units competing with the coal fired cook stoves, which run choc a bloc, creating a black fog over the river. Nirmal's poetry is to do with his green village, which has turned into a dark semi industrial town over the last 60 years. He recreates a lyrical and colourful picture of fresh water, forests, fish and a peaceful life in the district before. (Field Notes, On the Banks of the Damodar, Baghmara Block, Dhanbad district, 2003)

In his study of Griqua land claims in South African diamond fields of the 1870s, Jonson believes that "for the Griqua the major concern is material loss'. In addressing their experience of loss, the Griqua have chosen to prioritize the material struggle for land, trying to use the new laws to achieve restitution".[24]

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related to global warming to desolate wastelands created by large-scale strip mining—that diminish people's mental health.'

[24] David Jonson, Theorising the Loss of Land: Griqua Land Claims in Southern Africa, 1874-1998, *Loss: The Politics of Mourning*, Edited

Such expressions around 'material loss' are widely available specifically among the leaders and activists from the area. In a popular digital site CG Netswara,[25] (a platform which brings tribal voices from Central India directly into the public domain) the interview between Naim Ejaz with politician and social worker, Ramchandra Rawani, based in Dhanbad district, gives an insight into the feelings of tangible 'material loss'.

Ramchandra Rawani tells the interviewer about how the DVC (Damodar Valley Corporation) dam on Damodar has killed the river and also destroyed the people who lived on it. In 1952, when the dam was built, 71,000 acres of land was taken, 1,70,000 people were displaced and people were given hopes of a better life. Coupled with mining the dam has killed the natural flow of the river and people have neither got irrigation nor drinking water. He ends the interview with the poignant words that the rate of coal mining has accelerated to such an extent in the area, currently under BCCL (Bharat Coking Coal Limited) that on one side are only mountains of waste, and the other side deep gorges, such that no land will be left to even bury or burn the dead for future generations.

Scholars discussing 'loss' as a psychological concept state that while loss is a primary reaction, mourning loss provides new avenues to cope with loss, taking us a step further from nostalgia. Dotted all along the landscape and closely intertwined with memories of loss, I found spatial markers and symbolic space and place making by resident communities which may be classified as a form of mourning or a form of remembering.

At Nagdah, in Dhanbad district, the mine has shut down now, and a memorial has been erected for mine workers. The memorial is a stark reminder of an accident where workers died in a terrible disaster as methane reserves in the mine exploded in 2006.

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by David L. Eng and David Kazanjian, University of California Press, Berkley and Los Angeles California, 2003.

[25] Ramchandra Rawani, in an interview, with Naim Ejaz in Dhanbad District.http://www.cgnetswara.org/index.php?id=12871, access date August 4, 2012.

At another point along its banks at Jharindi, near CCL (Central Coalfields Limited) colonies, where methane emanates from the banks of the river, we sit at the teashop on what is known as Hospital Road. A broken wall in front and new tenements to the left is suggestive of some disturbance here. The village elders explain how a hospital was shifted from here, as the railway line was to divert into the heart of the village and a mine was to be located where the hospital is now. Though the railway line has not come in as yet, in spite of many years passing by after initial land acquisitions were announced, the dwellings off Hospital Road seem to exhibit the fragility of transience in them. An elderly man explains pointing to a pit, where fortunately no coal was found.

Right near the pit, which is now covered in grass, is a sacred shrine. A young boy explains that this is dedicated to 'Kasba Dada' who protected the village from displacement. The shrine at once makes the entrance to this otherwise unobtrusive colony a sacred space, a marker and imminent reminder of the memories and stories of displacement that haunt other parts of the region. (Field Notes, On the Banks of the Damodar, Baghmara Block, Dhanbad district, 2008)

Besides mourning associated with loss of land or livelihood i.e. 'material loss' [26], loss also includes environmental and cultural loss which signifies the intangible aspect related to imaginations of landscape, the environment and the internal significations these had with childhood, memories, ancestry and collective imaginations discussed in various parts of this work. In a striking letter in the cultural archives at Sanskriti in Dipugarha, Bulu Imam, a resident of Hazaribagh, an environmental activist, artist and founder of the Sanskriti Museum and tribal women artists collective writes a letter to his brother giving a meaning to the intangible experiences of loss. In the letter, dated 30 August 2006, he writes:

[26] Jonson tries to theorise this feeling of 'material loss' and says that Freud who hierarchises 'loss' as personal loss or the loss of a 'loved object' fails to recognize the 'loss of land' or 'material loss' in his text titled Mourning and Melancholia (1915). Jonson wonders whether Freud's tentative 'economics of pain' may be extended to involving material loss of land or not.

Once Barakar flowed wild and freely through densely forested flanks straight down to the lovely Tiger Pool where it spread out among the numerous natural rocky pools carved by the incessant flow of water through the rocky fissures, leaving little sandy beaches among the boulders where we as children would play while the elders swam or prepared the picnic lunch.

The small falls and rapids in this wild river in the forested setting of Tiger pool was known for wild animals who came here to drink especially during the hot and dry summer months when water was not available elsewhere in the jungle. Legend goes that the Raja of Ichak got lost in these forests and was saved by Krishna after which he established the Bansidhar Mandir.

One day it was decided to build a dam, now called the Lotia Dam, on the Barakar stream between Salparni and Tiger Pool. The water in Tiger Pool dried up. The industrial developers rushed in and stone crushing began, with huge mechanical stone crushing units being set up. The last decades of the twentieth century were coming to a close. The Tiger Pool was fated to die with the century. In a few years, Tiger Pool disappeared. It has become like any other industrial site. The villagers have become industrial workers.

The forest and its wild animals have disappeared. The people who used to come for "moonlight picnics" are no more. On one of those boulders in Tiger Pool my brother Christopher and I and our friend Michael had chiseled our names. I wonder where that boulder has gone, to build a road or house roof? My brother is now dead and I am getting old and I realize that when I go nobody will remember Tiger Pool. That is why I wrote this little true story to tell you so that at least you will know.[27]

Using the counter intuitive technique of relooking at the past apprehended by loss almost simultaneously necessitates the need to look at remains. The ideas around 'spatial remains'[28] are specifically useful thus in my exploration of environmental loss and conflict in the upper and middle valley tract. For instance,

[27] Letter by Bulu Imam, Sanskriti Archives, Hazaribagh, 2006

[28] David Jonson, "Theorising the Loss of Land: Griqua Land Claims in Southern Africa, 1874-1998", *Loss: The Politics of Mourning*, Edited by David L. Eng and David Kazanjian, University of California Press, Berkley and Los Angeles California, 2003.

Susette Min's discussion of Vo's works, Min explores in the artist's work the impulse of representing the lost object, where the artists have tried to 'preserve loss by suspending and controlling time through space'. Susette Min points us to Giorgio Agamben's theories where Agamben uses melancholia as a metaphor for becoming. Here Susette Min argues for a case for the engagement with loss as a necessary means that would lead to nostalgic stasis but a creative process of becoming or overcoming the lost object.[29] Sumathi Ramaswamy, in her book titled *The Lost Land of Lemuria: Fabulous Geographies, Catastrophic Histories*, gives some justification for this preoccupation with lost geographies. She writes, 'I am interested in the preoccupation with loss, as this manifests itself in the fascination with vanished homelands, hidden civilizations and forgotten peoples and their ignored pasts...'[30] She classifies the practices of place making imaginations as being both fabulous and catastrophic.

Similarly, David Jonson, in his essay on the Griqua land claims in South Africa, talks of 'material loss', here the loss is loss of land, where mourning the lost object does not mean detaching oneself but probably finding ways to get it back. Furthermore, Jonson clarifies that this melancholia is not necessarily associated with a 'love object' or 'person' as described by Freud but could refer to 'material loss' as well.[31]

In this work, both the tangible and intangible aspects related to 'environmental loss', where loss is not just loss of land or 'material loss' but also includes intangible aspects such as cultural psyche and memory, attached to the environment and landscape that it constitute, is discussed.

Abandoned mine sites or 'brownfields' in the Damodar Valley call for the need to understand features of technology and economy,

[29] David Jonson, Ibid., 2003, pp. 229-225

[30] Sumathi Ramaswamy, *Lost Land of Lemuria: Fabulous Geographies, Catastrophic Histories*, University of California Press, 2004.

[31] David Jonson, "Theorising the Loss of Land: Griqua Land Claims in Southern Africa, 1874-1998", Ibid., 2003, p. 278.

social organization and ideology and the nature of ecological impact on these different modes of resource use proposed by Guha and Gadgil in the industrial situation. Guha and Gadgil stop at observing that the continuing contraction of niche space in tracts of subsistence agriculture, and for those dependent on foraging for resources—landless and small peasants, fishermen and traditional resource processors (artisans and nomads)— has created intense conflicts, an ongoing struggle between the peasant and industrial modes of resource use of the colonial and post-colonial, which has left in its wake 'a fissured land'.[32] However, the fissured land today is not just due to resource shortages but an earlier resource abundance that has created conflicts. As India marches on towards further industrialization in various parts of the country, exploring the history of conflicts and loss in this post-industrial area and the various narratives around it from this tract helps to continue the continuum proposed by Gadgil and Guha on the culture of environmental conflict in the post-industry phase. These conflicting narratives in the later part of the work specifically in identification of moments of loss and the numerous ways in which individuals and institutions related to this loss give us some insights into projected futures and hence a set of realizations needed today, to act on environmental loss.

River Damodar as a Metaphor of Loss

The early representations of river Damodar are close to invisible.

Some scholars point to the river being referred to as an *Antasira* (subterranean river) or the *Maha Gauri* in early Hindu texts such as the *Matsya Purana*.

In its different representations, we find that the river is more visibly discussed in the late eighteenth century. From here onwards, the river is represented as an obstruction for navigability, a source of sorrow for its devastating floods. Later it emerges as a seat of 'modern temples in India', one of the first multi-purpose power

[32] Gadgil Madhav and Guha Ramachandra, *This Fissured Land: An Ecological History of India*, Oxford University Press, 1993.

projects—the Damodar Valley Corporation (DVC). However, besides written representations of river Damodar, we find many other diverse representations of the river in popular and oral narratives.

While maternal metaphors are commonly used to explain the nurturing quality of rivers, river metaphors are used to signify a passage of time, love, connections between places and people and between diverse communities, shared histories, the sacred, the divine or supernatural and in the case of the Damodar, 'environmental loss' and the 'urgency of life' as well.

While rivers tell stories themselves, they are also 'narrated about' in numerous ways. These narrations tell us a lot about the 'discursive politics in the construction of the image of the river', which changes with changing priorities over time.[33]

Antasira-A Subterannean River

According to popular belief, the Ajoy and Damodar are like the Tigris and Euphrates. They run parallel to each other and many nomadic people have settled here from ancient times.

While Deonad and Damodar have been cited as the name of the river, some scholars from Bengal have traced the Damodar to sixth century BC texts, such as the *Matsya Purana,* where the Damodar was probably the *Mahagauri* and described as an *Antasira*—a subterranean river or *durgama*—a river difficult to encounter[34]. But the most interesting version and interpretation is from the name 'damuda' (spelt this way in British texts), which refers to two Mundari/Santali words, *damu* and *da*, simply meaning 'sacred water'.

[33] Kuntala Lahiri-Dutt, "Imagining Rivers", *Economic and Political Weekly*, July 1, 2000.

[34] Kumkum Bhattacharya, *The Lower Damodar River: Understanding the Human Role in Changing Fluvial Environment,* Springer 2011.

A Shifting River

Like other rivers in Bengal, Damodar was known as a 'shifting river'. The river is also called a river of 'buried histories', where the mouth of the river was made famous by 'the port at Tamluk in southern West Bengal'.[35] Tamralipti, now buried under the river, was a site of ancient high cultures, which saw the amalgamation of Hindu, Buddhist and Jain traditions.

British administrative texts such as the Gazzetteers in the eighteenth century begin to represent the river as an 'obstacle', where one finds the mention of an 'ill famed point' along the Damodar for 'maritime trade'. This is when the river gets more visibility and the main concern around the river surfaces mainly around its poor capacity to lend navigability. This 'ill-famed point' is where the Damodar met the Rupnarayan river known as the Hooghly point or Geonkhali, where through their combined force they arrested the flow of the Hooghly making it difficult for ships to navigate the river. These rapid currents, shoals and shifting sand banks were named James and Mary Sands after the Royal James and Mary ships were lost in these parts in 1694, threatening maritime commerce.[36]

Bradley Birt, writing in 1903, describes the Damodar as a 'splendid river':

The Damuda and Barakar are splendid rivers after heavy rain further up among the hills. Then the wide expanse of sand, showing bare and dry for most part of the year, is covered by a rush of swiftly flowing water, bearing on to swell the larger and more stable rivers of Bengal. Strong impetuous foaming in their haste, they carry all before them, and there is no safe crossing until their force is spent. Even when their first flood has subsided, quicksands make the fording dangerous, and boats are few. Yet to get to Purulia from Gobindpur by road, the Damuda must be crossed. The Bengal-Nagpur line, now under construction includes a bridge 1200 feet long over the river at Boojidih, but the traveler on foot will still have

[35] Ramesh Chandra Majumdar, *Ancient History of Bengal*, G. Bharadwaj and Co., 1971.

[36] Asim Kumar Mandal, *Geo-Ecological Set Up of the Sundarbans, The Sundarbans of India: A Developmental Analysis,* 2003*,* p. 64.

to make his way across as best he can and pray that his journey not be in the rains.[37]

Birt describes the river amidst the lit furnaces of Kumardibi and Laikadih and the unbroken paddy fields further south noting the non-perennial nature of the river in its upper reaches. Birt marvels at the perils of the journey on foot, and the courage required in crossing the Damodar, and overcoming its forcefulness. In the memoirs, we find copious 'natural descriptions' of the river. This is the period when colonial rule has settled into the Chhotanagpore Division, and even though Birt's memoir calls it the 'Little Known Province of Chhotanagpore', we know that most imperialist narratives of that time are travelling and penetrating into otherwise 'invisible' and 'little known' tracts, which get 'mapped', 'marked' and better known, as the colonizers etch out the Empire. As argued by Martin Green, the adventure narrative "is the energizing myth of the empire"; these descriptions include in it the hidden imperial desire to conquer this 'countryside'. Subtly Birt's descriptions mentioned above while describing the splendour also builds in the relevance and need for the Bengal-Nagpur railway line which will help to overcome the perils of travel to this lesser known place.

A River of Sorrow

In the later British texts, the river becomes infamous for its regular floods. It was, hence, highlighted as 'the sorrow of Bengal'. However, this is a contested notion on the river as we find in Bholanath Chunder's *The Travels of a Hindoo: To Various Parts of Bengal and Upper India*, written in 1869, a different perspective:

The idea haunting the public mind about the Damooder is that it is a stream of gigantic velocity, which throws down embankments and inundates regions for several miles…for all of which it is distinguished as a Nud, or masculine river…But here up at Raneegunge it is stripped of all such terrors… a 'babbling brook' with scarcely audible murmurs,

[37] Francis Bradley-Birt, *Chota Nagpur: A Little Known Province of the Empire,* Smith, Elder and Company, 1903, p. 295.

awakening a train of softest associations, as one takes a walk along its lonely and steepy banks.[38]

Chunder's observation on the river, are however overpowered by narratives, of the Damodar being a river of sorrow during the late eighteenth and early nineteenth century. The first recorded flood was in 1730 when the Damodar was shifting its course southwards away from its original mouth at *Naya Sarai* or *Kansona Khal*. The slow transfer of irrigation systems into the hands of the British system change the narrative considerably on how rivers were managed and written about. Explored in greater detail later in this work, it is sufficient to say here, that recurrent disastrous floods due to mismanagement of systems led to the river being known for the sorrow it was bringing in. Thus, we see a slow descriptive change where river planning terminologies begin to guide the narrative on the Damodar.

By the 1950s, the Damodar Valley became a centre of commercial activity and was referred to as the Ruhr Valley of India. Daniel Kligensmith's work titled, *One Valley and A Thousand: Dams, Nationalism and Development*, gives an idea of the representations of the Damodar in the 1950s. He points to an inset map of Damodar in the *Times* Atlas published in the 1950s, which deceptively show three reservoirs on the Damodar which never got built, the Balpahari, Aiyar and Bokaro, which find their way into the maps reproduced in several editions up to 1994 and are only eliminated in the 1999 edition. These representations and misrepresentations as Daniel Kligensworth points out were the ambitions of planners of the 'New India in the Making'. 'The foundry of Nehruvian India was supposed to lie here. All the industrial sites of this 'Ruhr Valley of India' were to draw on power provided by the hydroelectric dams built along the Damodar and its tributaries.'[39] Thus, the river had changed from sorrow to one of great opportunities by the early 1950s.

[38] Bholanauth Chunder, *Travels of a Hindoo: To Various Parts of Bengal and Upper India,* N. Trubner and Company, Vol 1, 1869, p. 162.

[39] Daniel Klingensmith, *One Valley and a Thousand: Dams, Nationalism and Development*, Oxford University Press, 2007, pp. 3-5.

Though public national memory chose to forget it, the stories after damming the river Damodar or the establishment of the Damodar Valley Corporation (DVC), is one of dispossession, loss and regret. Here are embedded the testimonies of anti-dam sentiments, 30 years before the Narmada Bachaon Aandolon, and new testimonies on pollution, issues of water sharing and irrigation and hurdles in compensation in current times. The sites around the Damodar, thus, provide a wealth of experience and knowledge on the debatable discourses of the mainstream paradigm of development and the responses to large-scale diversion of rivers and spatial transformations in the aftermath. The narrations, thus, revolve around the need to 'unearth histories and related connections' under the now dammed Damodar in different oral narratives in the present.

A Trapped River

A Bengali short story writer interviewed in Durgapur reflecting on the earlier floods of Damodar in his village near Raniganj shares that the river is not so mighty any more, hence comparing the Damodar to a 'mighty man' who has now been 'trapped and tied' indicates how the harnessing of natural resources in local cultures tend to get closely associated with colonization, control and weakened masculinities in these parts.[40] Thus, from the 1950s to 1980s, we find ambivalent descriptions of the river sometimes describing it as a centre of commerce and, at other times, as trapped and tied.

One must absorb here the interchanging narrative of masculinity and feminity associated with the changing expressions on or about the river. Damodar in contemporary times is considered to be a "nad" (masculine), but we see references in early texts of the river actually being of subterannean nature and being given a feminine expression, *mahagauri.* Similar to colonization, the damming of the river seems to have been related to a loss of 'vital'

[40] Field Notes. Translated and transcribed narration, dated January 2013.

energy and while it is difficult to locate the exact point when the masculinization happens, it's clear that it's assumed as such right from the British period to current times, the difference being that of a river being trapped after dam building. Another point to note here is that in tribal texts, the river was neither masculine nor feminine.

A Lifeline

Today, the narratives of residents living around the banks of the Damodar particularly in Bokaro and Dhanbad oscillate between associating the river with the 'urgency of life' or with death, calling it a 'dying river dotted with polluting industries'. Calling the river a 'lifeline' is interpreted in terms of self-identity as well; since the Damodar is a major source of water, and a main nerve supporting the industrial region here.

An activist, who fought for the compensation rights of displaced people along the river Damodar, after the Tenughat dam was built in Bokaro district, gives her own meaning to this urgency, which brings together the ideas of pollution and displacement.

Rivers are like the interconnected veins running through our bodies, if you cut off a vein we cannot continue to live.[41] This close association of the river with the body and life is common.

The Black River

The Damodar is also called the "The Black River" indicating the high toxicity and pollution in it. Many texts and scientific narratives echo similar sentiments.

A rarely known book found in the Central Mining Research Institute (CMRI) and Indian School of Mines (ISM) in Dhanbad by U.C. Mehta and P.K. Mishra titled *Damodar Basin Through Ages (An Environmental Approach)* and published in 1995 by MM

[41] "Countering Patriarchal Imaginations: Women and Water Movements" posted on my blog In The 21st Century.http://inthe21stcentury.blogspot.in/2012/07/countering-patriarchal-imaginations.html

Publications is probably one of the few available studies looking at the environmental status of the basin as a whole. In this study, Mehta claims that the basin is the most polluted river in the world, and while he assumes this to be an exaggerated claim he does not deny the fact that the implications of the coal industry and its allied industries have a deep rooted impact on the basin.

When Mehta conducts the study, i.e. in 1995, there are as many as 600 industries identified by him at various levels in the basin. These industries include six thermal power stations, 15 coal washeries, one metal smelting plant, four inorganic chemical plants, four organic chemical plants, eight cement mills, five coke oven and product plants, beehive coke oven and over 200 allied briquette plants, 22 metal casting and steel rolling plants, three refractories, 20 mica and glass industries, three rubber industries, two fabrication and engineering industries and over 200 stone crushers, lime and brick kilns.[42]

Mehta and Mishra's key findings in the 1990s validate the observation of deteriorating status of the river. The pH of the river water generally ranged from 7.15 to 8.32 exhibiting alkaline character. The temperatures ranged between 28 to 34 degrees Centigrade, mainly due to the discharge from Thermal Power Plants (TPPs). The river water had a large number of suspended solids evident without sampling, making it useless for use by local people, though the exact sites are not clarified in the book.

The scientific testing concludes that unabated and indiscriminate discharge of industrial effluents from different industries and coal mines into the river has affected the water quality, particularly the high discharge of suspended solids, discharge from coal washeries and thermal power discharge, polluting the water and river bed. The consumption has resulted in various types of water borne diseases among people and is also unsuitable for aquatic life.

In his detailed analysis of the water quality, Mehta states that the status is really poor, placing the Damodar in 'Category C', of the Central Water Pollution Control Board (CWPCB). He points

[42] Mehta/P.K. Mishra, *Damodar Basin Through Ages (An Environmental Approach)*, MM Publications, 1995, p. 10.

out that in this situation of poor availability of fresh water, water was made available by BCCL through its water treatment plants which supplied water of about 4 million gallons per day and in the 1980s only 20 gallons of water per day was available per capita, far below the Indian Standard of 30 gallons of water per day.

Water supply did not cover the entire field and most depended on pond water, wells and other dirt water. Wells were dry due to a drop in the water table and hence people had to rely on tankers. Land has been severely disturbed. The amount of agricultural land has dropped partly due to soil degradation and shift to lucrative economic activities.

Mehta highlights that villagers are not well absorbed into the industry and they have a basic distrust for BCCL to the degree that they even refuse to resettle, as they do not think the mines and fires are their creation. In Mehta and Mishra's descriptions we see a shift in terminologies used for the river. The narratives of loss in scientific terms are clinically distilled from emotions and sentiments otherwise often displayed in oral narratives. However, even through these clinical indications, it is made amply clear that the river is 'ill'.

In the environmental magazine *Down To Earth* there is an article titled "Damodar Ten Years After", written in 2003 by Avanti Roy and Sachi Chaturvedi, which gives a comparative status of the description of the low adherence to environmental standards and norms by industries and the stagnation in terms of action on the same in the last ten years, and ends on a poignant note:

This is it. I have nothing more to record. I take with me many images of a river that I cannot call a river (a river is something that changes). I can only share with you what I have learnt: the Damodar is the perfect reflection of what it passes through. The Damodar is not a river. It is a mirror with a black sheen. The mirror shows—it has shown for a decade now—we cannot live the way we are living now.[43]

[43] Avanti Roy and Sachi Chaturvedi Damodar: Ten Years After, http://www.downtoearth.org.in/content/damodar-ten-years-after, Down to Earth, March 2003.

In the same year of 2003, in a paper titled "People, Power and Rivers: Experiences from the Damodar River, India", Kuntala Lahiri Dutt explores the discursive construction of rivers and identifies several conflicts that exist between resident communities and water resource planners, concluding that the technocratic view of the river has stripped the rights of the river and local communities.

Locating the power dimensions in these narratives, Dutt mentions the need to look at the rights of the river to move over space and also highlights the need to include human society in the geographical image and construction of the river. In these power dimensions behind the imagination of rivers, we find a new kind of narration about the Damodar.

The Damodar is a 'South Asian river' as opposed to European and American rivers an interesting shift from the time when the river was being compared to the Tennesse during the planning of dams. It is a wild river but 'due to its destructive floods and benevolent moods it naturally invited modern thinking on river training'. Most of the examples given by Dutt are of agrarian communities in the lower tract of the Damodar or the *laabh kshetra* (area comprising the supposed beneficiaries of the project) after the dam is built, pointing out the situation of flood and inundation and discontent over the dam in the lower tract or that part that should have benefitted from the dams built on the Damodar.

The One Eyed River

Dutt also identifies a series of conflicts between the people and the river; agricultural communities have choked up its distributaries giving rise to 'Maja Damodar' (silted up) and 'Kana Damodar' (one-eyed). These are predominantly names given by those living in the lower tract of the Damodar and using the dam waters to cultivate. The other tensions located by Dutt are those that exist between 'local communities living in river valleys' and 'experts and planners' in post-colonial India, modernization and development agendas which have created 'binary oppositions'

between the 'traditionalists vs. modernists, anti-dam vs. pro-dam, local vs. global, bio centric vs. anthropocentric'.

A Symbol of Lost Civilizations

Bulu Imam gives a different picture of the river in its upper valley in Hazaribagh. In the article, "Fighting for flowers on the Damodar", Imam describes the upper valley as a beautiful, forested and agricultural region inhabited by indigenous peoples amidst lush fields and forests with rare archaeological heritage of Paleolithic, Mesolithic, Megalithic, Neochalcolithic, Buddhist and Jain provenance. Imam sees a conflict between 'industrial giant corporations' and 'Third World Environments'.

Tracing the development of coal mining in these parts, Imam describes the upper tract as follows:

"*Today the valley of the Damodar in Jharkhand has become an inferno of choking dust and coal smog, high temperatures and lack of visibility. . . .*"

Stressing on heritage, he states:

"The Damodar is the richest repository of Jain and Buddhist monuments of the Gupta-Pala period in India. The archaeological heritage lay open to vandalism through coal mining and industrial development clearly putting a conflict between 'industrialization' and the 'forces of culture and heritage', between 'global corporation giants' and 'nation states' and 'local societies'."

While fighting to preserve the non-material culture of the indigenous in the upper valley tract, Imam does not restrict his definitions to the river alone but the entire valley. Here though the Damodar also becomes a symbol of the 'past', 'of lost or hidden civilizations and cultures'; an important symbol to express the international struggles related to mining.

Later in 2008, under 11 media fellowships supported by the Centre for Science and Environment under the title "The River: Used and Abused", the Damodar surfaces as one of the several rivers

being researched. Among other rivers such as Sheonath, Indravati, Koel, Padma or Bhagirathi, Anupama Mishra, a journalist based in Ranchi, specifically researches the river Damodar. This is in a context where the CSE believes that the Ganga Action Plan (GAP) initiated in 1985 has failed in spite of an expenditure of over Rs 2,000 crores to clean the river. The fellowships were related to assessing the status of rivers and the plausible alternatives. The fellowships supported thus included several other smaller river systems and the associated problems. Anupama Mishra writes on the Subarnarekha and Damodar. Her articles are titled *"Karahta Damodar", "Damodar Pariyojna: Sapno se Zyaada Dard", "Bachaane Ki Muhim Jaari", "Abhi Paani Peene Yogya Nahi"*. We are reintroduced to the issues of pollution, displacement, water scarcity and water pollution and livelihood crisis, around the river as well as the different initiatives and movements by Gandhians, political parties and NGOs in the area. In the article, "Karahta Damodar" or "The Groaning River", the writer emphasizes the link between the Damodar and *adivasi* culture. 'Damuda', she explains, is actually associated with the flowing sounds of the Damodar and the uninterrupted sounds of the *mandar* (traditional drum). In the article on Damodar Pariyojna, she quotes the lines of a famous Khorta writer, Shanti Bharat and mentions that the river is not just a river but also 'a document of the culture, civilization and history of the people of Jharkhand'.

The River: Our Identity

In "*Bachaane ki Muhim Jaari"*, she talks of the different kinds of movements that have erupted 'to save the river Damodar' ending with the most contemporary movement by Yugantar Bharati, led by Saryu Rai of the 'Damodar Bachao Aandolon' (DBA). Here in the narrative we see how the river has emerged as a final political motif, centred around identity elucidated in the goals of the DBA as "Hamaara Astitva, Hamara Itihas, Hamara Bhavishya, Hamara Damodar Bacha Rahe" ("Our identity, our history, our future, let our Damodar be preserved"). The last article stresses on the

quality of the water and the fact that the water is not suitable for drinking.

Environmental Meaning Making on the River

In almost all the narratives, 'identities' try to express themselves through the identity of the river; this inhibits environmental action specifically in terms of fracturing the public on the cause, leading to limited, small, localized short-term action only. Similarly, identifying the river as beautiful, or splendid leaves it only as a romantic expression of nature, while seeing the river as dangerous, one that brings sorrow and an obstacle meant the need to control the same. Looking at the river as a potential foundry for industrialization displayed the acceptance of the need to harness resources while later metaphors display realizations on development and expose the deep power hierarchies around the same.

The changing narratives and metaphors used for the river result in different kinds of environmental meaning making which gives rise to different actions. In the narratives about the river, through different time periods, we find a subterranean river gaining prominence in romantic colonial writings of the British as a splendid river, and then in the notions of 'sorrow' highlighted due to incidents of flood or difficulties in navigation during the British period. The river also gets represented differently as a political or developmental motif: as a part of 'an industrial dream' in Independent India, and later as an important environmental political motif to express issues of the Third World, as a symbol of *adivasi* identity and culture, of buried or hidden or lost civilizations, as a metaphor to explain conflicts between planners and local societies placing the rights of the river and rights of local communities, as a motif representing the differences in the nation-state and its sub-nations, and as an political and ecological motif of a black river which acts as a mirror of realization on environment and development.

The Damodar in imagination and memory thus works as a metaphor of loss. Based on the many ways in which it appears

whether in memory or in imaginations, or in studies, it gives us indications of something deeper that is happening in the basin around it. It acts as a metaphor and with a totality of meaning for those looking to express and explain the deterioration of the landscape and what this means. The Damodar is not just used to show a linear progression of deterioration and devastation along the landscape due to development over time, or highlight the problems of coal mining and industrial pollution, identity conflicts, and the tribal voice, but to understand how figuratively different images of the river give voice to something deeper in environmental meaning making in and around it.

The Damodar Valley provides a complex site where the congealed definitions of environmentalism and environmental discourse seem to come apart and call for new ways of thinking through different environmental problems.

This used to be an area inhabited by *adivasis*, but is largely cosmopolitan today. The area has witnessed the early industrialization projects of Nehruvian socialism, housed important initiatives of Gandhian-socialist leaders, such as Jai Prakash Narayan, is a site of splintered Maoist rebel activity, has given birth to *adivasi* political leaders who have emerged from coal worker movements and articulated the first ever Left politics incorporating the idea of 'internal colonialism' for tribal communities.

Imaginations on the River by River Movements

The imaginations around and the construction of the river in river movements may be easily mapped in the narratives available in existing environmental campaigns, in the literature and cultural resources used by them which give us an insight into the kind of imaginations around the river that have aided or inhibited environmentalism. This section looks at available texts representing the voice of these movements around river Damodar that is either circulated by or written by activists participating in these movements.

Environmental movements around rivers have depended largely on identities of faith and religion to rouse environmental consciousness in India. The 'Yamuna Satyagraha' and 'Save the Ganga Movement' bear out this fact, where the strategies within these movements have tended to use religious symbols and practices closely associated with the river.

These strategies have successfully brought together masses for the cause. Some enviornmentalists, who prefer that environmental politics remain devoid of the Left and the Right ideologies, criticize that environmental movements have tended to succumb to right wing politics in India[44]. However, the success in bringing together, large numbers of people into these movements are not answered in this partially correct analysis that environmental movements have a saffron hue in the country today.

[44] Mukul Sharma, *Green and Saffron: Hindu Nationalism and Indian Environmental Politics,* Orient Blackswan, 2011.

The preponderance of saffron among green movements may also be the consequence of a large number of theoretical accounts on environmentalism (including those available in the West), which have always given an emphasis to a 'glorious innocent past' in comparison to a 'high risk hazardous polluting modern society'.

In looking into this past, scholars have tended to invoke a Hindu philosophical past in India. K. Sivaramakrishnan argues that environmental history emerged within the confines of dominant perspectives. Indian scholarship on the environment was caught up in the critique of colonialism, the nation-state, development and transitions to capitalism that engrossed a wider nationalist and postcolonial historiography.

A lot of work has also been done in contrast with Indian cultural practices, Brahminical models and indigenous religious ideas and the potential they have, to support ecological awareness in India. These major models of analysis K. Sivaramakrishnan calls ecological nationalism, which is typically situated in critiquing of colonial structures, and drawing from ancient wisdoms and cultural diversity within India.[45]

Drawing from 'ancient wisdoms' has in itself, brought in a trend of appealing to the ancient Hindu perspective, which is now vulnerable to political excesses. Emphasis on eco-cultural identities of Indians and their ancient Hindu practices and even *adivasis* and their eco-friendly non-modern practices have resulted in polarizing environmental discourse in the case of the former, and in the case of the latter, an ecological overburden on *adivasi* communities to live out ecologically friendly lifestyles, in an India, gunning for more economic growth.

This, thus, means that environmentalism is going through a complex phase, for not all *adivasis* are yet in a situation or have the option to use fuel guzzling cars and continue to fight for self-determination and recognition of *adivasi* cultures, and Hindu philosophy continues to contain pertinent ideas that may feed into

[45] K. Sivaramakrishnan, "Nationalisms and the Writing of Environmental Histories", *Seminar,* 2003. http://www.india-seminar.com/2003/522/522%20k.%20sivaramakrishnan.htm

environmental philosophy. Hence, while avoiding puritan politics, which may lead to radical conservatism, how then do we delve into our senses of self and cultures and at the same time articulate a progressive and secular form of environmentalism? How do we understand the recognition of culture and yet avoid a complete Hindu appropriation of the environmental question.

The same issues arise when looking at scientific versions of environmentalism. Here too are debates, which oscillate between 'pessimism' and 'optimism', where the thinking dominates around the invincible ability of mankind to surpass and find solutions to all environmental risks. This has given birth to a new form of environmental science, which tends to use words such as 'clean technologies', 'clean development' and couches itself in a barrage of scientific terms and negotiations to prove that we are securely based in 'sustainability perspectives'.

Scientists, corporates and politicians who subscribe to this view have 'manufactured faith', among the masses through the 'clean tag' to ensure consumer driven capitalist ways of life, by postponing environmental burdens, shifting the direct perception of environmentally hazardous activity to remote locations and sites or into the future, buying off environmental guilt and displacing it from consumption into production processes. This in itself is a new kind of manufacturing of faith among 'environmentally conscious', 'middle class' and 'elite citizens'.

The failed negotiation around environmental politics has, thus, created a certain 'underbelly subterranean environmental movement' in the country which exists outside the sharply articulated political outlines but always succumbs to the dangers of the clearly outlined and already negotiated environmental politics of the political mainstream.

Environmental Movements around the Damodar

While anti-displacement movements along the river began in the 1950s, local memories record the first ever 'environmental movement' around the Damodar, which is traced back to 1989-90 under the leadership of three individuals— Tribhuvan, Suresh and

Mahaveer —who initiated the movement around the discharge of slurry into the river. The movement found some success in 1991 after which *Pariyavaran Bachao Aandolon (Save the Environment)* was initiated around the BTPS (Bokaro Thermal Power Station) forcing the unit to shutdown in 2000.

Based on the richness of the antiquarian remains around river Damodar, an entire campaign incorporating environmental concerns was organized by intellectuals and artists along the North Karanpura Campaign from 1989, where "the upper Damodar Valley which faced the threat of losing important heritage sites due to open cast coal mining". In a document tracing this campaign, titled *Fighting for Flowers around the Damodar,* Bulu Imam, the head of the Hazaribagh chapter of the India National Trust for Art and Cultural Heritage (INTACH), shares the journey and different strategies that the campaign took to appeal to the conscience of the elite decision-makers in India to protect these sites which were of immense archaeological importance and had potential for furthering research on 'the ancient traditions in India'.

In the North Karanpura Campaign, the 'culture and heritage movement' seemed to join hands with the 'anti-displacement' and 'environmental movements' opposing open cast coal mines, though the appeal to elite groups was pitted around the concerns of the restoration of ancient heritage and art, 'lost civilizations' or the 'lost world'. Imam writes in his note on the campaign:

We managed to save a small group of megaliths next to the (Coal India opencast) mine at Bhagwantola and another group of megaliths at Benti where the company went underground, drying up all the village water sources. A railway for transporting coal to the Mangardaha washery was challenged by us as it damaged archaeological sites at Thethangi and Saraiya where we had an old fort, palaeolithic-to-iron remains and world heritage rock art.

Imam's notes in the introduction to his narrative on the movement "*Fighting for Flowers around the Damodar*":

When we look at the world today we find there is a war raging between the nation-states and small societies within them or in some manner related to their interests, who are fighting for their rights which have

been denied to them. The denial of these rights has become a reason for them to declare war against exploitation. This has nothing to do with any religion as has been made out to divert from the real issues. With the advent of globalization the industrial reach of the superpowers and industrial giant corporations into the rural Third World environments for cheap labour and materials has increased and has also been strongly resisted locally.

The movement demanded proper archaeological, wildlife, environment and human rights clearances for mining in 1987. Sunderlal Bahugana of the Chipko Movement came in to provide solidarity to the movement. In 1993, a seminar was organized in New Delhi by INTACH on the 'cultural and ecological implications of mining in the upper Damodar valley tract'. The representatives of the campaign had met the UNESCO Director General who requested that they submit an appeal that the area be declared an 'Endangered World Heritage Site', but Imam reports that after 10 years he heard that the GoI did not allow the appeal to move from India to the UNESCO as it went against interests related to 'development'. Only when the group discovered Isco rock art paintings did it change the paradigms in the campaign.

Several new megalithic sites were discovered along the upper Damodar Valley tract. A lot of intellectuals began to show interest and started visiting the valley. There were also extensive studies done on wildlife corridors here. INTACH had already made an earlier demand for archaeological clearance in mining locations, however the campaign gained strength only when Coal India Limited (CIL) asked for a loan from the World Bank of an amount of 480 US million dollars. It was in the opposition to the loan that several intellectuals joined hands to save the North Karanpura Valley from further destruction. Appeal letters were sent by international organizations such as *Sanctuary Asia* working on tiger conservation and wildlife issues to Bill Clinton who was visiting India at that time, and to Atal Behari Vajpayee, who held the Prime Minister's office. The World Bank, after considerable delays finally appointed a World Bank Inspection Panel to investigate the campaign's claims on the environment and social impacts of the

project. It found terrible lacunae in the environmental plans of the East Parej mines of the Central Coalfields Limited, the regional wing of Coal India Limited (CIL), and the general environmental standards set forth both by the World Bank and CIL. After the critical report and depositions and testimonies of those who were being displaced by the project to the Panel, the World Bank did not sanction the second part of the loan.

It should be noted, however, that there were a lot of delays in responding to the claims made by those engaged in the campaign, which included INTACH and other smaller organizations such as Chotanagpur Adivasi Shramik Sangathan (CASS). A considerable area had already been damaged by the project by that time. The loan given by the World Bank to Coal India Limited (CIL) was under the Coal Sector Rehabilitation Project (CSRP) sanctioned in 1997, which aimed to make the coal sector in India commercially viable at that time to bring about improvement in the domestic supply of coal through the IBRD. By the time a second part of the loan was refused on environmental, social and cultural grounds, considerable damage had already been done. The Campaign continues to struggle to bring in recognition for the area as a World Heritage Site.

A Gandhian socialist activist, Ghanshyam, in 1997 started the *Damodar Bachao Abhiyan,* inspired by the *Pariyavaran Bachao Movement*. A *yatra* (journey) was organized along different parts of the Damodar to assess the status of the river. My conversation with the current convener of the campaign reveals that the stories on environmental action are grim. There has been no dearth of action, he notes: "The campaign still continues, with regular protests and sit-ins in front of DVC authorities, Jantar Mantar in Delhi, Ranchi Vidhan Sabha, against the poor adherence to environmental norms. Even legal action does not come to any fruition. The last demonstration was in March 2013 but the situation has remained the same."

The *Chotanagpur Kisan Vikas Sangh* is another organization comprising farmers, which also surfaces when talking about memory of movements around the Damodar. Memories of the

movement are documented in a text titled *Damodar Ko Jeene Do* and authored by Prabhat Kumar.[46] The *Chhotanagpur Kisan Sangh* began its struggles in 1995, under the slogan *'Damodar Bachao, Khushhali Lao'* (Save the Damodar, Bring Well Being). The movement tried to bring together the ideologies of Gandhi and Birsa Munda. On 2 October 1995, on the birth anniversary of Mahatma Gandhi, members of the Sangh spoke with people who were directly using the waters of the Damodar, and on 15 December 1995 on the birth anniversary of Birsa Munda, a *padyatra* (journey on foot) was organized along the banks of the Damodar right up to the Panchet Dam constructed on the border between Jharkhand and West Bengal.

After the *padyatra,* the Sangh decided to work on pollution, displacement and development, while the core demand was 'river revival'. Other demands included filling up of abandoned mines and the return of these lands to farmers, a demand that the farmers get water from the various dams of the DVC, that forest dwellers are restored rights over the forests, that the land acquisition act is abolished, clean drinking water is made available for all, rehabilitation and jobs of all those displaced is ensured and that there is protection of the culture of the people of Chhotanagpur.

[46] In Dhanbad, sitting in the outer courtyard of the informal office of the Kishan Vikas Trust (KVT), I try to figure out what the campaign is doing today. The KVT office has shifted to Patna. The representative from KVT in Dhanbad is mainly involved in livelihood programmes and credit linkage programmes and implementations of similar such rural development schemes he explains. The campaign work revolves around the compensation for the displaced families when the DVC was built, in partnership with the *Ghatwal Adivasi Mahasabha*. KVT published a book titled *Damodar ko Jeene Do (Let the Damodar Live)* and authored by Prabhat Kumar in 2005 which carries a series of newspaper articles and archiving of the incidents and activities related to the struggles around the Damodar. Prabhat Kumar's political career started in the 1970s when he was a part of student movements in Bihar. He was also associated with the nonviolent Bodhgaya land struggles in Bihar and the student organization Chhatra Yuva Sangharsh Vahini initiated by the leader Jai Prakash Narayan (Field Notes, 2008).

In these initial phases of activity of the Sangh, the movement used strategies associated with some religious faith practices in the movement not very different from the Yamuna Satyagraha or Save the Ganga, where the sacred site of the *Chinnamastika temple* was chosen to offer prayers to the river.[47]

However, in later activities of the Sangh in Munidih in 2000, a village in the Bharat Coking Coal Limited (BCCL) area, we see radical environmentalism emerging in the activities of the *Chhotanagpur Kisan Yuvak Sangh* (CKYS). At this point, women are engaged in the movement along with youth. While the protests picked up considerable pace it was a typical situation of how environmental actions of this kind invariably get suppressed and form part of the underbelly of most environmental action in these parts.

The Munidih struggle started due to an acute shortage of water, as tubewells were sealed off by BCCL due to the presence of excess methane, leaving just the tanks receiving rainwater as the only source of water. However, due to underground mining, water refused to hold, marking its own path into the cracks and crevices underground, creating a massive water shortage problem for farmers living in Munidih. Not only was there a water shortage, but the electricity lines were also disconnected in the community spaces in the village. Prabhat Kumar notes that when an area became redundant for further mining, the coal company not only left the village to fend for itself but also took basic amenities like electricity away. Women and youth organized protests in August 2000, where they *gheraoed* (encircled) the local offices of BCCL

[47] In the incidents recorded in 1995, we find that before the *padyatra* the activists decided on a *Jal Samadhi (*water burial) and a *padyatra* from the *Chinnamastika* temple at Rajrappa right up to the Panchet dam. An important part of the ritual was a *puja (prayer)* at the Chinnamastika temple before the Jal Samadhi began. Several of the Jal Samadhi activists were arrested at this point. In 2004, the Sangh organized a hunger strike as well as a *puja* in a Shiv Temple in Telmocho located on the banks of the river, thus not differing much in such strategies from those around the Yamuna and Ganga.

and its washeries, railway and transport networks demanding 'stop in production' till electricity and water is supplied to the villages.

The strategies of stopping production, however, created conflicts between the daily wage 'mine workers' and 'farmers' engaged in the protest (in the retrospective memories on the movement, for activists living in and around Dhanbad, this conflict is often popularly cited as one of the main reasons for the movement being quashed, though in the text authored by Prabhat Kumar states that this was an opportunity for the movement to shift strategies).

Given the situation, the CKYS and the women from the village changed their strategies and started encircling the officer's colonies, the office of the District Collectorate in Dhanbad who promised to do something about water problems, but did nothing. Women continued the protest, disturbing the free movement of railways. Several villagers from Munidih got arrested during this period, while solidarity support started pouring in from other youth organizations from Patna.

On 15 October 2000, a march was organized where village residents of Munidih took to the streets in protest with photographs of Mahatma Gandhi, Jai Prakash Narayan and Birsa Munda and obstructed the railway tracks protesting with the slogan "Either give us water and electricity or give us Jail". The Peoples' Union on Civil Liberties (PUCL) report on the Munidih police firing details out the incidents of violation by the police during this protest, the police opened fire and attacked the protestors, many among whom were women. This caused considerable public alarm.[48] Several trade union workers, politicians and political parties started providing solidarity to the movement. The author notes that after the incidents of 15 October, the people in the village withdrew their demands since they believed that there was little trade union leaders, politicians and bureaucrats could do for them. Instead their voices were being instrumentalized in political struggles and fake promises were being made.

Many such similar narratives exist among those residing

[48] Report on Moonidih Police Attack, http://www.pucl.org/reports/Bihar/2001/moonidih.htm

around the Damodar where action by residents, were triggered due to impacts of environmental loss, which have remained an underbelly narrative.

For instance, while visiting two villages in Baghmara block in Dhanbad district in 2003 and discussing issues related to health and livelihoods and the water crisis in the village with village level health workers from the government, a member in the meeting mentioned the story of a leader of a labour cooperative in the village who claimed to have lost his memory. Probing further, I found that the local residents in the village had formed their own labour cooperative in order to demand tenders from the coal company to load coal onto the trucks. Most of the people here were agriculturalists who slowly had to shift occupations after mining started in their village. Mining in these parts had affected water availability and their agricultural fields. Since they lived in the area, and were not benefitting from the externalities of coal production, this was one way in which they thought they might take advantage of the presence of the coal company in these parts.

When I met this cooperative leader for more details on what happened, he did not remember the sequence of events fully. His neighbours claim that he lost his memory after his arrest and return from the police station after a violent round of protests; however, in the interview he did remember the day of his arrest. The cooperative had received support to further its plans from trade union leaders and local politicians who had promised to negotiate on their behalf. That day they had instructed him and the rest of the workers to stage protest outside, while negotiations with the company took place inside.

However, the meeting continued for several hours and they never heard from the leaders on whether their demands would be met or not. In the meantime, the police, under the instruction of company officials, started violently attacking the youth who had gathered outside the office to send them back home. The leader came forward to stop the fight but things had turned violent by then. He explains, “I had to take action, I was a leader and they were my people.” The labour cooperative leader was arrested and

the rest in the village narrate that he returned home with severe head injuries and loss of memory.

The cooperative dissipated after this. Rallying for rights whether health or livelihood is not easy in these parts I am told. When I ask the 'leader without memory' about what went wrong, he said: "we trusted too many politicians then". In the subterranean movement on the environment, there is always the call for livelihood and basic civic amenities besides 'pollution', and the indeterminate narratives of these movements tend to surface only through strong episodes of violence, or protest and the representatives of the formal democratic system are portrayed as playing ambivalent roles in them. Moreover, a few of the strategies engage with legal procedures or the procedures of the bureaucracy.

The Damodar does not escape the broader environmental politics in the country either. The BJP MP, Saryu Rai,[49] through Yugantar Bharti, runs the most active campaign at present on pollution issues around the river. The DBA initiated by Rai in 2004 acknowledges the issue of 'pollution' as the primary environmental problem and also performs the important task of testing water sediments in different parts of the Damodar periodically in its own water testing lab called Yugantar Bharati testing lab. The lower visibility of the campaign in comparison to the other national campaigns may be accounted for in terms of competing regional politics with national politics and the inevitable importance of the coal sector for India. But when speaking about Damodar in more recent times, one cannot negate the presence of the '*Damodar Bachao Aandolon*' in Jharkhand.

[49] A brief public search on Saryu Rai reveals the following details on him. Saryu Rai in his early pre-political years was exposed to the organization of the Rashtriya Swayamsevak Sangh (RSS), till it was officially banned, and worked with different pan political organizations during the period of Emergency and war by Russia in Afghanistan. Here he worked with stalwarts such as Jai Prakash Narayan, the Gandhian socialist leader and Satyanarayan Singh from the Naxal organization and later engaged with the activities of the Janata Party as the Bihar State General Secretary. After taking a break from politics for almost nine years, Saryu Rai reentered politics through the BJP.

The movement uses symbols of faith in its day-to-day strategies. For instance, it calls the various polluting plants on its banks '*bhasmasura',* an *asura* or demon who when it touches anyone's head, the person is burnt and turned into ashes. The inauguration of the movement started through a *Ganga Dashhara* in 2004. Periodic events are conducted on its banks through the *Ganga Dashhara Damodar Mahotsav* (as publicized by the DBA).

A simple text is written by Saryu Rai, Convener of the DBA and Member of the Jharkhand Vidhan Sabha, titled *Deonad Damodar ki Vyatha (The Pain or Agony of the river Deonad- Damodar)* may be considered a part of the campaign material of the DBA. It is a first person autobiographical account of the river running its course. It familiarizes us to certain sites and specific power plants. A constant thread through the work is how the Damodar is made dirty and polluted at each point.

The source of the river is marked in the narrative at Chulhapaani in Boda Pahar as the 'birthplace', on the boundary of Latehar and Lohardaga districts. It is observed to be clean here up to Baseria in Latehar where other rivers join it too. Important breaks are made at different sites in the narrative; first according to its nomenclature, where the river is called 'Deonad' till Kekrahi and then 'Damodar' from Baseria onwards and secondly, in terms of the various polluting and sacred sites along its course. The only sacred site marked in the narrative is in Rajrappa, where lies the temple of *Ma Chinnamastika.* The rest of the narrative mentions most of the polluting thermal power plants, coal washeries and steel plants (which tend to coincide at the confluences between the Damodar and its tributaries) and the sites where the river is dammed. These start with the Dakra Piparwar coal mine, followed by Patratu Thermal Power Plant at Bhurkunda-Saundadih, the Rajrappa coal washeries, the Chandrapura Thermal Power Plant, the Bokaro Thermal Power Plant, the Tenughat dam and canal to Bokaro Steel Plant, the Kedla washery, the Kathara washery, the Jaridih washery, the Dugdha coal washery, the Jharia coalfield, the Panchet, Tilaiya and Maithon dams, the Durgapur coal washery and steel plant to name a few.

Besides chemical wastes and heavy metals, the narrative notes

the discharge of city wastes into the river. It also notes some extraordinary incidents such as the one in April 1990 at Khetko. Here, tonnes of oil were discharged into the river by the Bokaro Steel Plant, causing many people to fall ill and death of several animals. Near the Jharia coalfields, the river narrates a frightening experience, where a thick bed of ash has got sedimented on the river, and many toxic chemicals also flowed into it at one time from the Sindri fertilizer factory. At the sites where the river has been dammed, the narrative makes the distinction between the problems of the displaced in the *doob kshetra* (area of submergence) of Jharkhand in contrast to the gains in the *Laabh Kshetra* (irrigated area) located in West Bengal. The narrative ends on a note highlighting the need to establish the river's self-identity (*astitva),* for it is the 'lifeline' of Jharkhand.

The most recent activity taken up by the DBA was an offering of prayers at the source of the Damodar at Chulhapani, in May 2012, where Saryu Rai is quoted to have said that the hill at the source of the Damodar is 'eroded' and therefore there is a need to set up a Deonad-Damodar Temple Trust and locate a Lord Vishnu temple on the hill to preserve the same and declare it a tourist spot in future.[50]

During the celebration of *Ganga Dussehra*, which is held across different spots along the Damodar, Rai is quoted to have found a private company illegally violating the norms of the Pollution Control Board (PCB) in constructing an intake well in the area to the extent of blocking one of the rivulets entering the Damodar.[51] The temple trust protecting the site is seen as means to create a protective barrier to the untold destruction being brought about by these private companies flouting environmental norms and procedures otherwise.

[50] Prayers to Save the Damodar, *Times of India*, May 2012, http://www.telegraphindia.com/1120531/jsp/jharkhand/story_15550684.jsp#.UZDwu8qWf3E

[51] Letter on Pollution, *The Telegraph*, June 2012, http://www.telegraphindia.com/1120619/jsp/jharkhand/story_15627859.jsp#.UZDyPcqWf3E

In 2008, the community-based organization (CBO), Dhara, based in Bokaro district, launched another campaign, *Damodar Jeevika Bachaon Aandolon.* During my discussions with the members of this CBO, I was informed that the members of Dhara had also participated in the earlier Gandhian movement mentioned above *the Damodar Bachao Abhiyan* led by Gandhian activists earlier. During this campaign they worked on issues of pollution along the Konar tributary of the Damodar, and having joined this campaign they were able to link their local issues with the issues pertaining to other communities residing along the banks of the Damodar. Members of Dhara date the beginnings of the *Damodar Bachao Abhiyan* to 1997 but insist that mainstream politics have grabbed the few spaces they had for action around the Damodar.

Most of the communities that Dhara works with, speak *Khortha*[52], which is also known as *Panch Pargania,* a mixed language that accommodates the language of the tribals, the *Kurmis* and *Mahatos* and working class communities. Much of their activism and broader orientation and interests now lie around preserving language, culture and livelihoods through advocacy around education today. The language movement around *Khortha* spoken by those residing along the Damodar and held as a lingua franca between all the communities is an essential part in the narrative of movements scripted around the Damodar.

A contemporary, popularly printed piece of literature in *Khortha* by writer Shibnath Pramanik on the Damodar, titled *Damodar Koraiye* (In the Lap of the Damodar) is considered to be one of

[52] *Khortha* is considered to be a language with its roots in *Indus Valley Civilisation* by some activists in Jharkhand. Though there is a debate among some scholars on its origin, activists continue to hold that the language belongs to pre-Aryan times and is older than Sanskrit, with some scripts matching those found in Mohenjodaro and Harappa. *Khortha* was also the lingua franca for *adivasis* with several Mundari and Santhali words in it. Others claim it to be a regional form of the ancient language *Magadhi.* While some other scholars say that Khortha is derived from the ancient language *Kharoshthi* script brought into the region during the Mauryan period. The language has increasingly been mixed with influences of other languages from outside.

the most important cultural texts of the area by cultural activists. The members of Dhara showed this text to me. Representing one of the cultural resources available to communities residing in the middle valley of the Damodar, the text incorporates an epic poem or *Kavya* making references to the civilization history around the Damodar with references to the ancient history of the area. The text is rich in evidence of the wisdom and nature-culture richness in the communities living along its banks.

The Kavya or epic poem is set along the ruins of the fort Chechnaogadh in Katras in the bed of the Damodar. The Kavya is divided into five parts: "*Mela" (The Fair), "Saranchi-Kamal" (About Saranchi and Kamalketu), "Rajbaid" (The Healer), "Hun" (The Huns), "Amar-Chatan" and "Harpa" (The Flash Flood)*. The narrative is set at the time when the Kings in the Magadhan Empire enter the forests, where live the *adivasis* of Jharkhand. The forests full of its flowers, fruits and trees attract the legendary King, Umaditya who decides to live here and build his fort here. The Magadhan kings would regularly hold a *mela* in the forest, which in the description given, makes it evident that the *mela* was a traditional market where seeds, sandalwood, spices, *haldi*, stones and jewels were sold and people from all walks of life attended it—Kings, saints and peasants, such as the *Nagvanshis,* the King of Panchokotok (later known as Pachete and now Panchet where the Panchet Dam is built), people from Parasnath, the King of Baghel and many saints and ascetics.

It is in this *mela* that a Buddhist monk arrives and professes that all men are equal and there is no caste: " *Sab manus ek. Manus chhara Bhagwan rupe aar keo nai"* (Humans have the essence of God in them, other than that there is no God). In the story, this turn of events creates great discontent among the existing priests and saints, and as a result a lot of conflicts develop due to which the forest is slowly destroyed. It is the forest that is then born in the form of *Saranchi*, a beautiful *adivasi* girl. The plot evolves around the life and love story between Kamalketu, the son of the King Kalketu, who comes hunting to the forest and is saved from the tiger by Saranchi. A struggle ensues between Kamalketu and his father, as Kamalketu rejects all worldly riches to come and live

in the forest with Saranchi. As Kamal and Saranchi settle in the forest, the *Huns* attack the *adivasis*. The bold Saranchi leads them. During these moments, several important lessons are given about the way of life in the forest, the festive seasons, the changing seasons and folk festivals through these months and the enemies or *dikus* of the forest who are strikingly described as follows:

Je hamar vanaj-khanij loote
Se he hiyak diku
Roti mati chhinewala
Ohe daku diku
[Those who steal our forests and minerals
They are the diku (other)
Those who grab our bread and land
They are daku-diku (thief-other)]

The narrative ends with the *Harpa* or a flash flood taking the story and people into the lap of the Damodar and hence, rendering the story of Saranchi and Kamal and their people immortal. Pramanik tries to bring out the essence of a time between Buddhism and Jainism and through the same, appeals to the need to look beyond the problems raised by different religions—Christianity, Jainism, Buddhism, Hinduism and Islam and delve into the forest and river cultures of the communities living here. While the story is entirely a piece of fiction, including the events, it does point us to the large number of ruins that have been found in this area, buried under the Damodar and now submerged under dams such as in Chechnaogadh in Katras for example, also highlighted by the North Karanpura campaign.

For Dhara, the articulation of the issues around the river, are slightly different. When I try to understand their strategies, I am told that they are not going to rally around the issues of 'pollution' alone but on the issues of livelihood. The group prefers to consider the Damodar as a lifeline preserving the life and customs of the people living around it, rather than a polluted source of water and, thus, they rename the campaign led by them in 2011 as the *Damodar Jeevika Bachao Abhiyan* which revolves around lifestyles and ways of life from *Damodar Bachao Andolan*. In the

strategies they adopt, they decide to make an inventory of different *melas* (fairs) that take place along the banks of the Damodar in Jharkhand which are currently threatened by mining activity. For Dhara, the *melas* in themselves are a form of community life where people gather irrespective of their caste or religious backgrounds and this is that section of society that reveres the river and holds it close to their daily life.

The *melas* listed in the initiative are all performed along the banks of the Damodar mostly during *Makar Sankranti* celebrating the harvesting season. While some of these *melas* seemed to predate to a very ancient period, some such as *Bhado* celebrated in the month of *Bhadar* in memory of the daughter of the King of Cossipore, who died at an early age refers to the organization of the early feudatory kingdoms here. In spite of the modern industrialization processes having entered this region, the CBO manages to track a large number of *melas* which had syncretic practices of the Muslim, Hindu and tribal priests coming together to perform rituals, sometimes the rituals included tribal practices of sacrificing a white fowl, though this also had the participation of many of those who called themselves 'Hindu' or 'Muslim', or it included community performances—a dance with *choudal (chariot made of dolls)* was performed along with immersion rituals in the river. The organizing principle dated back however to pre-British period.

While this inventory proved that 'sacred sites' have different definitions and are not just the temple at *Ma Chinnamastika* pointed out by *Damodar Bachaon Aandolon (DBA)* or rock art paintings as highlighted by archaeologists in the North Karanpura Campaign, it did not really move away from the larger strategy of appealing to religious, faith based or sentiments of tradition to rejuvenate an awareness in the community on the environment.

It is important to note here that even though the members of Dhara wanted to articulate a politics different from that of the *Damodar Bachao Aandolon (DBA)*, under the leadership of Saryu Rai*,* they also tended to incorporate strategies to reach out to mass base through festive and ritualistic activities such as *melas*. When I try to reconcile why this tension is always there,

I get partial answers from Alpa Shah's notes on the concept of the 'sacral polity' when she speaks of the *Parha Mela* instituted in the traditional governance system of the Munda community in Jharkhand. Shah observes that 'colonial officers while conducting surveys would invariably draw distinctions between the sacred and secular matters. The two domains of the spiritual and the secular remained distinct in most of their writings, not recognizing the sacral polity within which the Mundas lived, which was a world where the political and the sacred were one conceptual realm. Embracing the concept of sacral polity, and typical to the situation of Munda villages in the area in Jharkhand, she mentions that the sacral polity embodies democratic principles, represents the values of mutual aid and reciprocity, manages disputes in the villages and the chief priest presides over both sacred and secular roles. Unlike in Western models where the domains of economics, politics and the religious are separate, she sees the sacred and political as completely intertwined and recognizes these systems in the living culture of the Mundas.[53]

Though it is difficult to transpose this concept onto the communities in the middle tract of the Damodar who have seen a lot of cultural change due to mixing of communities and migration of labour and entry into an industrial world, time and again the people of Jharkhand mention a *Jharkhandi* culture which has retained or borrowed from the cultures learnt from the *adivasis* who lived here originally. It, thus, may be enough to say that the discomforting tension is raised in the fact that political activities get shaped around the 'sacred' very quickly, and shows up the very aspect in colonization that Shah tries to point out, that the colonizers made uncomfortable distinctions between sacred and secular matters, while these did not exist in the local institutions and mindset of communities.

Thus, in the movements highlighted above, it is amply clear that while there are clearly defined saffron green movements in

[53] Alpa Shah, *In the Shadows of the State: Indigenous Politics, Environmentalism, and Insurgency in Jharkhand, India,* Oxford University Press, 2010, p. 43.

the political mainstream, there are also subterranean movements, which try to find expression in the public domain in different ways.

In the movements mapped above we find several nuances to environmental thought being articulated through the politics of everyday life and activism around the environment in the upper valley of the Damodar. At the very outset there is a constant tension between the 'sacred' and the 'secular' and while environmentalists have tended to reclaim the 'sacred', *developmentalists* tend to operate in the domain of the 'secular'. However, since development is the dominant perspective and what provides the overarching framework for 'emancipation and self realization', dissent by workers and communities residing in these 'resource cursed' areas mostly get articulated around the 'unequal distribution in the benefits' promised by development or the disenchantment with the so-called 'collective emancipation' that this development had promised to have brought in. This disenchantment includes the experience of loss of ancestral land and livelihoods, shrinking water and other environmental resources, the unequal distribution of these resources and poor environmental management of industrial waste and pollution. In fact, this is the core articulation of most subterranean, working class environmental movements in this region so far.[54]

The more prominent political environmental movements have tried to articulate alternative methods to the sense of 'self' (understood collectively) through their dissent which includes associating the identity of the river with 'life' or an entity crucial to Jharkhandi identity, and that which contains embedded in it the cultural history and languages that the river has come to represent. Both these aspects are an important alternative component identified by these local movements in the need for 'self realization' of people living around the river, which *developmentalists* have

[54] Derived from some concepts available in David Harvey's on *The Domination of Nature and its Discontents,* pp. 120-149*,* Justice, Nature and the Geography of Difference, Oxford: Blackwell Publishers, 1996.

failed to recognize. This sense of self and identity is translated around 'spatial politics' as well.

One can locate these negotiations in the mainstream that are emphasized in spatial constructions for development which come into direct contestation with 'symbolic spaces' (temples, shrines, monuments, memorials, archaeological sites and at a more marginal level folk or community held sacred spaces) which have a direct bearing on heritage, culture, identity and sense of self. These strategies draw from cultural ecological perspectives. Those articulations, around the recognition for folk or community held sacred spaces, also remain at the subterranean level, and get classified more as 'the fight for commons', though the definition of commons mostly get defined according to resource use and may not always include all aspects of symbolic space which communities tend to define as environmental space as well.

The underbelly problem of 'displacement' if expressed in the mainstream turns the movement into a more radical form, classifying it in the movements informed by Left ideology, but not always sensitive to environmental politics.

From the existing experiences within these movements it is evident that cultural ecological perspectives have found a better foothold in furthering environmental action, which help to negotiate collective moralities around environmental decision-making at various levels, whether in the case of the DBA, the North Karanpura Campaign, or the CBO I am visiting. However, the strategies include the recognition of ritualistic and faith-based activities, or recognition and protection of symbolic spaces held to be important by the elite and the working class. There still remains a wide distance in the sites of action of localized people's movements from secular domains which require legal petitioning, policy influencing, scientific monitoring of environmental management, citizen monitoring of the regulatory actions of the state on air and water quality, and occupational health, civic amenities, toxics, pollution and housing issues or any negotiation which requires a scientific assessment of environmental standards. These strategies tend to be seen as long drawn, technical, expensive and undemocratic. Middle class or urban activists who do not

always reside in the area or influential leaders and NGOs from the locality mostly use these strategies. Environmental activists also had to find another route to bring in mass appeal and then had to switch to directly speaking about 'livelihoods', e.g Dhara renames its campaign as *Damodar Jeevika Bachao Andolon*, to find relevance among a larger number of people. A commonality, however, emerges through the differences around the river and this is around the idea of environmental loss and conflict, which guides the interests of those rallying around the river.

Though Left environmental movements have not been able to look into cultural resources in the imagination of space in environmental meaning making. Others have found various ways in which space is reimagined, there are clear demarcations made by Hindu traditions as with movements which are more practice based which have a clear place making imagination through local livelihoods routed in forest, land and water. There are also 'subterranean' movements that emphasized and articulated the sacred differently and through the everyday perspective.

The Damodar Valley tract in the current state of Jharkhand has seen different kinds of loss (which includes environmental loss), through pre and post-independent history in India. The following part explores the various sites through these 'objects of loss' or 'spatial remains' which help to 'unwrap, disclose and resignificate'[55] and hence transform 'nostalgic stasis' to new perceptions on ecological histories and pathways for the future[56]

[55] Inspired from Susette Min's "Remains to be Seen: Reading the Works of Dean Sameshima and Khanh Vo", See Eng and Kazanjian, "Introduction: Mourning Remains", *Loss,* University of California Press, London, 2003, p. 21.

[56] Walter Benjamin's treatise on the political and ethical stakes of mourning as what remains of lost histories as well as histories of loss, qualifies that to mourn the remains of the past, hopefully is to establish an active and open relationship with history. This practice is a creative process, animating the history of future significations as well as alternate empathies'. The authors of the anthology *Loss*, David L. Eng and David Kazanjian, explain that as soon as the question 'what is lost' is posed, it invariably slips into the question of 'what remains'. That is, loss

thus supporting movements that are in search of reclaiming this loss and recognizing that which is ‘sacred’ to the self and community.

is inseparable from what remains, how they are produced, read and sustained.

PART 2

Resignificating Loss through Spatial Remains

The Grand Trunk Road: An Environmental Crossroad

Road Ecologies

While most studies related to road ecology focus mainly on mortality due to vehicular collisions, the changing land use patterns that a network of roads bring in, have far reaching consequences for the ecosystem and communities living within these ecosystems which are seldom assessed in the conceptualization of road networks. Usually, these changes in land use are also affected by the priorities of trade, and trade routes thus have a strong linkage with the same.

"Money flows and commodity movements are regarded as fundamental to contemporary ecosystems (particularly given urbanization), not only because of the past geographical transfer of plant and animal species from one environment to another but also because these flows formed and continued to form a coordinating network that keeps contemporary ecological habitats reproducing and changing in the particular way they do"[1]. Shifts in these networks and creation of these networks have drastic effects on the ecosystem.

In contemporary times, renewed attempts have been made where the GT road with its avenue of trees has now been broadened into a six lane highway of bare black asphalt, proving Birt wrong about the loss of the importance of the road and its far reaching

[1] David Harvey, *Justice, Nature, and the Geography of Difference,* Wiley, 1996, p. 185.

impacts on the landscape around it. It is now known as the National Highway 2 (NH-2), which will be further developed to form the Asian Highway. The road from ancient times has had a far-reaching impact in transforming the spatial use and environment around the river basin. It is also one of the first markers of a large dramatic ecological transformation of the landscape brought about by humans.

A Trade Route from the Mauryan Period

The Grand Trunk Road as a spatial remain along the Damodar River Basin takes us back to the Mauryan period and the realities in that time. At this point of time, this region was part of the 'Gangaridae' a reference made to those living along the lower stretch of the Ganga. The Maurya clan, derived from *Moriya,* came from a Buddhist tribe of *Sakyas* who incidentally lived in a tract full of peacocks (*mora)*[2]. They developed the first Imperial Empire under Chandragupta Maurya and later by Asoka, after overtaking the kingdom of the Nandas who ruled over Pataliputra. I choose this as an important 'spatial remain' as it's the first access point for outsiders into this region and a substantial stretch runs through the basin of the Damodar. It, thus, acts as an important change agent. Texts on the Grand Trunk Road in that time, from this region, give us enormous insights into what this region was like before the changes happened.

The time period that the Grand Trunk Road is significated to saw Asoka's conservation policies propagated through Asokan edicts. Asoka's policies and decisions were a sign of his times.[3] There had to have been considerable deforestation in the carving out of these roads, since Asoka calls for conservation policies such as the planting of trees, especially the banyan tree along the sides of roadways and planting mango groves and wells to furnish

[2] Irfan Habib, Vivekananda Jha, *Mauryan India,* A Peoples' History of India, Part 4, Tulika Books, 2005, p. 3.

[3] Romila Thapar, *Asoka and the Decline of Mauryas,* Oxford University Press, May 2012.

water for travellers. Asoka also called for measures to restrict animal slaughter, with a very detailed listing of these animals (quadrupeds, monkeys, pregnant goats and cows and young animals) and birds (pigeon, dove, waterbirds to name a few) where hunting practices were closely linked with the life cycle of these animals and with the intention of allowing their populations to regenerate. Restrictions were also made on the time of fishing and a tax was levied for fishing and hunting. In fact, these were like disincentives imposed by the rulers who looked down on unsettled occupations such as fishing and hunting due to the uncertainty in the forests. However, these communities were also important for the rulers when they had to cross densely forested tracts to move from one place to another. Hunters were called *atavis* at this point of time, pointing to the ever-contentious relationships that forest gathering and hunting had with the Imperial authorities. Forests were also an important resource as elephants were a symbol of 'national wealth' and ivory was an important product got from the forests hence underpinning the need to maintain them as well. Out of these historic times pops out the Grand Trunk Road (called so by the British much later), which is today a part of the National Highway 2, running north of the Damodar Basin.

"Geographical factors were an important determinant" in the formation of these roads, in the Indo Gangetic Plain for instance from 322 BC to AD 500, river systems continued to provide a suitable channel for trade where several pre-Vedic accounts show that "Tamralipti (at the point where the Damodar earlier joined the Hooghly) was one of the main ports used to transport commodities from the North down to the South."[4] This is further substantiated with my discussions with people living particularly in the downstream area of the Damodar who share that the Damodar at one time was navigable. Exploring older land routes reveals several commercial centres or cities in the ancient period now embedded under history. Among the many older centres, of particular importance were Pātaliputra (Patnā), an important centre

[4] R.S. Agarwal, *Trade Centres and Routes in Northern India*, B.R. Publishing Corporation, 1982.

of the Mauryas, Sungas and Guptas. Vaisāli, another crucial trade centres with links to Rajagrha and Kaplavatthu and Tamralipti (a port at the confluence of the Damodar and Hooghly), which finds no reference in Vedic literature and comes to light only in the sixth and fifth century as a flourishing port. This port had important road links to Rajagrha, Sravasti, Gaya and Banaras.[5] The Port, besides connecting these routes, also radiated out onto three major overseas routes connecting it to Burma, the Malaya Peninsula, the Far East and along the coasts passing Kalinga and Coromandel, and then to South India and Ceylon.

The major export items included precious animal and aromatic plant products such as pearls, muslins, malabathrum and spikenard at that time.[6]

Right up to the nineteenth century, there was very little change in the antiquated means of transportation that relied on waterways and limited system of roads. In the pre-railway era by the 1830s, a time when land routes were better developed, land traffic tended to seek out river outlets.[7]

In the 1730s, British engineers mapped out a New Road, which was completed in 1785. It chose a more southerly course, a route that veered away from Hughli toward Burdwan and then across Hazaribagh, running parallel to the course of the Mughal main route until it crossed over the Son proceeding to Banaras along the same trajectory as the Mughal route. Yang writes that this new trajectory was also designed to extend British control into Chotanagpur, a region that had remained beyond the ken of the Mughals, which in part aimed at enabling the new regime to meet and contain Maratha incursions that came through Central India.[8] The New Road and the Grand Trunk road being prone to flooding

[5] R.S. Agarwal, *Trade Centres and Routes in Northern India*, B.R. Publishing Corporation, 1982, p. 118.

[6] T.N. Ramachandran, Tāmraliptī (Taṁluk) Artibus Asiae, Vol. 14, No. 3 (1951), p. 226-239 URL: http://www.jstor.org/stable/3248590. Accessed: 19/08/2013 05:50

[7] Anand A Yang, *Bazaar India: Market, Society and the Colonial State in India,* University of California Press, 1998, p. 32.

[8] Anand A. Yang, Ibid., 1998, p. 32.

were inconvenient highways for the distribution and flow of goods at this time.

These old routes slowly fade in importance as the new focal point shifts to Calcutta during the colonial period which lay south of the major Mughal settlement in Bengal. Yang talks of how Patna emerges as a "City of Discontent" as these rapid changes emerge and there are shifts in the fortunes of the local elite. Patali, a commercial centre of the Magadhan Empire fades into oblivion when Magadhan brilliance fades, and the locus of power shifts westwards, finally resting at Delhi. This happens as the empire collapses and the dissipated authorities build their own centres of power leaving Magadh to the peripheries, awaiting only to emerge as a 'museological identity' under the archaeologist's spade in the future. Europeans, Armenians and Portuguese travelled in large numbers to Patna during the late sixteenth, seventeenth and eighteenth centuries, or when Patna re-emerges as Patana under Sher Shah in 1540 becoming an important centre of commercial importance where Patna and Gaya's bazaars were known for trading fine white cloth, cotton, silk goods, rice and opium.

There was also and influence of the oceanic routes with inland routes either by rivers or by roads. While the inland route through the Grand Trunk Road into western Asia was already present, different changes took place, and concentrations were greater around ports especially after the entry of steam vessels in the eighteenth century. This opened up inland areas into the oceanic routes.

It was during Sher Shah's (1540-45) time that the Grand Trunk Road was developed further. He, however, is not known as the first great road builder, before him Balban (1266-87) cleared large tracts of forest. Ibn Batuta (1341 A.D) describes these highways especially along the Malabar Coast in South India as "shaded by trees with resting houses and wells at regular intervals". Emperor Firoz Shah Tughlak (1351-88) was distinguished for "the enlightened spirit of his regulations and the extent and utility of his public works", but it was "Sher Shah (who) brought his territories into the highest order. He established horse posts, constructed high roads throughout the land, planted trees and wells and '*sarais*'

at every two '*kos*'—the most important were from Sunargaon in Bengal to Rhotas in Punjab-known as the 'Badhshahi Road' which was the precursor of the modern great Trunk Road."[9]

Great care was taken for the maintenance of the Badhshahi Sadak and its long avenue of trees. Many European travellers who, thus, describe this road during the seventeenth century particularly notice these trees and the aesthetics of road building. Sir Thomas Roe observes:

"It is all a plain and the highway planted on both sides with trees like a delicate walk, it is one of the great works and wonders of the world."

Peter Mundy, in 1631, writes:

"The trees are distant one from the other about eight or nine ordinary steps and the ranks from side to side about forty. It is generally known that from Agra there are such ranks of trees which reach as far as Lahore…and they say this (is)…for the ease of travellers and for shade in hot weather."[10]

The Grand Trunk Road was metalled between 1861-62[11] and the 1857 mutinies and rebellions and regular famines forced the British state to maintain these roads to build political and military objects and to ensure famine relief activity. Most accounts show that there was a limited system of roads right up to the pre-railway era, which hindered the development of trade. The railways led to a decline in water transportation and the speed and reliability of the railways made them the prime mode of transportation. By the early 1870s, they had already curtailed the flow of goods along the roads, a trend that was evident in the rapidly declining traffic on Grand Trunk Road (GTR).[12] It is during this rapid transition that Bradley-Birt is writing about the decline of the GTR in his memoir, which informs the map we are tracing around the

[9] Benoy Kumar Sarkar, *Inland Transportation and Communication in Medieval India,* University Press, 1925, p. 32.

[10] Benoy Kumar Sarkar, Ibid., 1925, p. 33.

[11] Anand A Yang, *Bazaar India: Market, Society and the Colonial State in India,* University of California Press, 1998, p. 51.

[12] Anand A Yang, Ibid., 1998, p. 51.

Damodar in the late eighteenth century, and where we identify it as a spatial remain.

The Railways and The Highway at Constant Crossroads

Bradley-Birt writes about the Grand Trunk Road in his memoirs that runs through the northern part of the Damodar River Basin, in the Chhotanagpore Province in 1903. Here he is describing a moment or a historical crossroad when the railways are making their inroads into the area. According to Birt, this will completely change the face of the road and he states nostalgically:

"The Grand Trunk Road has lost much of its life and interest in the twentieth century. The days have gone forever when it formed the Great Highways of northern India…

…It was a busy stream of life in those days that poured along its route with its monopoly of ceaseless traffic. But the first line of rail that, once begun, crept with lightning speed over the land robbed it forever for its great position, as the most important highway of upper India."[13]

Birt, besides describing the sights and scenes around the road, the paddy fields, the resting places, the *thanas* and *chowkies,* the antics of conjurers and "the stolid contemplation of fakirs", also ushers in the railways and cements the British Raj in these 'little known' or 'interior' parts lying in Bengal's hinterland.

Unlike Birt Bholanauth, Chunder is not nostalgic about the Grand Trunk Road in 1869 as Birt is in his text in 1903. Instead, Chunder is amazed with the railways but also aware of the massive change it will bring in:

"The train goes on careering upon the terra-firma as merrily as does a ship on the sea. In it, a Hindoo is apt to feel the prophecies of the sage verified in the Rail-riding upon which has arrived the Kulkee avatar of his Shasters, for the regeneration of the world."[14]

[13] F.B Bradley Birt, *Chota Nagpur: A Little Known Province of the Empire,* AES Reprint, First Published J Jetley, 1903, pp. 169-70.

[14] Bholanauth Chunder, *Travels of a Hindoo: To Various Parts of Bengal and Upper India,* N Trubner and Company, Vol 1, 1869, pp. 161 (emphasis mine).

He also gives some descriptions of the vegetation, cropping pattern, soil and climate and notices that he is now able to access those "far off places" near Mankur, which were known to be attacked by marauders and highwaymen before this. Thus, another interesting description he gives of the railways is as follows: *"Hercules of old turned only the course of a river. The Rail turns the courses of men, merchandise and mind all into new channels."*[15]

Bholanauth Chunder describes the poor situation of the jungle, where it is almost 'sterile' and he seems upbeat of the way Raneegunge, one of the first coal mine sites, contrasts the industrial prowess with the wilderness:

"*Raneegunge is then announced and as one stands with his head projecting out of the train, the infant town burst on the sight from out an open and extensive plain, with its white sheening edifices, the towering chimneys of its collieries, and the clustering huts of its bazaar-looking like a garden in a wilderness, throwing a lustre over the lonely valley of Damooder"*.

Chunder is quick to point out the great ability of the railways in bringing together a whole township of people near the foot of the hill. While he remarks of the great potential of Raneegunge in becoming a centre of national wealth, he feels that town planning could have been far better and the town should have come up in keeping with the laws of sanitation and hygiene. He also talks of the difference in the living conditions in the Railway Hotel for the English and the "higgledy piggeledy" mess, in which the coolies, labourers and other workers stay, with hardly a lodge for the "Calcutta Baboo". He does not complain of dust, but instead contrasts Raneegunge as "civilization" as opposed to the "barbaric jungles" and marvels at how "jungly waste" has now been converted into a flourishing seat of trade. In fact, he points out that India had old histories in commercial activities such as the

[15] Bholanauth Chunder, *Travels of a Hindoo: To Various Parts of Bengal and Upper India,* N. Trubner and Company, Vol 1, 1869. p. 162 (emphasis mine).

production of steel and iron, found in these parts, which are yet to be properly harnessed and because of foreign hands this has not reached its potential. He marvels at the subject of geology, where a similar stream of knowledge is completely missing in the Hindu *shastras*. He reaches a coal mine and describes the depth to which the tunnel has been dug underground to about 300ft in thickness, "nearly double the height of the Ochterlony Monument' and does not fail to give a different description of the Damodar here.

While describing the forests and smaller streams in Panchete Hill, Chunder manages to talk about the influence of the road on the life of its inhabitants and also some ideas of environmental loss: *"The Grand Trunk road has acted the part of an Open Sesame to these regions. Formerly tigers prowled here in numbers. Now they are seen once or twice in a twelve month-though they lurk not far off in the neighbouring woods."*[16]

Filled with copious details, Bholanauth Chunder's accounts give us the attitude of the Bengali elite who began visiting these parts, and while the writer tries to imitate in style the copious ethnographic accounts being written by European travellers at that time, with detailed information, there are several contradictions which make his account truly the "travels of a Hindoo". For instance, the subtle remarks he makes about the discrimination in the housing arrangements for the Europeans and for the Indian coolies and labourers in Rannegange, or the importance he gives to several shrines, temples, places of pilgrimage for the Jains and Buddhists or even the appreciation of Santhal village arrangements which are clean and sanitized, and very different from the pathetic typhus and cholera ridden townships that were being set up by the British at that time mark the contradictions and the difference his narrative brings in. Upset at the situation of the donkey pulling gharries that he must ride on the Grand Trunk road, he calls it "the science of cruelty" that has been applied to these poor beasts of burden. When travelling through Barakar he gives detailed descriptions of the Santhals which sometimes are

[16] Bholanauth Chunder, *Travels of a Hindoo: To Various Parts of Bengal and Upper India,* N Trubner and Company, Vol 1, 1869, p. 178.

no different from what the European ethnographers wrote about the Santhal communities as well, but here he notices an internal colonialism, explaining unwittingly, that like Bengalis who want to imitate the Anglo-Saxon, the Santal community looks forward to imitating the Bengalis. His romantic descriptions of Parasnath and the beauty around the "sublime mountain", is no different from the romantic descriptions made by Birt. He also gives several stories and incidents of the attack of tigers and bears in these parts, which though not found in similar numbers as in the past, are known to have "infested" the region earlier. For Chunder too, like the British, the forest was wild and needed to be tamed, while the mountains were romantic.

Looking at the Grand Trunk Road today, we will find that the GT Road never declined as an important highway as regretted by Birt. Instead, the route has been reconstructed to form the NH2 under the Golden Quadrilateral Project, an expensive six-lane highway project initiated in 2001 which would meet international standards and thus connect the four major cities of India (Delhi, Kolkata, Chennai and Mumbai) through a linked highway forming a quadrilateral. The project promised to bring impetus to the economic growth in the country and was one of the then Prime Minister, Atal Behari Vajpayee's dream projects when the NDA was in power in 2001, improving transport networks between smaller towns and markets, improving transport of agricultural produce, giving impetus to trucks and providing for faster transportation between smaller towns and metropolises. Other benefits assumed from the project were "better movement of products and people, more choice of locations for initiating industrial activity, reduced wastage for the agriculture sector, and a decrease in vehicle operating costs and time" along with job opportunities made available during the implementation of the project.[17] The total cost of the project crossed over 300 billion rupees and most of the contractors included for the project were some of the largest

[17] Manu Kaushik, *Highway to Prosperity, Business Today*, May 12, 2013, http://businesstoday.intoday.in/story/economic-benefits-of-the-golden-quadrilateral-project/1/194321.html

cement and construction companies such as Larsen & Toubro, LG Engg. & Construction, Nagarjuna Construction, Consortium of GVK International and BSCPL, IRCON International, Punj Lloyd, Progressive Construction, ECSB-JSRC, B. Seenaiah & Co., Madhucon Projects, Sadbhav Engg., KMC Construction, Gujarat Public Works Department,SKEC-Dodsal, MSRDC, Mumbai, Skanska Cementation India, Hindustan Construction Company, RBM - PATI, Unitech, CIDBI Malaysia and PATI-BEL. Fifty per cent of the project was financed through external finance, while the other fifty per cent, was from taxes on petrol and diesel and some through market borrowings. The renewed emphasis on highways is well explained in the 11th Five Year Plan which states yet another historical crossroad quite different from Birt's times. Today there is a modal split between the railways and highways:

Road transport sector has seen higher growth vis-à-vis railways during 1992-93 to 2004-05. Several factors leading to the relative high growth in road transport are structural. These include more dispersed industrial and business location patterns and increased need for just in time deliveries…Structurally the railways are confronted with the changing pattern on industrial production and geography away from traditional industries and clusters towards a more dispersed pattern embodying high value and low volume manufactures. The inabilities of the railways to respond to the dynamic conditions of the market reduced market shares and in many ways also led to the great importance of highways for freight.[18]

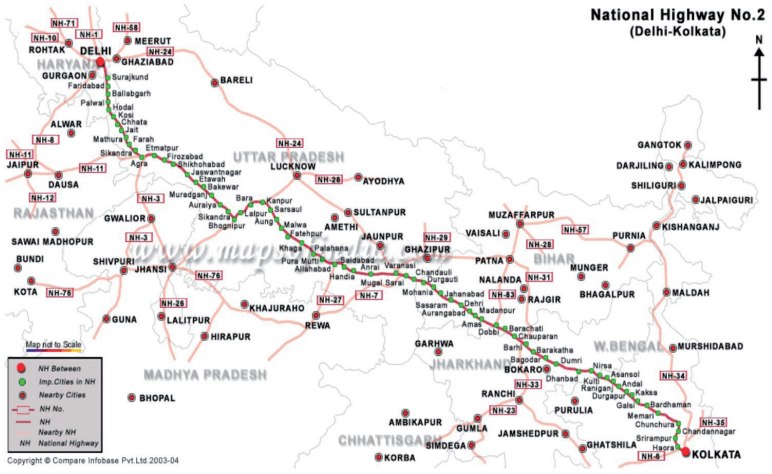
Most reports on the Golden Quadrilateral Project discuss its main aim of supporting manufacturing firms. In recent reports in *The Hindu*, dated January 2013, some environmental impacts, such as loss of fertile lands, destruction of neighbouring lands which have turned arid, pollution from building material which has affected adjacent lands, thoughtless felling of trees and closing of water wells which earlier supplied irrigation have

[18] The Working Group Report on Road Transport for Seventh Five Year Plan, GOI, Planning Commission, New Delhi.

been reported.[19] Large-scale corruption charges, delays and red tapism are other aspects, which have affected the project. In some stretches citizens have suggested flyovers to avoid damages to markets and bazaars after agitations. The GQ and road aesthetics have drastically changed since the Mauryan times, hence making it an interesting exercise to look at the past narratives around the environment along the road and contemporary memories of what has changed for people residing next to the road.

[19] T. Saravanan, "Tracking Effects of Throughway"*, The Hindu*, January 30, 2013. http://www.thehindu.com/sci-tech/energy-and-environment/tracking-effects-of-throughway/article4361462.ece, access date 20 December 2013

Memories of Change along the Badhshahi Sadak



In my journey from Nirsha to Chauparan, where I look for narrators who carry the memories of 'loss' through the experience of the 'local', I find that those living alongside this stretch also along the Damodar basin are a complex mix of shopkeepers, residents, migrant workers, migrant traders, migrant executives working in the public sector along with tribals. These different citizens evoke memories of different kinds of loss, material or environmental, personal or social, based on the everyday, from the view of their own village, or the view of an entire township. Amidst these memories of loss, I am conscious of encountering

an 'elite' lamentation of loss as well when I traverse through the Badhshahi Sadak.[20]

The diversity in the narratives points to a need to look at the textures and layers in identification of environmental loss in the narratives that I record and the type of memory. In these contemporary narratives, I view the road with its old *chattis*[21] or small connecting market places and towns and erstwhile memories of mutinies as bringing together different and yet a hybrid notion on environmental loss today.

Not all the memories on loss are related to environmental loss. Around the GT road is a mix of populations with different histories. The road does not only carry the history of the marginalized but those who gained. The 'loss of land' discussed by many for instance, is not due to dispossession for large mining or development projects only, but instead due to state led social reforms. The concerns are not around the environmental loss as much as around cultural loss and increasing materialism, violence and corruption in the society. However, clearly in migrant memories one sees different time scales inhabiting the memory and different conceptions of habitation or space in them.

Starting my Journey

It is winter in Kolkata; mufflered passengers lie sprawled on the station platforms probably waiting for their early morning trains. This year's winter, i.e. 2012, is exceptionally cold. Interestingly, the train I am to jump on to is metaphorically named after the most

[20] The GT road was called the Badhshahi Sadak prior to the British period. Recalling this name through the interview helped to explore memories which may have been tied to this period or passed on through cultural resources.

[21] "Chatis" were a smaller version of *sarais* which are found at a distance convenient for a traveller on foot, who could start his journey at sunrise from one *chati* and reach the next *chati* by sunset. A *chati* sold basic dry food and was appropriate for short-distance travellers and pilgrims.

sought after mineral resource in these parts: coal. I am traveling on the "Black Diamond Express". I get off at Asansol.

I choose my starting point at Asansol as one can access river Barakar, which lies on the finishing edge of the town and that which Bradley-Birt describes in his chapter, "A Tramp on the Grand Trunk Road", as dividing the Chhotanagpore division from the western part of Bengal. The Barakar, before the bridge was built, would divide the Grand Trunk Road into two, creating considerable inconvenience for travellers using the road during times of flood. But Birt is quick to point out, that for merchants who frequented these uncovered territories to trade in goods, 'money' was more important than 'time' and hence travellers would wait for one to several days for the floods to subside.

Asansol displays its essential identity of a railway colony with the GT road running right through the centre of this busy town, making it quite evident, that the city would not come up but for the road. I look for markers on it, which may give some evidence of its ancient history but it is a busy thoroughfare resembling any of the chaotic roads in urban Kolkata. Some bits of the railway colony are to be found on the right and large missionary schools to the left before we drive on ahead onto the BNR (Bengal Nagpur Railway) Bridge, while below us the old road is broken by a railway track heading towards Purulia.

The Voice of a Transport Man

I meet a man, in his late thirties, who having been in transport business provides me with a short map of the road and some essential details we must know if we are to move down the road. Having spent most of his time in the coalfield area during his childhood days, he believes that Asansol has seen the closing and opening of several industries. Despite these massive developments, improvement in incomes and standard of living, Asansol is yet to have better universities and hospitals according to him. The most prominent change he points to is the construction of the bypass after the implementation of the Golden Quadrilateral Project under the National Highway Authority of India (NHAI). An original resident

from Purulia the other change, which has been dramatic in his life, is the construction of a bridge in Dishergarh over the Damodar that allows a quicker connection to Purulia. Earlier, he reflects, "during the monsoons at this confluence where the Barakar and Damodar met each other, floods made it difficult to cross the river requiring his buses to take a longer diverted route to Purulia. Now we can reach Purulia in just two hours.". I ask him about what his previous generation saw as change and he replies that the areas near Fatehpur along the GT Road were deeply forested and the fear of dacoity along these routes was still there, but now Fatehpur has become more accessible. I probe a little more, does he have any personal memories or stories to tell us about the road, a story which may give us some idea of the experiences on the road—personal memories of change. He thinks a while and his memories of the past and present of the road straddles between traffic jams in the past and a frequency of accidents in the present. Thus, though the roads have been repaired and the smooth asphalt enhances speed, there is no dearth of accidents today.

Unlike the frightening mythic tales around tiger and bear attacks found in the travel accounts based in the past, his narrative revolves around negotiations with smugglers, labourers, politicians and even a community of Bauris who hold on ransom, goods which fell off his bus, and tales of ghosts in underground mines. The ghost story is of a Mining Sardar[22], a helpful ghost who died in an abandoned mine and now continues to practice the occupation of guiding tourists who have lost their way in underground mines back into the open, only to disappear after that. This meeting with the transport agent is probably the beginning of a whole host of myths and legends afloat in the coal belt. Despite a fairly rationalist version of change in the narrative of railways, bridges and smugglers, there is a lingering sense of the fear of the 'wild' and the 'forested' brought alive in the ghost story.

[22] The term used for the chosen labourer used by contractors to manage the rest of the labourers.

The Oldest Residents of Asansol

Locals in the area mention that there are two famous families, in these parts of Asansol: the Nags and the Gorais, at Burnpore More, the owner of an electrical goods store explains briefly that in the 1970s and 1980s, "all this around us, was forested, it was only the main market in Asansol that existed". He suggests that we visit Aguripada, the oldest hamlet in Asansol without failing to mention that Asansol probably gets its name from the 'Asan' trees that were commonly found in these parts.

On many occasions, in the narratives, we find that unlike today's preponderance of naming roads, cities and places after famous human beings, entire villages were named after trees that were found around in the landscape.

At Aguripada, the architecture of the houses is strikingly different from the rest of the buildings constructed by the railways. Narrow labyrinthine lanes run between tall white walled houses, big wooden doors, similar to old style Rajput households, greets the observer. Nothing inside may be viewed from the street, the doors and walls enclose the residential spaces like little fortresses. These old structures and residence of the Aguris now form the bustling centre of Asansol town. Two old men are warming their hands as they stoke the coal in the cook stove outside. It is nearing three o'clock and things need to be readied for tea. I ask if they know any Aguris? The man outside points to the shop owner, who is from 'the seventh generation of Aguris'[23] living in the area. He does not remember much of the past except for the fact that the Raja of Cossipore granted them these lands. When the family came here it was just the GT road and forests all around. There were no railways, markets or anything else. The man is a bit preoccupied. In spite of being in his seventies, he has to work as his son has been overcome by cancer and is undergoing treatment.

The Aguris were placed here as '*senas*' to look after the Raja's

[23] We don't know if this is the exact number of generations or and expression commonly trying to express that 'we have been here for eternity'.

estates. This corroborates with the rumoured history that the Aguris were brought into these heavily forested estates to protect the landlord's estates. The landlords would hire armed bands to protect villages and property in these deeply forested areas from their rivals. The early history of the Aguris is not well known. Some say that the Aguris are Ugra Kshatriyas (aggressive warrior catses). Others claim that they are of mixed castes and older residents. Most of the Aguris today have become petty shop owners, businessmen, moneylenders or bank service employees.

At the entrance to Aguripada, the owner of a cigarette shop gives us a brief idea of what may have changed in these parts. This interaction with the shopkeeper marks several shifts and confusions in value systems. The shopkeeper identifies loss as economic loss or material loss, and with that a cultural loss in terms of value systems such as 'honesty' and 'brotherhood'. But particularly contemporary in nature is his reduced faith in public sector organizations and I the ambivalent nature of state-led land reforms such as "Operation Barga" in these parts.

The shopkeeper is 75 years old, speaks in Hindi, but makes no claims of being an Aguri. His family migrated to these parts from Uttar Pradesh. He tries to remember what happened in the past, sometimes oscillating between text book history of old leaders, kings and events and the moral tenets of ancient Hindu philosophy. Finally, he declares that the watershed change happened in these parts post-nationalization in 1970s and 1980s. That was the time when the markets were crowded, there was an influx of outsiders, specifically the poor refugees from Bangladesh who had to be settled and "poor things they were so scattered everywhere, some here, some there, others went to Dhanbad and some others to Chhattisgarh. Then with nationalization came many jobs. At that time there was a shortage of people, there were so many jobs."

Me: For how long are you running this shop?

Shopkeeper: I was a Medical Superintendent. My son got a job with the Railway Police Force (RPF). He was called for interviews thrice but he refused to work there. He did not want to pick up a rifle and move around here there. See, as a father I can give birth, not the occupation.

...Earlier, people were very honest. After the seventies it has changed. There was no hatred at that time against the Muslims, Punjabis, Biharis or Bengalis. There was a word: 'brotherhood'. Now it is all violence related. Good people have all left.

Me: So nationalization of coal mining brought about change here?

Shopkeeper: Earlier, coal was under the Marwaris here. Then it went to the government. Many more labourers were employed. This was during 1971-1975. Now whatever the government takes up, there is loss there.

...

Me: What occupations do the Aguris follow here?

Shopkeeper: Most of them are engaged with banks. Earlier they were landlords. But now they have educated their children.

Me: Who would work on their lands?

Shopkeeper: The Maajhis. They are the only people who can work on the land. Those who had land among the Aguris, some sold their lands, some gave it off to Bargadaars. After 'Operation Barga' many sold their lands out of fear here. They then educated their next generation with this money. ....Because of the Bargadaar laws, many lost land.

The Coal Story

I try to meet a knowledgeable folk singer in Durgapur who is one of the oldest residents in these parts and is popularly known to have vast knowledge of the history of both the areas around Asansol and Durgapur. His memories revolve around the story of coal, which brought a dramatic change to the region.

Getting off at Durgapur Bus Stand, I ask for the place where the Durgapur Steel Plant (DSP) quarters are, the autorickshaw driver laughs and says, the DSP quarters are everywhere. We whiz past a massive sports stadium named after '*Sidhu and Kanhu'*.[24] I wonder what Sidhu and Kanhu might have thought about this, but

[24] Sidhu and Kanhu were the leaders of the Santal Rebellion (1855-1856) against the British administration.

I make a note from the past, that we are somewhere near erstwhile Manbhum.

Durgapur, unlike chaotic Asansol, has the typical features of a steel plant township, wide roads and segregated spaces, isolated residential areas, but the lanes are well planned. The folksinger in his mid-seventies, and father of three daughters, has specialized in different kinds of folk songs *Jhumur, Bhatiali, Bhawaia* and *Chatka.* While he gives the self-description of a folk singer or cultural artiste we know that he has received numerous cultural awards for his work, has sung for All India Radio, has some interest in documenting local histories of Durgapur, was a school teacher who taught Bengali language and literature and spent most of his younger days in Asansol. He currently writes actively in the Bengali newspaper, *Ganashakti*, the official mouthpiece of the Communist Party of India (Marxists) in the state. Focused on the road itself there is very little to tell except that minced meat delicacies such as mutton chop and Moghlai Parathas, continuously play on his mind through the narrative as these food items are no longer available and if so, are not of the same quality as before.

Me: Do you have some memories of the road in the 1950s?

Folksinger: On GT road no one was local. The Roys came at an earlier period. Aguris were from North Indian interior and were brought to fight the Maratha raids. Atwald was owned by Punjabis. Gregory was Armenian. There were also Madrasis. Janki and Israel stores these were very big cloth stores-they are now shops.

For the folksinger the GT road is not a symbol of environmental loss but of economic prowess and also of economic loss. He sees it as a main nerve of market and commerce, a metaphor that represents the sights and sounds, tastes and memories primarily of middle class culture and industrialization. His memories oscillate around shops that have shut down and the earlier cosmopolitan culture, which comprised people from different backgrounds, including the Armenians, Europeans and Anglo-Indian families who set up business in these parts but no longer live here. When I ask him about what he has witnessed as change in these parts

he does not give a virtue value to change, he names an important actor and lists three important events in his narrative which provide the backdrop of change in the region. For him, the main actor is Dwarkanath Tagore[25], while the broad events include the discovery of coal, the railways and finally nationalization of coal mines.

He starts his narrative with the fact that the area was originally inhabited by *Doms*[26] and *Bauris*[27], mentioning famous dacoits Jibna and Sona Bauri several times as the original inhabitants. He suggests that rivers Damodar and Ajoy are like the Tigris and

[25] To explore this symbol of change Dwarkanath, I trudge through some works on Dwarkanath Tagore (1794-1846), his biographies reflect a similar nostalgia of his being a pioneer. For example, Krishan Kripalani titles his biography as "The Forgotten Pioneer" and Blair B. Kling, writing much later, sums up the sentiment in the introduction by asking: "Why did the dream of Dwarkanath Tagore fail to materialize? Why did the industrial development of eastern India lag so far behind its potential?" Listing several reasons for this failure from poor application of technology to poor governmental support, Kling also highlights socio-cultural factors where he notes that the Bengali *bhadralok* culture, which comprised the Western educated middle class, failed to get attracted to mercantilism later. This socio-cultural trend left the area of trade and commerce to the "alien entrepreneur". This alien entrepreneurship, Kling observes, had a different character from the mercantile class in Bombay or Western India. "Here the entrepreneurs lacked 'local commitment' and had little interest in reinvesting their profits in local enterprise" or even philanthropic activities—they were like "farmers who refused to replenish the soil with nutrients, taking but never giving". While this remains a contestable point, Dwarkanath is portrayed as this glowing lamp in the history of a massive decline in the mercantile class and a shining example of creative entrepreneurship in Bengal in the folksinger's narrative.

[26] Doms are Scheduled Castes with traditional occupations related to rituals of the dead.

[27] Bauris, though considered to be of lower caste, are actually the original occupants of the region and some claim that the Bauris were traditionally Buddhists who have been later incorporated within the caste order.

Euphrates and the earliest settlers in these parts are considered to be the Doms, Agha Dom and Bagha Dom mentioned in a commonly sung nursery rhyme by children.[28] Agha Dom and Bagha Dom were at one time held to be warrior generals of Lau Sen's[29] army. They were also known as Porels and a nearby village pond is named after them as 'Porelpukur', he explains. I find on several occasions that as we speak of remembering the past and tracing changes in the life of residents in these parts, I am always guided to a tangible site of memory or folklore, nursery rhymes, riddles that may tell us something, as evidence of authenticity for these oral narratives even though this may be deeply contentious. In this case, it is the pond or Porelpukur and the rhymes about Agha Dom and Bagha Dom. We may conclude that the physical landscape and environment is a rich reserve for understanding the place of

[28] I try to trace the poem, which has different versions:

"Agdumbagdumghoradumsaje
Dhakmridongjhajhorbaje
Bajtebajtechallodhuli
Dhuligelosheikomolapuli."

[Agdumbagdum and ghoradum are dressing
The drums, dhak, mridong and jhajharstart beating
The drummer starts moving while playing
Moving, the drummer goes to Komolapuli]

A variant of the same poem is as follows:

"Agdumbagdumghoradumsaje
Dhakmridongghagarbaje
Bajtebajteparlosara
Sara gelobamonpara."

[Agdumbagdum and ghoradum are dressing
The dhak, mridong and jhajhar start beating
The noise of the drumming is finally heard
As the drumming reaches the Brahmin neighbourhood.]

[29] Lau Sen, often found in Bengali oral folk literature, is considered to be part of the Sena dynasty that ruled over Bengal before the Mughal period.

local communities simply in the meaning making, naming, and entwined memories attached to every site in that space and place.

There is an underlying tension in the interview, as meanings have to be mediated. "The change that you are talking about, 'Poriborton'[30], that Poriborton is Dwarkanath"[31]. The narrator moves into a mental time travel as he starts talking about Dwarkanath's crucial role in changing the landscape in these parts.

The underlying melancholia in the folksinger's narrative, not overtly stated, is a loss of commercial activity and this is available in the lines where he describes his favourite shops on the GT road having shut down. It is very difficult to locate any nuances of environmental loss at this point in the narrative except for a small memory around the *chattis* and forests around these *chattis*, a collective memory of this area which tends to project forest loss way back into the past when the British cleared the forests of Asanbon and renamed it Asansol. His identification of place and space is associated with the discovery of coal instead, and he narrates a legend of how coal was initially found along the banks of the Damodar and the places in the area which have been named because of this:

Narayankuri and Igra is a place between Raniganj and Kalipahari and right next to the Damodar, in Chhotanagpore district at that time. At that time Hartley and Summer were collectors, and they realized that there was coal to be found in these parts. Now there is a legend about it, we don't know if it is true or not but it could be true. That is the thing about legends. The legend states that during the evenings shepherds would light

[30] 'Poriborton', or change, has taken on a new meaning in West Bengal as it was the one word that politically turned events in West Bengal, leading to a crumbling defeat of over a thirty-year rule of the Left inclined parties in West Bengal. The political word has often been used in the campaign slogans of political parties appealing to the popular need for employment and hence renewed industrialization.

[31] Kishorichand Mitra, in his introductory piece on Dwarkanath, echoes some bits of what the folksinger struggles to tell us, when he stresses on Dwarkanath's large philanthropic activities towards education and support of medical students. That 'ethics are also a part of *Vanijya*" is something the narrator is constantly trying to stress.

fires with wood to warm themselves on the banks of the river. They did not realize that the stones along the banks of the river are actually coal. After they put out the wood in the fire they found that the stones were still burning. They assumed that ghosts haunted the banks of the river. They then let the collector know, and the collectors realized that this was black diamond. The collectors then let Warren Hastings know, who came to these parts and did a boring. A village is named Boringdanga because of this and there is also a village named Pradhan Khanta, (a train station just before Dhanbad) which is also called Pradhan Khutta (as in boring). They bored it and realized that from Raniganj to Dishergarh there was coal. Rupert Jones a businessman realized that there is a need to do coal business. But this business required a lot of capital. So you can imagine the amount of coal there was here!

The narrator draws up a colourful personality of Dwarkanath in his narrative. While understanding business to be a significant component of social relations is essential, reworking our memories of the indigenous elite is important in understanding colonization. Dwarkanath's stories are filled with examples where the British were not masters and where, instead, on several occasions Dwarkanath bailed British merchants out of indebtedness. Dwarkanath's endeavours reflect the coming together of capital from land and from mercantilism and, in fact, the several micro situations, which led to the invitation and cementing of the British Empire. As his biographies suggest, what makes Dwarkanath different from his descendants and family members is his free and open interaction with the British. The particular relevance that Dwarkanath's biographical details have with this region is the point in his career around the 1830s when he shifts from being a Zamindar to a businessman.

Dwarkanath puts capital into a trading company discussed in detail by Blair B. Kling, known as the Carr Tagore and Company. Carr Tagore and Company was a company jointly owned by Dwarkanath Tagore and William Prinsep. The Company was not only involved in export trading of commodities, but also purchased dockyards or Ghats along the river Hooghly and pooled in capital to organize steam ships that could go to Britain with goods via the Cape of Good Hope. The 'steam engine' was the wonder of

the age and this required coal. During this period, William Jones who had come as a 'mechanic' discovered coal in Burdwan and started mining as the government provided an advance to him. Running into losses, he had to sell this mine to Alexander and Company. Carr Tagore and Company bought these mines much later and these were the earliest coal mines located in Raniganj. Dwarkanath, having substantial capital and the highest amount of shares (many of these joint ventures with European merchants), was as influential as any other European merchant in Calcutta in his times. It was through the Carr Tagore and Company that he bought William Jones's mines from Alexander and Co. in 1836, and slowly managed to monopolize the coal business in the Bengal Presidency. Later, mining was also initiated by Carr Tagore and Company in Chinakuri and in Rajharra in Palamau district. The company employed managers such as G.B. Taylor and Thomas Watkins who engineered these mines under very harsh conditions and also amidst rivalries which were not only sorted out through legal suits but various other strategies of 'instigating' labour strikes, obstructing transportation of coal and the use of 'lathiyals' (muscle men). The major rivals of the company were the mine owners of Naraincoory, Jeremiah Homfray and C.B. Taylor. A merger was settled in the year 1842 to form the Bengal Coal Company, which continued to be the main company handling coal mines in West Bengal till nationalization. Though not mentioned in the folksinger's narrative, Kling talks of a terrible mistake made in engineering by Taylor who tries to replace the pillars in the Raniganj pillar and shaft coal mines, with brick and wood, so as to extract as much coal as possible. This engineering mistake resulted in the shutdown of the mine due to raging fires.

The folksinger also tells us about the treacherous travels by boatmen along the earlier navigable Damodar river to transport goods to the dockyards called Koylaghat in Kolkata, probably named after coal:

Folksinger: Many years later, say around the 1820s, two companies Alexander and Co. and another one first started mining in these parts and later Carr Tagore and Company came in. Actually Prince Dwarkanath

owned a lot of the capital but since we were not independent at that time, a bit of the share had to be given to the British for smooth running of the business. So at that time the Prince would own the business and coal was transported on boats across the river Damodar.

The river was navigable. They took the coal from these parts to Koila Ghat now called Jahajghat near Strand Road. So from there the coal would reach the Kidderpore docks and then be transported to Europe.

Prince Dwarkanath's company ran from Sitarampur to Raniganj to various places. It was the main company. He had 1600 boats in comparison to Alexander and Co, which had only 40 to 50 boats. In fact in many cases the boatmen would be killed and thrown into the water, and the coal taken on board Dwarkanath's boats. Actually the Europeans could not manage with him and that is when they wanted a merger with him. That is when Alexander and Co. and Prinsep Co. merged with Carr and Tagore and then it formed the Bengal Coal Company.

Along with these changes, the folksinger introduces us to the several cultural changes in Asansol and the entry of cosmopolitan culture:

Folksinger: Near Girjapara in Asansol there were a lot of Anglo Indians who used to live there. Beth Road and Cotton Road are named after them. In Asansol there was Atwalds Air Condition Bar and Hotel. Then there was a Valley View Hotel and Restaurant. Then in Prabhat Hotel there was mutton and vegetable chop and then in Bharat Coffee House, there was dosa, idli. Though at the college in Asansol we knew these things, the people living in the interiors of Burdwan were busy with the plough. For them, 'what is dosa? What is idli? What is moghlai parantha?' This was beyond their imagination.

The folksinger takes us back to the next marker of change, the railway lines:

Folksinger: This railway line was Prince Dwarkanath's dream. After the introduction of coal mines and railways, the whole picture changed. Steel companies and many new factories came up around the coal mines, as did several ancillary industries for the coke oven plants which needed fire bricks.

From 1885-80, there was a huge cultural change. All the Europeans here were not all British; some were Armenian, Dutch, and Australian.

Most of these people were businessmen. Unlike the governors and rulers, these people wanted to keep good relations with the people. They were not of the same character as the colonizers. The businessman would exploit, but they were bourgeoisie and not feudal, so they did not engage in physical torture like the Zamindars. They started a lot of sports activities, such as football, tennis in clubs like the Calcutta Club, Dalhousie Club in Calcutta. Here the clubs were known as Kulti Club, Barrack Club, Gorandih Club. People played tennis in interior villages such as Gorandih. Can you imagine? The Europeans would play and in the same way the Indians started playing tennis too. And I have seen, not the game, because lawn tennis is now over, but I remember we would speak amongst our fathers and uncles that they would play tennis and so and so had beaten a Saheb in tennis. These were definite cultural changes.

There were the Railway Institute and the Tagore Institute (but this Tagore Institute was not by Rabindranath Tagore, but Prince Dwarkanath). These were famous institutes… They made a grand cultural contribution. In these institutes at that time there would be table tennis, billiards and in that environment the Indians who were good in academics got a few better opportunities and they started participating in their plays, drama, singing ceremonies and in this way there was a lot of change in culture through music, dance, drama in these parts and if one looks at the food related customs and how that changed, food habits changed too.

This is happening from 1900s to the 1950s. In between, during the World Trade Depression several Europeans had to leave, and at this point many Indians took over these spaces…

This area, which was the forested land of the dacoits such as Sona and Jibna, changed. At one time there was a dacoit known as Jibna Bauri (finds mention in the District Gazetteer written by Patterson). This entire area comprised Bauris. But whether he was a dacoit or a ruler, we do not know. I remember meeting some Bauris who claimed that Jibna and Sona were their ancestors once. One can never tell about legends. All of them are not untrue. Jibna had 200 gangs under him. Imagine what kind of an organizer he was! We are unable to trace whether he was a dacoit, or fighter for Independence in these parts. Or was he a leader of the Chuar rebellion?

Here where there was cholera, and due to Bargi attacks there was regular strife, daylight robberies would take place, and here there was lawn tennis, table tennis being played, and dramas being performed.

A man who enters interrupts us. He is circulating a public petition against price rise: "We are sending this petition. There is a huge problem on food distribution." He explains:

Folksinger (continues): Industrialization really improved people's situation. But this cultural development started decaying after the 1970s, which has happened everywhere. After the presence of this kind of affluence, a kind of opportunistic or consumerist culture entered the society.

To quote Lynn Abrams, 'memory is an active process through which the interview is an event'.[32] While the interruption in the interview brings us back to the challenges of the present, I try to probe into what happened to the Bauris and Doms who earlier inhabited this cosmopolitan place and how they adjusted to industrialization. Here I am told that the most downtrodden, the Musuhars and Chamars, migrated from Bihar to work as labourers in the coal mines first.

Folksinger: See now you have reminded me. It was very difficult for agriculturalists to give up their lands and become labourers since they receive some value from production. Therefore, the Santals and other agriculturalists opposed joining the coal mines for a long time. Besides, they were not convinced of the larger logic of industrialization bringing in development, the concern was primarily the loss of land that they were attached to, for generations. The Bauris, however, worked in the mines and later the Santals joined in. Among the better educated, among those who could not complete their matriculation joined in as clerks, while those who completed education became the managers, professors, teachers and doctors. The occupations were caste segregated as well. At the time of Independence the Bauris had a little land, but by the 1950s they formed the poorest sections of society. This dispossession happened through many processes but one main reason was indebtedness. Every colliery worker unit had the Mahajans (money lenders), a Kali Bari, a grocer shop and a liquor shop which would exploit and drain the workers of their resources. Besides, before nationalization, people received hafta (weekly payments), which means if on Sunday no work is done, then no payments are made.

[32] Lynn Abrams, *Oral History Theory*, Taylor and Francis, 2010.

The folksinger observes that just as there were shifts in the cultures of the middle class, in the same way there were shifts in the cultures of the labouring class reflected in their folk and cultural songs. He sings three short songs that reflect these changes:

Song 1: Santals coming in from Manbhum brought Jhumur with them. One Jhumur song reflective of the harsh times is as follows:

"Bandha Kopir Baro Aana Daam Go
Bandha Kopir Baro Aana Dam
O Kopi Kinbi Jodi Guard Saheb Ke Deke Aan
Phulan Tele Mathati Bhijabo Go
Phulan Tele Mathati Bhijabo
Koila Khaade Moner Manush Nai Go
Koila Khaade Moner Manush Nai
Phirbi Jodi chole jaabi Bardhamman Go
Phirbi Jodi chole jaabi Bardhamman"

[*Cabbages are twelve annas each*
Twelve annas each
If you must buy it, call the Guard Saheb (Railway Guard)
Soak my hair in scented oil
In scented oil
These coal mines have no humans
No humans
If you must return, go to Bardhamman
Go to Bardhamman.]

Many of the women who migrated to work in the coal mines regretted their fate. For survival and making ends meet, they often entered into transactional sex. Clearly agricultural work was preferred to what was available in the coalmines. When drastic changes were taking place, many of the Tushu, Jhumur and Bhado songs had woven in them tragic stories of displacement and exploitation. Tushu and Bhado are both performed along the banks of the river Damodar.

Song 2: Bhadoi is a festival celebrated during the immersion rituals on the banks of the Damodar during the month of Bhadar. The festival is in the memory of the daughter of the Raja of Cossipore, Bhadreswari who

died at a young age. Today she is worshipped as a 'Sarvajanin Kanya' (Daughter of the Community) and a Bhado song sung reflective of the changing times goes as follows

"Aamaar Bhadu Opaar Gecche
Kaalo Pathar Kaatite
Eto Keno Deri Holo
Ajoye Baan Porecche"

[My daughter Bhado has gone to that side
To cut the black stone
Why is she so late?
The river Ajoy has flooded]

Women's work in underground mines was stopped, and men took on these jobs later, while they continued with other work on the surface but not underground.

Song 3: In 1957 there was a new currency put in place, the Babus in the colliery would really exploit workers then. At that time those who were uneducated did not understand the difference between the new and old coins, because of this ignorance they were often cheated by 'babus' in the colliery when being paid (this remains as a sharp memory in another resident I interview later in Isri as well. And there is a song on this with the GT road too):

O tor gamchaa haralo GT roadey te
Naya poisha baadhbi kishe
Baadhbi kishe poisha baadhbi kishe
O tor gaamcha haralo GT roadey te
Naya poisha baadhbi kishe

(Oh you lost your gamchha on the GT Road, of what use would those new coins be)

The folksinger'a reflections are filled with the memory of a bustling township and all the contradictions that go with it. Much of the nostalgia is informed through the perspectives of nationalism, the need for public sector enterprise. He chooses to talk about environmental loss at the end of the narrative. It is through songs that he first expresses this loss, and the mourning

is inscripted on the woman worker, the tribal, the Santali, the Musuhars, Chamars and Dalits.The end of the narrative carries a hint of the signs of environmental loss, but this is with a note of helplessness and inevitability that goes with such large enterprises. Entwined with this history we finally come to the current situation of environmental devastation left behind by mining.

Folksinger: There was a duality in the nationalization of coal, while employees got perks, many lost out. As the collieries got squeezed of resources they were given voluntary retirement schemes (VRS) and the collieries were shut down. These abandoned pits instead of being privatized were taken over by mafias and thieves; no methods were followed in extracting coal. The labourers they employed died and there are no records to show these deaths.

Now those that have been totally abandoned don't run any more. They have been converted to habitations, ponds and settlements. The more recently abandoned collieries are the ones where there is a lot of illegal cutting.

Me: Are there problems at the settlements on abandoned collieries?

Folksinger: There will always be problems. Whether the pits were abandoned today or later. This is because there are three kinds of collieries—pit, inclined and open cast. Besides open cast, pits and inclined have tunnels underneath, and those need to be filled with sand. That has not been done. Europeans have not done that, and later those to whom they sold these off too did not get proper maps. Hence, they don't know where the tunnels are. Then you know that nationalization happened overnight, suddenly at midnight.

So now we know that there is subsidence. That is why Durgapur land prices are so high. In the subsidence areas, the amount is less. It is not safe anymore in those areas. Those days are not there anymore… the mutton chops and 'moghlai parantha' of Asansol, where are those days?

Thus, we find embedded in the story of progress, the typical characteristic of a citizen inhabiting modern India, looking for the dreams in industrialization and the nationalist fervour in public sector enterprise. For the folksinger inhabiting the memories of a once bustling township and market is primarily vital force through which he tries to engage with the past. Its in these early days of coal mining and heroism of Indian industrialists during

pre-Independence period of coal rush, which gives away the time period of the 1970s where he chooses to inhabit the most of his narrative when comparing the past with current deteriorations.

The Ever-Widening Road and the Temporary Tea Stall

At Burnpore More in Asansol, the owner of a tea stall narrates his history. His father was the original owner who set up the tea stall in 1972. He migrated from Odisha and ran it for five to six years.

"This wall is new, as the government demarcated the boundaries of the wall from the road when the Highway was being constructed."

The tea shop rests in a transient space between the ever widening road and the fence. On the right, an old blue rusted PCO box stands as an evidence of a booming business now made redundant by mobile technology. The owner explains:

"Things were different then in 1972. At that time people were hunted down and given jobs. My father joined the PWD while my uncle took over the shop. The shop was further down though" (he points to the middle of the road).

As the road has widened, the shop is almost aligning the now fenced wall of the PWD office. The business also included afternoon meals earlier. This has shut down now.

"My five brothers have jobs in the PWD, IT Department, the Big Bazaar Shopping Mall, while I run this tea shop. The job at the PWD was passed on to my eldest brother after my father's death, but unlike my father, all of us have completed schooling."

Though the tea stall is in an ever-precarious situation and despite its temporary nature, it has provided economic returns for this family for the last 40 years. Such is its nature of stability amidst its instability that I try to rationalize why the family has continued to nurture this source of livelihood otherwise considered to be temporary and transient in nature. I notice an inherent nature in the activity:

1. The tea stall is an important identity marker for this family whose first economic activity started here in the 1970s when the family migrated to Asansol from Odisha.
2. In spite of its temporary nature, the tea stall has provided economic returns to this family for the last 40 years.
3. In spite of the economic activity being in existence for the last 40 years, the nature of the activity is such that it is never a stable business and yet the tea stall continues to adjust itself to the changing nature of the space, the wall, the expanding road, the changes in technology, expanding and shrinking depending upon the way the Highway is planned.

The River and the Village Nopugram in Raniganj

I meet a Bengali short story writer in Durgapur. Sitting at his writing desk, he tells us about his village Nopugram. For him, his village history is the most important way to remember environmental change. The writer sees 'change' as changes in the social system of the village and a simultaneous change in the environment. He also highlights some spatial elements and technology, which changed the backbone of the village, the construction of railway lines, construction of the DVC and the coming of cars into the village. Guiding the heart of his narrative, however, is the changing course of the river and its impact on the village. These include the end of navigability in the river because of siltation, the closing down of proper irrigation systems after the railway line was built in 1854, regular floods in between and then drying up of floodwaters after a barrage was built, which prevented the overflows in a local wetland during the rainy season, which provided natural irrigation to the paddy fields earlier. The main essence of loss entwined in his narrative is a mass exodus of people moving out as the space for local livelihoods shrunk after the construction of the dam.

Writer: My village is Nopugram. I was born in 1942. It is 6km from Raniganj. It is towards the Damodar and between Andal and Raniganj, very close to the railway line. Whatever I have heard from my previous

generation is that we have been living here for 300 years. Our first ancestor came from Murshidabad to these parts, and was known as Sankarson Roy. Here he built his house and slowly our numbers increased. The village was much older and the older people here were Mandals, Dao and Pals. Our family came here during the Mughal period. At that time there must have been a lot of flux. Our forefathers kept 'lathiyals' to guard the estates. The Bagdis were our 'lathiyals'. They came from Bankura during the Maratha raids. We were linked with the King of Cossipore. Some of his land we had bought, which was on this side of the river on the condition that we must give due respect to the King of Cossipore. This condition is still performed during our puja rituals where we must receive a message from the next village that the sacrificial rituals (bali) have been conducted before us. Only then are we allowed to perform our sacrificial rituals. This was a way of communicating that we are protecting each other and our territories.

During Dwarkanath's time there was navigability. This stopped after the Damodar moved rightwards towards Mejhia and deposited pali (silt), which resulted in loss of navigability. The Damodar was known to be a river frequented by dacoits. What I have heard is that from the river the dacoits would come to attack the villages. The villages were in interior places inside forests. Actually it is difficult to say who was really a dacoit. Many of the dacoits were Zamindars in the morning and dacoits at night. I have also heard that the Damodar's waters were channeled for agriculture.

Now there is a lot of sand there and sand mining has become prevalent. Sponge iron factories have started here for the last five years. After Andal the sponge iron factories start.

Around 1854 a railway line was built up to Raniganj, before that we had proper irrigation systems. Earlier, some bridges and outlets would be made which we called baroduari, aatduari (culverts) for the railways, but these were not good enough to prevent the flow of flood. Our village was in between the railway lines and river and hence would invariably get flooded.

After the DVC, there has been no flood in the river. The Damodar brings no more sorrow instead it seems that a completely able bodied man has been made into a weak person. Damodar is not the way it looked earlier.

In our area, there was a bil (wetland), when floods occurred the waters would spread into it. Earlier the Damodar waters would then

enter the bil, which flowed, freely into the fields. After the barrages were constructed the flood stopped.

If you see near Madanpur, now the village is breaking this side as well. That village had playground next to it but the river has taken that with it. This is in the Panchayat area of Andal. People have lost land there. We can see how the Damodar has moved. The reason is because of modernization, there are pits where they are mining and water fills into these pits. Water flows into the low lying areas from here and then post monsoon as large volumes of water collect in these pits, the land is washed away with the tide.

For the 1942-born, short story writer, there are substantial gains made by Scheduled Caste communities and like in Yang's discussions on Patna, one might assume from the outer shell of this narrative that probably the writer sees 'loss' more as an elite 'lamentation'. The abolition of the Zamindari fundamentally changed the village system according to him and the relationship of the middle castes with land.

Writer: In our village area, there are a large number of Scheduled Castes (SCs). The reason is that Zamindars would bring a lot of SCs for their protection and now the population has increased so these areas have become SC dominant areas.

Me: What about the Bauris? Did they too live in this area?

Writer: They are seen as low castes (though not correct to say) they are more Rarh Bengalis. They are more industry based. There were many fisherfolk here earlier. Now they do sand mining. River dependency was very high among them. Their surname is Dibhor. They are very few in number. I have seen 20-30 fisherfolk families and now there are only five families. They are all working in collieries and the rest in the 100 days of NREGA activities.

This area is breaking and forming.

The SCs were earlier neglected and did not get much. But after several years since Independence, the situation is changing. They are coming up now. The earlier middle class is slowly reducing in the area. Not that they are getting poorer, they are slowly leaving the village. They are not able to handle the changes. They are going to cities. Most of them have left. The land is now being taken over by others. Our own uncles were Zamindars but have left the villages now. This section of society is moving away from land.

The writer digresses to other memories as he remembers talk of travels by palanquin even in the 1950s and the Zamindari mentality, the fears of dacoity along the road and thereby marks the rapid change of shift in dominance from agriculture to industry. He also tells us about the Chattis which offered shelter and dry snacks such as *muri* (puffed rice), *murki* (traditional snack), *khejur* (date), *gur* (molasses), *bathasha* (sugary snack), *khoi* (whey), and *cheere* (flat rice).

Writer: I remember one thing about GT road. There used to be a lot of grain husk being dried along the road. There would be regular fights on this. This has now stopped. Now there are a lot of accidents.

My first bus ride was to Raniganj high school in 1952. At that time, there were just one or two cars in these parts. We did not buy cars, we bought horse carriages! But in Kolkata cars had already arrived. The first time we saw a car was when members of the Mallaya family came in a Ford to Nopu, the petrol smell was such a big thing for us!

This is the last narrator on the Bengal side (lower valley) of the Damodar. But before I move on to the upper and middle valley tract, I must refer here to a novel mentioned by both the folksinger and writer in their narratives—*Devi Choudhurani* authored by Bankim Chandra Chattopadhyay (1838-1894) in 1884. This is probably because throughout the travels along the GT road and in the accounts written by the British, 'dacoits' form an important piece in the narrative of both the past and the present of this area.[33] Bankim uses "dacoits" as a motif of change for a deeply hierarchical and patriarchal society.

[33] The novel contains rich details of warring boats on the waters of the rivers and many presume that this might as well have resembled what it was like along the Damodar which was famous for the transport of goods through the densely forested areas at that time, where businessmen had to contend with rival parties and water wars, before they could safely transport their merchandise at the Kolkata port.

Hence, Bankim Chandra Chattopadhyay's focus on the dacoit's world provides interesting insights into this parallel, unknown world in the eighteenth century. These dacoits are sometimes portrayed as

The Changed Scenes Around Barakar

This is the border of Jharkhand and West Bengal. The Barakar flows underneath two bridges, a mighty one and one not so mighty. Large freight trucks stand stationed after crossing the bridge. Police chowkies and check-posts are present and on the other side, a line of tea and sweet shops are found. On the left, a tiny lane goes in towards the Barakar station and across it a road leads to the temple, a well-known tourist spot. Several tourists

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the powerful Zamindars, sometimes as the heroes living in the forests and sometimes as ancestors of today's dispossessed, marginalized populations. The complex narrative in the novel is centred on the female character Prafulla, most marginalized within the polygamous patriarchal Hindu Brahmin family, who makes the most of opportunities available to her to survive, though this means her becoming one of the most famous dacoits in these parts. The plots in the novel provide useful insights into this mythical, mystical world of the dacoits and most importantly how the writer drew up and imagined this landscape. In the preface to *Devi Chaudhurani*, Jadunath Sarkar writes that though the novel may not be considered as historical, the contents and the descriptions were surely a depiction of Bankim's time, also pointing to the scant details in State Reports which mention that among the dead bodies of a Bihari Brahmin dacoit Bhabani Pathak and his associates killed by the British Army in 1787, the presence of the body of a female dacoit of the name Devi Chaudhurani was also there in Rajshahi-Pabna of Rangpur district. This is all that is known about her, and it is her character around which Bankim decides to weave his story. Sarkar points out the need to recognize the two locations and the time period that Bankim chooses to locate his novels within—Birbhum and Rajshahi-Pabna, the frontier regions of the new British rule then.

These areas lay in the in-between zone, where Maratha raids were frequent, and the British had not been able to take on full control of these areas, and yet there was a simultaneous crumbling of the earlier order under Indo-Islamic rule which had created much scarcity and flux in the society. The forests and the world of dacoits provide the mirror to the polygamous society existing among Kulin Brahmins at that time and the various problems in that society which included ill treatment of

from Bengal flock the Maa Kalyaneswari Mandir here. Birt's description of the once peaceful GT road, where there was never any haste but the sound of rushing feet, and the memories of 'pace' only going back to the 1857 mutiny, finds little resemblance with what we see today as huge cargo trucks hurtle down the highway in an unwieldy manner. In 1903, Birt observed:

"*Across the bridge crawls a long line of bullock carts from Barakar, their wheels creaking hoarsely as they move slowly along. The bullocks, with their mild uncomplaining eyes, are of the smallest description and seem scarcely able to bear the weight of the heavy yoke that presses on their necks. They are bound for Nirsha eight miles off."*

When one turns onto the road that leads to Barakar station, a series of factories are to be found on either side through a slushy unmaintained narrow road that leads to Barakar station, probably the road taken by merchants for their second phase of the journey up to Calcutta mentioned by Birt in his time. Near the temple on the opposite side, a good view of the vast reservoir at Maithon is

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women, atrocities on Zamindari subjects, famine, scarcity and lack of food in poorer households, extreme discrimination of the lower castes and the poor, the alternative fight for power and control in the region and the numerous ways in which the dacoits had to counter the British army in Bankim's novel. Besides showing the mastery and skill that the dacoits had in predicting the storms on the river and taking advantage of its flows and currents to overtake the British and their subordinates, the Zamindars, who had no experience of the terrain and its natural obstructions, Bankim uses the 'dacoits' as a motif of change for a deeply hierarchical and patriarchal society. The novel provides a challenge to ordinary women engaged in everyday domestic household life, for the potential for independent thinking, self-education and finding ingenuous ways of working within their family systems to treating them with respect within the domestic space and protecting their families from the problems brought in by external forces. In the novel, rejection from society makes the forest a refuge for Bankim's protagonist and forests provide a learning ground for attainment of skill and wisdom in return. However, despite the several humanitarian concerns raised by Bankim, the 'forest' is exotic and alien in his narrative.

available to the onlooker. John Wiles, in 1970, described these parts around Chirkunda as follows:

" ....in the heart of the industrial complex of the government owned DVC, where wages were high, prices proportionately higher and men lived in the midst of rusting metal and grinding machine parts. This was still the heart of the coal belt, but waterpower was also being harnessed and fed into the factories of the area. The Damodar and Barakar rivers both provide hydroelectric power. I stayed the night by the Barakar river at Maithon, the site of the barrage and hydroelectric station. On one side of the river lay as doleful a collection of dead or dying heavily machinery as I have ever seen anywhere, with moribund looking people to match; the other bank was so cleverly banked that one was unaware of the industrial belt over the water. The government had built a guest house on a little island on the lake formed by the barrage, a delightful place reached by a bridge, and there I was given a single room with windows overlooking the lake and a private bathroom for a charge of Rs 2 a night. Across a narrow strait was a yacht club for Europeans working on various projects in the area, and beyond that was a little cove where rowing boats could be hired and the paddle streamer that operated for short pleasure trips on the lake was berthed. This 30ft paddle streamer, the Mallard, had once belonged to the Maharajah of Patiala. It was a long way from the regal Moti Bagh Palace in Patiala to barrage on the border of West Bengal, from a Maharajah's company to parties of day-trippers. The Mallard still had a day of glory before her, however, for, together with other craft of the Maharajah's flotilla, she had been bought after Partition by DVC and Pandit Nehru had sat in one of her little leather arm chairs in the bow and taken a pleasure trip to the lake after he had officially opened the Maithon Dam in 1957.

A column had been erected near the dam 'in memory of those who laid down their lives in the construction of this project', a memorial that simple people with little notion of mechanics or electricity workers like those sees at every site in India, that one sees on bricks or on ladders or up the crazy bamboo scaffolding with baskets of sand or earth, or bricks upon their heads. Men, women and children, with little idea of safety and few protective aids, who in the days when the dam was being built, had only a vague idea of what they were achieving, but were beginning nevertheless to conceive the idea that what was being built was their own. Many of the massive projects completed in those first exciting years have had sorry records since they were proudly opened and 'dedicated

to the people of India', but it is a matter for pride that they were built at all."[34]

Wiles' account, besides being rather sneering of the local people, also notices the shades of the tension of inequality that this development was bringing in, in the seventies. He also observes a shift in focus from coal as a source of fuel to hydropower, an innovation which is a matter of pride for Independent India. Other details highlighted by him in the account are that people were in need of better education facilities, in those times. Again something I keep hearing in these parts— "*Earlier there were so many jobs, but no people, and now so many educated people, but no jobs.*"

A Story of Dispossession at Maithon

It is at Maithon that I meet tribal and SC families who lost their lands because of the DVC. As discussed in the past, environmental changes have been accepted as an inevitable part of development. It is the unfulfilled benefits of development, which is highlighted as 'loss'.

Two villages comprising displaced populations from Maithon have been named by leaders from the Ghatwal Adivasi Mahasabha fighting for the compensation rights of the displaced- Kalipahari and Banda. Unable to make it to Banda, I head towards Kalipahari where we ask around for an *adivasi* predominant village. I am directed to Nimdanga. In Nimdanga, all the houses are of typical Santali architecture. A small neat lane of mud houses on either side, with hand plastering and painting done by Santali women on the walls of the houses. The structure inside the house makes it evident that this village is now settled here for more than 30 years and yet constructed very differently from what W.G. Archer notices in a typical Santal village.

"While the street expresses Santal unity, the houses give the village its

[34] John Wiles, *The Grand Trunk Road: Khyber to Calcutta*, Oxford and IBH Publishing Co., Calcutta, Bombay, New Delhi, 1972, p. 153.

uniquely Santal air. The mud walls have a hard cement-like precision, a suave and solid neatness…

Within each house the rooms centre on a courtyard. This is often ten yards square and several times a day is carefully swept and tidied. Here rice and mahua flowers are dried, clothes are aired, and grain is husked in a mortar.

From the courtyard doors, one is led to the rooms. These are built as separate houses and are ranged along the courtyard sides."

While the street in the village continues to express this unity, the large courtyard is missing in the now cramped Santal homes fighting for space in an urbanizing environment.

The village gets its name from a *neem* tree. The primary concern in this small hamlet, comprising Santals, is loss of land and displacement. The struggle for land rights continues. The demands to the external world and anyone from outside, is clear, and all other conversation is pointless. The most important change in the lives of the Santals has been their displacement from Dhobokol and the ensuing struggle for land and livelihoods.

I try to ask the oldest person in the village of the changes he has seen, and he puts in:

"I was very small when I came here; Dhobokol was the name of my village before I came here. But I don't remember much of what it was like then. We got money but no jobs. There are no land records here. My father's name is Borka Kisku. When we came here, we did agriculture for five years, then my father said we need to make a jhopri (temporary house). Later we bought land. We used to work at the farm and my father worked at the brick kiln. It was shut down later."

All of the population in the village was displaced due to submergence after the dam was built, shares M. Hansda, an active member of a local organization called Vastruhara Sangram Samiti:

"We are on DVC land, we were told only verbally then that we can come and settle here. Many of us have documents but many of us do not have documents for our land."

It takes a while to unravel the story. It is clear that all in the village have come from Dhobokol. The elders in the village were

of five or six years of age at that time, with little memory of what happened and what it was like before.

A member from among the Hansda clan explains:

"Earlier our village was Dhobokol, Mauza 240. My father's name was Dukai Hansda. When the dam was being made, at that time my village was destroyed. It fell in water. We received half land and half money at that time in 1951. We came here in 1954-55. Our fathers did not have records. We have appealed for the records. When the new Survey Settlement was conducted in 1982-83 by the Bihar Government, the older ryots, whose lands we are cultivating now have claimed that the land is theirs. Thus we are not being given valuation on these lands. Our houses are on "khas" lands but our fields are either on DVC, Bihar government or Ryot's lands."

C. Marandi and H. Marandi explain further:

"Our houses are given as "khas" land and our fields as 'dokhol' (illegally seized)."

Not all the Santals in the village are agriculturalists. All were not given jobs, they mention the efforts of the Vastru Hara Sangram Samiti, which managed to campaign and lobby for the displaced and some were given jobs in 1978. One among the Samiti is a ceramic electrician, in charge of fixing the small white ceramic rings on lamp-posts. He worked for forty years and is now 58 years old. His son is a labour contractor recruiting labour for setting up DVC pipelines. Some others worked as labour in earlier iron smelting plant (KMCL) and the brick plant. I turn to S. Kisku and ask him about the last rites rituals of Santals along the Damodar. There is a faint recognition. I ask if they go to the river. Rather pragmatically C. Marandi interjects, *"If there is no river there, what is the point of these rituals? We don't follow all that anymore."*

We find Kalipahari, a village just before the road encircling the reservoir. The road is well maintained and from over the bridge, we can see an endless sea of water. Just before this T-junction overlooking the reservoir, the village Kalipahari is to be found. It

is bifurcated into two by the road leading up to the T-junction. S Mandal narrates his story patiently as I write it down.

While the narrator admits that almost the entire village comprised *pucca* houses in 1957-58 and there was a 100 per cent change in the village after 1975, when the number of people increased and education levels improved, he feels that Kalipahari has not seen much 'development' and the DVC does nothing for the locals. In 1971, a 701-member panel sat after a lot of campaigning (*aandolon*) for jobs for the displaced. But after that only 100 to 150 people were given jobs and the matter resolved for the rest by providing a compensation of Rs 3 lakhs each.

Mandal: "My father was a DVC employee. He retired in 1995. There were many villages in there which have been submerged, I know four or five, Gamarkuri, Dhobokol, Sidabari, Bathanbari, Sorkuri which comprised of mostly adivasi and Bengali populations. We are also adivasi (original inhabitants). Villages such as Dhobokol, Kaalipahari, Gogna (adivasi), Beliaad, Aamkura, Ramgarh and Purulia (adivasi) are located in the project area."

Many did not get jobs then. At that time there was no process in place. People got Rs. 3 per decimal in 1949-52. These villages did not face any floods. The dam was built for three purposes, flood control, water irrigation and power generation. For the last two years water is being supplied to Dhanbad, Chittaranjan and Bardhamman. People here get no water and electricity. Most of us depend on deep boring. Nor is our electricity regularized.

Fifty years ago, 90 per cent of the people gave up their lands, and they comprised Mandal, Mahatos, Telis, Doms and Brahmans. The Santal adivasis got scattered."

In both the narratives of the displaced, there is little discussion on 'environmental loss', but more on the huge sense of 'material loss' which continues to remain unresolved despite several piecemeal attempts to adjust the members of this society back into a daily life in these industrialized parts. It is ironic that given the huge gain from the large enterprise, compensations, the idea of identity and the notion of the 'lived space' of local communities seem to have completely been devastated as evident in the narratives of tribals who lost their land for the dam.

Residents, the Ever-Expanding Highway and Perceptions of the Environment

When travelling from Dhanbad to Nirsha, I find along an isolated stretch a memorial erected on the highway. Just discussing the memorial unravels a whole tale of inter-gang rivalries between the coal mafia. This death of a publicly known local politician due to an accident on the highway was a killing I am told. He was a politician by day and mafia by night and was behind the conspiratorial murder of a popular coal workers' union leader. Any further details on this plot is met with silence but it is clear that bloody battles and threat to life is an underlying tension in the coal belt.

We are to meet an old resident of Nirsha, a leader of the citizen groups in these parts. Nirsha chowk is a busy intersection. Shops of all kinds line it. Wires, dust, smoke and pollution make the afternoon seem pretty grey. This sight is completely different from the text written by Birt over a hundred years ago:

"Nirsha is only a small straggling village that grew up round the original halting-stage in the days when traffic was greater and the inhabitants did a good trade in supplying the necessaries of life to the travelers on the road" (Birt, 1903:183). Surrounding Nirsha were paddy fields, mango groves and patches of sal tree jungle according to Birt and the place was feared by travellers as it was frequented by 'dacoits' and 'badmashes'".

We meet an old resident and active citizen in these parts, who is also from a landed family that owned coal mines in the past. He takes us to his 150- year-old house. From the entrance we walk into a courtyard with a *tulsi* tree at the centre. We walk across through a narrow passage onto a vacant space, which is now a dump yard. This place was where grains were stocked earlier we are told. But the space has no use now.

Inside the house we are then taken to the terrace, which has been rebuilt because of damages due to blasting for the expansion of the GT road into a four-lane highway. The old resident's narrative is mostly located around the history of his family with a few interesting insights into old landmarks around Nirsha such as

an old water tank built during the rule of the Pandra Raja in these parts. Bradley-Birt mentions this in his accounts as well:

"Two miles behind Nirsha off the Grand Trunk Road lies Pandra with its fine large tank, known as the Rani Bandh. It was built by a lady famous in her day and created for the Maharani by the British Government for help given at the time of Sepoy Mutiny and for many works of charity. Most things in Pandra seem to owe their origin to her…" (Birt 1903:185).

In Birt's accounts, this Maharani built temples and several other community structures and forts which are lying in a dilapidated state now.

The resident's narrative on 'change' centres mainly on the business interests in his family. They were initially from a Zamindar family based in Bardhamman in West Bengal. Some among them moved to these parts over a hundred years ago. Their initial business was related to the *lac* business and later they diversified into non-agro businesses—garment shops, soap factories and coal mines. When they started their soap factories they were trading with Burma, China, Japan, Bangladesh. They lost their coal mines due to nationalization which got incorporated under Eastern Coalfields Limited (ECL) and Bharat Coking Coal Limited (BCCL). There was no compensation against that. But they also lost all other businesses and properties because of internal fighting among the members of the family. I am told about a talented member in the family, a chemical engineer who led the soap factory business after his training in Germany. However, after his marriage with a person of German descent, the family rejected him, forcing him to leave the country. The narrator marks this as one of the important points when the infighting in the family results in a lot of losses in the family's business.

Like the broader trends in the market in the late eighteenth century and nineteenth century, this family made profits from *lac* production in Bardhamman. They bought land in these parts and became Zamindars in the area after that. Slowly, like most indigenous elite in their time, they invested in coal mines in Nirsha, Ramgarh, Gobindpur which were later nationalized. They also had the largest soap factory in the 1940s. As we sit in the old

dilapidated Zamindari household the narrator tells me that he was born in 1948, and these stories he has only heard never seen.

In the 1960s, the narrator did his mining diploma from Raniganj and then joined Eastern Coalfields. Both his children are part of the service sector today and live outside Nirsha. As we stand in his old building, we look across the road and the roofs, and down at the rushing traffic along GT road. We see a huge looming well-lit, well-painted, four-storey house sticking out among the dilapidation that surrounds it. "Who lives there?" I wonder. Later, I hear that the owner is an influential head of a coal mafia in the region and it is rumoured that he killed his brother in broad daylight, in front of everyone. Amidst the rush and tumble of everyday life along the crowded Nirsha chowk, these incidents seem surreal. Though the road has broadened and damaged the narrator's roof, and compensation was not entirely adequate, he chooses not to complain about it. When we ask him about the coal mines, he mentions that there are norms in place but inspections are not done properly. Waters stored in the mines may easily be transported for water use through pipelines for those who need water, for instance.

The larger questions around the environment, illegalities and nationalization, he wishes not to talk about. These are questions the big people should answer but he does not fail to point out:

"It is rumoured that the NH-2 will be made into six lanes. That means that more shops will be broken down. Their houses will be broken down. In the hot days there will be no electricity. Shouldn't the government decide this beforehand rather than continuously disturbing people like this?"

I ask about compensations, loss of property, but again he does not worry too much about that. He is more worried about the constant disturbance to citizens due to lack of planning on the road. *"They should plan it in one stretch. Anyway, with the increasing traffic load they do not have a choice. But they could plan a national highway keeping in mind the expansion for next 20 years instead of disturbing the public every two to three years."*

While the narrative does not carry concerns on the deterioration

of the landscape around, we see here memories of 'personal loss' and 'declining fortunes' in the life of the indigenous elite, which carry the same vein of deterioration and the melancholia that the changed landscape has brought for others. The other part in this narrative is sense of violence that looms, not in the vocalized articulations, but in gestures, especially as we cross and look over at the coal mafia's loud colourful four-storey house, making its presence felt in the neighbourhood.

Notions of Loss Among the Elderly

Amidst the much discussions with elderly men and women managing their shops or sitting by the road side, a younger member in the family interrupted and gave their own version of loss and, thus, creating an intergenerational dialogue on environmental loss. What is evident from these conversations is that the generation living in that era is not conscious of the impacts of their choices, which are felt by the next generation. However, the new generation is particularly challenged in understanding cultural losses perceived in a far more nuanced manner by the elderly. At Gobindpur, a Hindu priest and his son, a Students' Union leader tries to articulate the changes:

S*on (Students' Union leader): You speak to my father. The government has taken away our lands. How did our fathers manage? Some of them got displaced. Now those who were owners of that land, they could not continue to work there as labourers, because they had a sense of self-pride.*

Father (Hindu Priest): We have moved from there 300 years ago. When we moved from there we did not stop doing agriculture. Now it is a time for urbanization. How do we manage now?

Son: This entire generation has given off their coal to individual families such as the TATAs. We were displaced. If we were the owners we would be like Bill Gates.

Father: We lost out in the 1970s. Slowly our lands collapsed in the fires. We slowly moved away. Some in our family are still there (in Jharia), the rest of us have moved. I am mostly into pujas and rituals now.

It seems that the father had reconciled with displacement and loss of land, it is the cultural loss that he regretted more.

Me: What are the changes that you have seen in these parts?

Father: People are different now. Earlier there were no 'decorators' now humans are full of sins.

Me: What about the environment?

Father: See the environment is polluted. Look at the traffic. After sometime Dhanbad will be blocked. But this is a highway, so much vehicular traffic, and there is not enough land for this traffic. There are no jobs. All of them are in private jobs.

Me: But your son believes that you have lost out?

Father: See, our generation was well-off. It is not true that we did not get. But they have got nothing. We used to play, we felt like eating, picked up fruits and ate …eggs, ducks… you have got none of this. We used to swim in the pond. There were no sins in those days.

Son: There was paap (sin)—Zamindari. My grandfathers were all zamindar, we had everything, but the main thing is we have been removed from our resources now.

Father: You ask me about religion, the Puranas, Ramayana, I will tell you. All discussion on that has stopped now. These brothers (referring to sons) could follow this profession but they will not. Why have they left it? The thinking is not right. He is ideologically different. Now the situation too is very different. When I completed college, I was in charge of public transport. I used to drive on the GT road, the ambassador, jeep Mahindra… Now I conduct pujas. Earlier the beauty in Sher Shah's time was that there were a lot of mango trees around. It has changed now. They have cut it down. Everyone believes that now they will take their cars and go 'pha pha' (referring to speed)… Earlier there were no accidents. Earlier there were 'sarai khanas' at our place. People would sometimes lose their way and land in our village. We had a community room there, where when it got too late at night to travel, they stayed over. We would organize food and stay with them for that night. In those days there was no food shortage, every household had fruit trees. Those were the days of 'Athithi Deva Bhava'. We still have that community room. My grandfather had horses, we still have the bridle of the horse.

When tracing his memories the Hindu priest marks important changes, though small in detail, it shows small spatial changes and hence how people changed their relationship with nature, he sees his personal losses as an overall cultural loss and can directly connect it to his environment. However, he also speaks of the troubles in the past, but he finds a sense of well-being before the change happened even in difficult times.

Father: When we came from Nagarkyari, that village was like an island because we had to cross three rivers. Till the waters would not subside we could not leave the village during flood, we had no bridges then. I remember we took Ashok Das's son on a khatiya to hospital when he was struck by tetanus. Palanquins and bullock carts were also there. The three rivers were Khirkhanali, Jodia, and Khudia, they will join the Barakar and then the Damodar. It was really very frightening those days.

At one time there was a drought in these parts. All the maize got pests in them. People could not eat that as well. We were very happy even though there was drought. Even during drought we were well off. We used to milk the cows, and also fish in the pond.

The father regrets that certain ways of living have drastically changed not only the landscape but also childhoods—especially the abundance of food and fruit and natural resources such as ponds, and freely available farm livestock and poultry. He also points out the other side of the story where nature was frightening and uncontrolled during times of flood, accessing healthcare during times of emergency was a challenge when the bridges and roads were not constructed. Though a man earlier from the transport business he remains nostalgic about his Bajaj scooty. His son, however, does not eulogize the past and instead points out the atrocities by Zamindars and the stories of dispossession and loss, and at the same time regretting that loss of ownership that has removed the opportunity to 'exploit' those resources better at the local level.

On my way out, I echo the concerns of some of the shopkeepers who will have to move as the Highway expands, his son, the Students' Union leader explains that it is really nothing to worry about:

"Markets have always been there and they will always come back. The larger showrooms are least affected. Instead they get better room once the road is made. The temporary vendors come back onto the road once their shops are broken down. Those owning the second row of shops (behind the front row) earn more and gain as they face the road now. The road makes these lands prime land, and is open to market fluctuations. It is the smaller entrepreneurs and businessmen and the owners of old houses who face the maximum losses."

Being from Left oriented student-led political movements, his son carries a lot of thinking of the second phase of the movement discussed earlier in the background to movements in Jharkhand.

The Erstwhile Galla[35] *Shopkeeper and his Son in Isri*

In a neighbouring shop, I interview a father and son who are from a family of traditional accountants. The shop is again of the traditional kind, with a square *gaddi* for the shopkeepers to sit on and shelves packed with several large glass bottles and small wooden drawers at the bottom. The shop seems to have stacked things, which look like they have been there for more than 20 years. There is a constant drone of the sound of vehicular traffic in the background.

In the intergenerational narrative of the shopkeepers, we find a difference in the view that each generation has on the environment again. While the son complains of the GT road now falling to disrepair and neglect as the Highway was diverted to the outskirts of the town, the father claims that there is some peace with the diminishing traffic and the station being closeby, there is no worry of loss of customers. While the father denies any pollution from vehicles that passed by but is more concerned about the slush and mud from the road which was *kuccha* and difficult to navigate for pedestrians in the monsoons, his son clearly points to there having been pollution in the moving vehicles in the past, though

[35] A shop which sells grain or could also refer to *gullak* or money box which at one time did the work of money lending.

his father is quick to point out that they never had problems with the moving goods.

The changing business and slow decline in products provides a useful indicator of the changes in the environment. Besides the unique things kept in the shop itself, including medicines for animals, makes it evident that in these parts, such as Dumri which the shopkeeper claims has not changed in the last 24 years, a life beyond industrialization exists. The shopkeeper's narrative points to a clear loss in forest products and a shift in the kind of goods that are transported from the earlier days of forest products to coal and large manufactured machines. He tells us that they earlier had a *Galla shop*, which has become too cost intensive now to maintain hence transforming the shop to one that sells mainly *puja* items for the passing pilgrims now.

Father: Earlier we were called 'munims'. My father used to do this work. He was working in Pritamram Hemram's Gaddi. It was a very big gaddi those days. Everything would come there at that time, sugar, wheat, dalda, all the major wholesale items such as mirchi, dhania, haldi, jeera.

Earlier, 40 to 45 years ago, there was not even a cycle in these parts. If we had to get a cycle we needed to go to Giridih or Dhanbad for a cycle. Now we have a cycle, motorcycle, tempo, you get everything here.

Me: How did this rapid transformation take place?

Father: Because of where it is located, see right here is the Parasnath station. It is one of the most famous stations of Jharkhand now. Wherever there is progress there is increase in the price of land. It means that there is a chance of further development in these parts. But many people say that after that there are losses as well. Take Dumri which is nearby to this place there is no change there at all, it is the way it was earlier it is the same as 24 years ago. There are houses and shops there too. The station has changed this place. There is also a bus station here which was constructed in 1986.

Me: So do you see a change in the environment such?

Father: There has been a little loss. Earlier this was all forested land. Now there are less forests. Earlier, we got a lot of products from the forest such as orha, hara, mahua, sargujia, teel, kaali jeere that would all go outside. But now you can assume that only 2 to 5 per cent of

what was available is left. Not even 10 per cent there. Mahua has also become very scarce. So much imli (tamarind) would come to these parts we would send it to Calcutta and Bombay. Everything has reduced. It is not like it was in the past.

Indicative in the memory of changes in profit and loss, is a deeper memory of changing lifestyles in the area.

The Pillars Built at Every Chatti and the Road

From Barwada to Gobindpur, it is a lonely stretch. The road has been widened enough to give it the status of a four lane highway. On either side we find coke oven plants, petrol pumps. Truck parking spaces and piles of tyres are interspersed by a busy crossroad of shops. As I move towards Gobindpur Chatti, people here are able to point to the two famous pillars built by Sher Shah Suri to mark every stop along the road. All of these look exactly the same at each of the places where they still exist — simple pink pillars, mostly in a decrepit state, fading into the untidy background of the markets. These historical pillars lie in the background, near dump yards, on the edge of a newly constructed wall, almost inconspicuous in the chaos and bustle that has developed around them and exist where they have survived highway expansion. Across the road we visit a family whose house lies on top of the highway now. The younger generation narrates that they have been here for seven generations and came to this area for business from Kashi (Varanasi). The house is adjacent to the highway. One of them explains:

"The road was widened to four lanes under the Golden Quadrilateral Project but rumour has it that the government is now planning six lanes. The noise levels have increased and it is impossible to speak in the outer courtyard without shouting. In future we will need a mike. Besides, this smooth highway gives a false illusion to drivers. There have been so many accidents on this road in the past, so many brain haemorrhage deaths. The pollution and dust in the area has also increased,"

He shouts and explains all this as we sit sipping tea in his courtyard with a constant drone of whizzing trucks passing us by.

For many residents it's the immediate transition of the road into a four-lane highway that is sharpest in their memory of loss. This is also because this has had an immediate impact on them and everyday lives and lived space in the recent past. There is, thus, a lot of discussion around memories for residents living really close to the road where the river and rest of the landscape is remote, the road and its transitions are much more pronounced in their mental memory maps.

At Topchanchi, a health activist who also lives on the GT Road points out several environmental losses that have impacted agriculture and in turn impacted health. Noise pollution and vehicular collisions are yet to be raised as 'serious public health' issues in the public domain according to him.

Health Activist: If you go out on that side of GT road, which you call 'Naxal area', you will find a lot of malarial disease there. Mainly you know of the falciparum type, it is not recorded in public hospitals. It is one of the basic reasons for high maternal and infant mortality rates. The other two killer diseases are diarrhoea and pneumonia. There is also a very high incidence of anaemia among women.

The food habits have drastically changed which is of concern. Oilseed and pulses intake has gone down here. See there are three kinds of cultivable lands— the taad (upland), bahiya (middle land) and baad (lowland). The oilseeds and pulses are mostly grown in the uplands but have vanished now as there is no irrigation and seed support. Other products such as mahua, gunduli, surguja, arhar have also vanished. Now it is only a carbohydrate intensive intake and not a protein intake. People have moved to only rice cultivation. So food content is only rice and potato and some beans. Livestock is kept but only for commercial purposes. Diminishing forests, due to policies, such as eucalyptus and no fruits and hence livestock gone less; fruit plants, pulses and oilseeds have gone out.

There are a lot of accidents along the highway but this has not been raised as a major public health issue as yet. There is a lot of noise pollution because of the highway, but this is not regulated or even evaluated and studied on a regular basis. Other diseases due to the impact of pollution are tuberculosis for instance, which is particularly prevalent in Baghmara block, though pneumocosis is prevalent, on most

occasions it goes undetected. Far more detailed studies are required on this.

He links a direct connection to how road aesthetics and environment are connected with health impacts on the communities residing here.

Health Activist: We conducted a nutritional campaign to determine the nutritional status of people and we are trying to say that through NREGA (National Rural Employment Guarantee Act), we can encourage women to plant fruit trees in their waadis (kitchen gardens), and also encourage the PWD (Public Works Department) and FD (Forest Department) to plant fruit trees all along the roadside. How do we put this into their heads? All the missions, horticulture are all vultures and not cultures, so you will find one department cutting trees and the other planting (and the wrong ones that too) so there is no coordination between them on these issues.

A Graveyard at Bagodar off the Badhshahi Sadak

In Bagodar, large looming red party flags, announces the town. One has just crossed Barhi, known for its vegetable market. Later, reports from Barhi filtering in after my travels there, show that there were several agitations here against Highway expansion, as one of the oldest bazaars where several local farmers come to sell their produce faced extinction. In Bagodar too a similar market exists. I try to speak to a group of men who are sitting together. They are all Muslim from the *Jolaha (weavers)* community and original residents in the village. Hearing Sher Shah, they direct me to the pillars, which lie near the school in near ruin at the entrance to the school called Buniyadi Vidyalaya, Bagodar. A teacher in the school talks about Dr Zakir Hussein's, and Jaiprakash Narain's visits to this school.

"They used to teach us spinning in the school those days. It is a very historic school, one of Bagodar's oldest but little is being done for it."

When I ask about environmental changes like many other residents that I speak to in these parts, the teacher, *Madhesia*

by caste, highlights these changes through an understanding of the changes in small scale technology and the changing value of money:

"In 1962, I bought a cycle for Rs 106 and that too in installments, but now we can't even buy a tyre with that."

Another old resident belonging to a family of *Quereshis* in Bagodar shows us an unidentified grave lying in the cemetery prior to the British period, probably from the time of the Mughals with faint Arabic letters. He then tells us about loss of his lands due to a family dispute. In the old records, which he makes available to me to show his family history, is the British Crown's seal. The *Quereshis*, butchers by profession, sold meat to the British military. I see amidst the legal records, a dispute with Hindus in the neighbourhood during the early 1950s on shutting down the slaughter houses that the *Quereshis* owned. "That's over now," Quereshi explains. His immediate concern remains an internal family dispute where one of his uncles has taken over a major share of the lands. For Quereshi, the past means going back to monuments, graveyards and the graves of two well-known martyrs, from the 1857 mutiny. But besides environmental history, I see a treasure of much oral and local history on the Badhshahi Sadak resident in the community.

The Women at Khilkanali

On a slight detour from GT road towards is village Khilkanali, named after the river near it. A group of women sitting outside in the winter sun, after a few initial introductions from the Students' Union leader, are willing to speak to me. While the narrations by the women are very short and abrupt, we find two kinds of responses from the women, most of who belong to SC communities and identify themselves as *Harijan*. These elderly women earlier worked in coal mines as labourers, but they have seen some improvement in their life. Agricultural wage incomes were not enough to get by in those days, which is why they moved to wage work in the coalmines. However, the second generation

of women, have stopped going there. The older women share that times were hard that is why they would go to work in coal mines but they will never encourage their younger daughters-in-law to go. They feel that they have materially gained from the work in coal mines and their observations on change, however, are ambivalent.

Woman 1: No, our daughters-in-law don't go and we don't go anymore. It is good. They are at home. We will not tell them to go. Then we had no money. We used to eat this much of rice.

Woman 2: Earlier we used to wear white clothes. All these multi-coloured saris we had none. Only one white cloth. Now we have started wearing.

Woman 3: That time the cloth was very thick. We used to go the river, bathe and wear it again. Now? Who will wear one. Now we have 10 saris. Now so many choices. Then there was no soap. Then we used to use ash instead of soap. Then we used to eat mahua, kodu, kundli, makai. Now we eat rice and roti. At that time for four annas we used to buy oil, salt, masala. We used to eat fish. We had a river next door and they would catch fish and bring it. This river is Jhoria and that is Khudia… Our husbands would go. Now we have to buy and eat..

Woman 4: I am Sarati Devi. I am from Khilka Nali. I am here for 80 years. It was better earlier than now. That time we used to eat more, now rice per kg is Rs 35. The rich are getting richer and poor are getting poorer (opposes the rest of the group). Earlier we got rice for less. Now we earn 50 we spend mostly on rice. Some people have, some people don't. The poor are dying. We have nothing. No lal card, peela card, no government land. The people who give land to factories, only they are earning.

Students' Union leader: We all want to become rich, what about the environment? Only one or two trees are left. All because of coal mining.

Rest of the women (in various ways): Our children are all going to work there. That is what we eat. We as women have worked there earlier. That time we had work. Now we don't have that work. The government has stopped that. We used to break stones. Now we don't have that work anymore.

Here the women acknowledge some basic material gains in terms of housing, clothing and employment but they also highlight how

these changes are in the market of multiple choices and availability is also artificial as food availability has gone down and the costs have risen. They are clear that they have seen material gain and that the basic needs, such as *pucca* housing, have been fulfilled and an earlier deprivation improved due to more cash income and probably also freedom from the earlier entrenched caste system. The narratives remain ambivalent on changing nutrition habits, increased cost of living, loss of fish in the river and access to it. While the people are conscious that the coal mines are the main source of employment for them. It is still a minority voice, even among them, which harps on the effect that coal mining has on the environment and quality of life. One wonders if sharp gender roles play out in our memories and therefore the experience of the everyday becoming far more enhanced in the memories and narratives by women than broader questions on culture, mining or historical identity.

The Owner of an Old House in Chouparan

At Chouparan in Hazaribagh district, the Chouparan Chatti is the last major chatti in Jharkhand before the Highway moves into Bihar. All along the sides of the road one finds half broken old style houses dramatically sticking out on the side of the highway. While two rooms of the house on the first and second storey are broken down, the inhabitants continue to occupy the rest of the house. In front of one such building, sunning himself on the Highway in traditional *dhoti* and *kurta* is 94-year-old Jagadish Prasad Kesri. Kesri's ancestors according to him hailed from Kashmir and settled in these parts during the time of the *Badshah*. They were brought in to set up shops and provide rations to the moving troops of the state's army. The land that was given to them was non-taxable. The most immediate and dramatic change for Kesri is the broadening of the highway, and the loss of his old house. However, he continues to own some of the shops lined on the road and remembers the details and location on his fingertips. He remembers clearly the different trees found in the vicinity, mango, *jamun*, peepal trees. When I ask about memories of the

road he shares stories from the British period and again harps on changes in technology that changed the environment.

Kesri: There, right there the 'gora' (white) people would stay. They had horses and our fathers would look after and feed the horses. The British would come over there (points along the road) and set up their tents here. There were wells along the road and we would take out water for them. Many days later the motorcycle came in and then there were cars. After the end of ghulami desh (slave country), it used to be a ghulami country before no, then the trains came in. At that time many people were killed in police firings because of the railway lines. I have seen it with my own eyes. We were in Koderma then, and fled from the back and came here to Chouparan. A lot of firing for the railway line, there were similar conflicts when the Tilaiya dam came up. Regularly there were processions with flags, red sometimes, black sometimes, green sometimes, down this road. Nehru has also passed this way. He was going to Ramgarh.

In spite of his age, there were moments when Kesri got excited, for instance when he discussed his trade in coal, he spoke of how 1 tonne was available for Rs 600 at that time. He also spoke of the dramatic change in the price of land in these parts and dramatic depreciation in the value of money. He constantly discussed the wells that were constructed during Sher Shah and Asoka's time which have now been filled up and blocked by the NHAI for the construction of the six lane. According to him, there was a lot of water available in these wells.

Just across the road is an old shop where a blacksmith sits with his mother preparing iron agricultural implements. His mother is about 85 years old:

Mother of Blacksmith: This was earlier all forested even though this road was there. I have seen those wars, when the military would move in troops down this road. I was about ten. The military was not nice. They would harass the women. That is why we would stay indoors. My family came here from Gaya. This is our traditional occupation. Earlier adivasis never lived this side, they were nomadic, it is only presently that they have settled down. Our main fuelwood was timber and now coal. At night tigers would come to drink water from the well in those days.

Blacksmith: I learnt this trade from my father. But I will be the last in my family to follow this profession. I have not taught my children this work. It is very cost intensive and the demand in the market has gone down. No one wants to buy these agricultural implements any more. The amount of time I spend on each piece and the per rate income on each implement is too less. People are moving away from agriculture in these parts. Our days are numbered. Half this shop was taken for the road. So we have extended part of the shop into the house at the back. Those who have more land are less affected. We have no more land to shift into. The money they have given us as compensation had to be shared between three brothers. We cannot get any further land from it.

During the conversation among the Blacksmiths, a local contractor who interrupts in the conversation and some other people reveal the usual situation of lack of proper information on compensations. Some people received more compensation than others. Some people received compensation only for the broken parts of the house, while others received for the land, which they had to divide between the brothers. Thus, for those along the sides of the Highway in Chouparan, which is its broadest, I notice in comparison to the travels elsewhere, material loss due to highway expansion, changing occupations from agriculture to other trades are the key environmental changes they highlight. Just like the land reform policies led by the state, state-led land use changes for roads has also led to a host of unfair practices and unjust acts which has created new memories of dispossession and loss in the area.

In many of the narratives, the increase of prices especially on food items such as vegetables and the depreciating value of money is something that is constantly stressed as change. While village life is associated with abundance of food, rapid urbanization is associated with the increasing costs of basic amenities, corruption and increase in the price of land. In Gobindpur, the older residents blame the land mafia for most of the environmental loss. However, roads and fencing and cutting off trees are some of the main ways in which land is 'developed' and then brought into real estate business. For the informal sector, engaged in the land estate business, this space is imagined only in terms of 'square feet and

square yards', not the trees, lakes or ponds or the landscape as imagined by residents.

Yet again as the lived space is disturbed, loss and gains cease to tap into the complex larger environmental meaning making that the lived space offers. Future anxieties then entrap most memories and hence loss is understood through language of compensations, transactions and 'material loss'.

The Old Goldsmith at Isri Bazaar

The Parasnath Station, a model station of Jharkhand, also breathes life into the market as Jain pilgrims regularly visit the town on their way to Parasnath. In this busy market place, one of the elderly I find is a goldsmith, who is not troubled by forest loss. Previous memories of coal fired steam engine vehicles, *chattis* and the march of military down the Grand Trunk Road and even Independence, is part of history but without nostalgic attachments. He sees gain in education specifically among women and their increase in mobility, improved information and better availability of transport. In his narrative, rising prices, the impossibility of leading a quality life without money, the crowded market space and increased competition in the market, non-availability of land and cultural degradation especially in the case of the respect for the elderly is identified as loss. He also gives a very balanced opinion of the class transitions that have taken place because of urbanization and hints towards the fact that now there is a greater distribution of wealth as some who had nothing have been able to improve their status and others who had a lot, have made some losses. He points out that a Harley Davidson ridden by the British military was such a big thing for youngsters like him, but now every second person owns a motorbike. He also talks of a time when petrol shortages would exist and automobiles would run on coal as fuel instead. He does not romanticize the notion of dacoits, instead he clearly states that dacoits existed yesterday as they do today. But there was less fear in the past. Loss of forests is again highlighted as the key change in the environment, but as a trader he does not locate this as a problem.

Away from the Highway, the *Adivasi* Voice of a Duli Carrier

I am looking for *adivasi* villages in Parasnath. After taking a long detour off GT road towards Parasnath in search of Santal villages and a walk by foot into the forested area, I find a tiny murrum road leading into a small Santal hamlet and this time it is inside the forest. A motorbike speeds past us and then returns. It is the Government School teacher who has shut the school early that day and returns to find out who we are, fearing we may have come to inspect the school. He makes up some excuses about urgent work and tells us that we can meet the PDS official if we want to know more about the village. Here in the village I get a chance to meet one of the eldest Santals who for a long time laboured carrying pilgrims up the Parasnath mountains on Dulis. In 1903, Birt not only talks about these Dulis but also posts a picture of it. However, most historical accounts centre around the beautiful pilgrimage centre. For me the insights of this elderly Santal about 65 years of age, gives a whole new meaning to the idea of 'loss' and the past.

Chunda Murmu: When we were very young, as children, we used to go to Kishangar to work as gurkis (shepherds). It was in Khirki in the Teli and Baniya households. We stayed there. We would take them and then bring them. Me and my brother. We were five brothers. Three have died. Now we are two brothers left. We would get very little money in a month. We hardly had rice to it. We would keep boiling the rice in water and drink the starch to fill our stomachs, and re-boil the rice at night and eat it. I learnt about herbs from my father. He would take me and show us. I have been up to Cheetadih by foot. Near Babulal Marandi's house, Isri, I used to go to work there. I have been up to Topchanchi by foot. It takes four hours by foot. I have been to Isri bazaar by vehicle.

Hembram (interjects): He used to travel with the dulis to the entire mountains. He can tell you all the 24 Tirthankars.

Chunda Murmu (smiles proudly and renders the knowledge with precision and a wise professional smile): Ajithnath, Sambhavanath, Chandraprabha, Parshva, Abhinandanath, ...Sambhavanath, Neminath

and then Parasnath. I would take them on the Duli. I have very little land around my house, I have no farmlands.

PDS official: Their land has not been measured by the government. There are no records.

Me: What do you cultivate on your small patch?

Chunda Murmu: Makai (maize). Now I don't go outside. Many people would come to Parasnath then but it is lesser than now.

The PDS official introduces us and asks everyone to come and sit and a heated debate goes on in Santali on where and how to sit. As we debate about the shade, a more outspoken person among the group, J. Hembrom, says: *"We are used to working in the sun, we have to work all day in the sun, we don't need shade. We are toilers. When we die no one comes. We will die and only after that the doctor comes. This is how it is. The government is full of middlemen."*

Hembrom (settles down): So did all of you come by foot?

Me: No, we came from the crossroad into this area by foot.

Man: So you came in a car?

Me: Yes. Is there a river nearby?

Man: Madam try to understand, in Village X we drink chua[36]water. The government has promised tubewells in each lane, but in my village you will not find any of this. They have placed tubewells in their own house, but we have nothing.

PDS official: They don't give us tubewells (laughs).

Me: So how did you come to this village? Tell us about your grandfathers?

PDS official: We used to stay in the forests. We used stay in a jungle that side. We did so many years ago, but we don't know anything about that now. We are not educated so how can we say anything about it.

[36] *Chua* is a traditional method of extracting sub surface water for drinking purposes. The method assumes that the clean top sandy soils in these parts filters the water till it reaches the sub-surface.

I ask about Maran Buru.

We are told that the village still worships Maran Buru and their sacred groves are located near Chandrapur. These stories are older than Independence, I am told.

I ask them what they do in the sacred groves.

Hembram: We put rice and milk during sarhul, sorhai, baha… once the flowers blossom we use it for our festivals.

Me: What flowers?

Man: Like Sakhwa flower for instance. There are so many flowers. You may not be able to recognize all of them. The Mungra flower. We will not eat flowers before we place our offerings. We have to do puja first. You come with a machine and then see, when the flowering season is on, and take pictures of all the flowers.

Co researcher: When should we come?

Man: In February and March. Flowers are such things for us, we will not eat for five days, just seeing the flowers, that is what flowers mean to us… when the leaves are green… See that flower, it has begun to blossom. Rola. Soso, Gojo, Braai, Akna, Umer… just as we have ancestors and castes, the species of trees are much more than that. See this tree… do you know the name, Sir?

Co-researcher: No we don't know. For us all trees look alike.

Me: What is its name?

Hembram: That is Arandi.

Me: Of what use is it?

Hembram: You get oil from it. We use it to fry our food and also use it to heal our foot, like look at his foot (points to Chunda Murmu and laughs), its broken on the sides, this oil helps to heal it. See that big tree we eat parts of it. When its new leaves come, we eat it. It is a saag. It is good for health. Konarpa. We know about these herbs. We treat ourselves (Then points to Chunda Murmu and shares that he knows all about herbal medicines).

Me: Has anything changed in the village since your childhood?

Man: Nothing has changed.

Co-researcher (local): Was there electricity earlier?

Man: No, Sir. So what if electricity comes. We can also understand what you are saying, we know what you are asking. We are poor people. If we had one lantern, it would be lit all night. Now where will we give bills of 15,000 rupees for electricity? Whatever we earn we spend on our food. They tax us. It becomes a bill.

Me: What is the main source of income for you?

Man: We sell these leaves. Companies come and take leaf plates from us. They sell it to the puja place in Parasnath and in Dharamshalas. We sell leaves. We don't cut young trees, we also don't permit it and the government also has said no to it. How will we make houses with that timber, we can take leaves but no trees. We and the Forest Department are working together. We take some fruits and leaves. Our biggest problem is water. Very dirty water flows from Madhuvan to this jharna (streamlet). All the pilgrims dirty that water and that stream comes here. This is our only source of water.

Me: Have you complained?

Man: How will we complain? Sibu Soren comes in a plane, Babulal Marandi comes somewhere, the police stop us from meeting them. We are shooed away like dogs.

In this village where forests are still there, the village is far from the road, our conversations revolve around flowers, festivals and seasons besides poverty, loss and lack. The lived space is beautifully expressed in the present. The history is the loss of the lived space of the 'forest' unlike agricultural lands mentioned by *adivasis* near Maithon. Here a dispossession from forests has also led to poverty.

A little ahead I meet a Santali woman from a family who also worked as a labourer in Parasnath for several years but now stays home to look after her grandchildren.

Woman: We are Tudus. My father's father first came here, this is my grand daughter here. My father would stay in Giridih all the time. Some notice has come, so he would go for that, he would also help everybody else. My father's name was M. Majhi. His name is still afloat, if you ask anyone they will still know him.

Me: Was he a neta (political leader)?

Woman: Yes. First they cleared the jungle and converted large plots for agriculture. So then they captured my father took him from here to Giridih. My father was a great man. I had a brother too. My brother died during Bhadoh. My father, Biru's father and the Munsi who would stay down there were always together. My father was powerful he could stop people from selling hybrid seeds? He would say why are you selling? Do not sell. He was a great man. He is dead now so what can I say.

Me: Does your grand daughter know Santali?

Woman: No she does not know Santali. She is not so 'advanced'. She only knows English (laughs). They teach in English.

Me: So where did you learn Hindi?

Woman: I used to go to do labour work in Madhuban that is how. We can't go that side. I go to Madhuban, roam there a little and come back. Those in the forest, how will we go there, the houses next to the petrol tank caught fire.

For her the notion of 'change' brought in a new dimension towards understanding location and community and though stated almost like a riddle, the importance and integral component that location and community have for each other came across.

Me: So have you seen any changes in the village?

Woman: Change? How can it change? This is Village X it has always been Village X. People may change but the village won't.

Me: What about the forests, the landscape, the sources of water? Have these changed?

Woman: If these change, people won't change right? These can change, but how will people change. How can a village change?

I am told that there is a great water problem in the summer months. The government does not sanction wells, and all the streamlets dry up. Most depend on *chuas* for drinking water. Loss for Sunny devi, translates mostly into death and departure.

Woman: People increase and then decrease also. Many of them have

died. Younger than me was Lakhan Bhai and under him three brothers (coughs a lot). They have all died. The youngest brother went to the river and died there only. At 3 o' clock, my nephew and son went and found him. They could not find him. He had epilepsy. Some died because of age, my mother and sister-in-law died due to fever.

The health worker from the neighbouring urban area Topchanchi travelling with me is amazed that the village has no amenities besides the ration shop and school. The impact of the GT road besides it leading up to Parasnath has little influence on the everyday life of this small *adivasi* village.

Me: Have you heard of GT Road?

Woman: GT Road. Oh Yes. That runs through that side. Not this side.

Me: Have you been that side?

Woman: No, never.

The Birhor Leader

In Topchachi, we are taken to meet the *Birhors* in Village Y. The village is not very far from the main road and is well connected, about fifteen minutes by vehicle from the GT road. It comprises people from different communities, the Birhors, Mahtos, Santals, Musahars, Doms, and Ghatwars. The hamlet that I reach comprises the Ghatwars and Birhors and my first conversation is with the women and then with the leader of the Birhors. The biggest change for the Birhors has been settling down in the village and adjusting to the semi urban environment. Most of the Birhors do *hazri* work or daily wage work. There is a nuanced way in which the community looks at these adjustments, and hence has a mixed attitude to the same.

An aged Birhor woman sitting at the doorstep of a newly constructed brick home: Aa, aa, aa (comforting the animals around)…

Me: Where is your home?

Birhor woman: My home is in Pipraari…in the forests.

Ghatwar youth (explains): Earlier we used live in the forest. But dacoits started entering the forests. We are now staying here. Some people have been able to make houses for themselves and some have not. That is how it is.

Me: How far is Pipaari by foot?

Ghatwar youth (explains): It will take one hour by foot.

Me: What is there now?

Birhor woman: It is forest now. We had to come away because of the dacoits there.

Me: Where were the dacoits from?

Birhor woman: How do I know? Some from Hariharpur, some from Kolkata we had to come away.

Me: How long have you been here?

Birhor woman: 10 years

Ghatwar youth (explains): 25 years

Birhor woman: I had four sons, all of them died after coming here. I now stay with my daughter and her children here.

Me: How did they die?

Birhor woman: After they came here they all died. They had to work very hard to live and survive, loading bricks. I thought I have no one, so my daughter and son-in-law (jamai) will look after us. But my son-in-law also died. We are just mother and daughter here. I have four grandsons. Two of them are studying and two of them are working. We came here with the help of a dalal (agent) after leaving our lands there.

I ask about the GT road, Nimiaghat and the chattis on the Highway. While the name registers with the man, the women look confused.

Daughter of Birhor woman: Earlier our forefathers would roam around, it is only recently that we have 'settled'. When our needs are not met in one place then we would move to another. Now we cannot do that. Our grandfathers would move around, but we can't move around so much.

Another Birhor Woman: Earlier we did not have jhopris, we used to live in jhopris made of leaves. We used to call it kumbhas.

Aged Birhor Woman: The government has made Jhopris for us now.

Me: So do you know how to make those houses now?

Women (in chorus): Yes. We can still make those houses.

Daughter: Earlier, we would stay inside it with our children. We would have to crawl in. Now our children have grown older, they stand and enter the houses now. We are more enlightened now. The leaves were from Paras trees usually. You have to go far to find Paras trees now. Some small trees are there now, we would get leaves from there and make the cover for the kumbha. Our elders and our husbands never liked it. Those were small houses and therefore we never felt cold in them. In these houses we feel cold (laughter around). But now we want these big houses because we have settled down. Even now, in the winters, the elderly get those leaves and choose to make kumbhas and sleep in them. But now the forests are gone. Not one tree in sight these days. Earlier, we would kill wild rabbits, make ropes with hemp for the khatiayas here. That was our main work. Then we would eat Aru (a subsurface tuber) from the forest. For Aru, we used to have to dig very deep into the sub soil. The roots were to be found way inside. We would boil it or cook it and eat it, make sabzi (vegetable dish) or khichdi (combined dish of rice, lentils and vegetables) with it. But now it is difficult for us. We eat better and wear better clothes now.

For the *Birhors* the past needs to be put to rest as they adjust themselves to the urban environment. Instead, finding daily work is the biggest problem for the *Birhors*. This is evident in the interruption in our discussion in the group, as huge sacks of grain are loaded on to a truck from a neighbour's house and taken away. Earlier the grain could be dehusked with local labour, but now the grain is being transported without dehusking. The landowner is probably getting a better rate from outside for the dehusked grain. But it is a loss for the farmer in the village and the labourers too. Some of them ask me to write about it.

When I ask about the forest, I get the most detailed elaboration of loss and scarcity in the forest from the Birhor leader. It seems that there is no choice of going back to the forest for the Birhors here in Village Y and they have not made any forest claims, though the Ghatwar youth tells me that there is a receipt for all those who

owned land or lived in the forest they have left behind. When I ask about why the Birhors have not been aided to make use of all the facilities that urbanization has to offer then here too the story is grim.

Birhor woman: Children Shh! Teacher has come.

Village health worker: He is the leader of the Birhors. (Pulls up a chair next to the fire)

\Me to Birhor leader: Sir, please sit.

Birhor Leader: No this is my land. You sit.

(Village health worker draws another chair). I sit. Leader sits a bit uncomfortably in the opposite chair.

Me: So what wood is this?

Birhor Leader: Palash. Once it dries, we use it as firewood to warm ourselves in the cold evenings.

Me: Sir, tell us a bit about the Birhors. I know that the Birhors get their name from the forests meaning Bir…

Birhor Leader: Yes, we are men of forests. 'Bir' meaning forests and 'hor' meaning man. Earlier, we were scattered in small groups all over the forests. We used to extract honey. Then we used to hunt boars, deer, pigs. It is only recently that deer hunting has been stopped. Earlier, there were wild rabbits, deer, boars. So we would hunt these, keep our share and sell the rest outside and somehow manage our life. We would get some cash income from this and meet our family needs by buying salt, cloth among other things. So like this we would stay in one place for 15 days and then another place for another 15 days and travel around the country. Our life revolved in the evenings around the fireplace like this. Our fathers have spent a whole lifetime and generation sustaining themselves on this wood.

Me: So, much has changed since then?

Birhor Leader: Yes with education, our old ways have changed. Earlier we never wore clothes. In winter we would take a big thick log of wood, light it and sleep around it. We never had land. Even now we have no rights over the land that we have been settled on. Earlier we had no problems. See we are getting ration now, but oil, salt, cloth, what will we

buy this with? We are not getting work. If we could do some labour work we can get some money. Sometimes we get some relief from government schemes like MGNREGA to make a road and with this income we tide over our expenses. The rations are not enough. What if we have guests staying with us in the house? Honey, roots, forest products these things are not available anymore.

Me: You know how to extract honey, and then there are those traditional roots such as Aru….

Birhor Leader: See those things are not available anymore. The Aru that we eat, even the wild boar eats that now. Because of that Aru is not available in large quantities in the forest anymore. Honey production has also reduced. If you don't have enough trees then how will there be enough honey production. There is less groundwater. This is affecting the forests. That is why even honey production is not possible.

Me: How do you see the future then for the Birhors?

Village health worker (interjects): They are not getting jobs. If they work only then can they move ahead.

Me: But there are so many shops, eateries, factories, vehicles and markets just ahead of this road…so much of development.

Birhor Leader: See you are right. See that big road there…we have not studied IA, BA, Matric. We go there and they will ask: 'Have you done your Matric?' See this boy here? He has the physique to do hard labour. But they will tell him to bring certificates. Why does physical labour require certificates? They don't see that this young boy can work hard, they want certificates from him. We live near forests, we can't study that far. We don't earn so much. Yes the road is there, the market is there, the government can support us and help us with some small capital for tea shops or small shops. We can run that. Once this hospital comes to place, some of our people may get jobs as workers. We have two boys from our community who have completed secondary education now.

The *Birhors* today are scattered and settled in small numbers all over the state. When I ask the *Birhors* of Village Y whether they are in touch with those in other districts who have been campaigning for the rights of Primitive Tribes, I am told that they are too small in number in this district and too scattered and far away from each other to know what is happening.

A Patchwork of Memories

My travels around the Badhshahi Sadak, or the spatial remain, resignificates the notion of loss. It also brings so many meanings to what life had to offer before massive transitions took place. These meanings come from different time scales, different habitational experiences.

Memories are diverse and a patchwork filled with different perpsectives of those who lost or gained make up my narratives along the Grand Trunk Rad. These narratives are diverse depending greatly on the reasons behind why those people interviewed are resding or inhabiting the site where I interviewed them. This has greatly influenced their ways of remembering, be it an educated young man who came for his first job in a steel township, or a transport man who found a thriving business in transporting workers everyday from home to work, or a tea stall owner who sold tea and lunch to workers, or a migrant worker or entrepreneur who came to settle and make his fortunes or those who were displaced and resettled. Those who lost their fortunes or those who had different businesses earlier, these different realities in the local and everyday, influenced the ways of remembering. What emerges is a patchwork of experiences and memories that situate themselves into a broader fast changing urban environmental landscape. How transacting and merely commodifying land completely changes, how space is imagined and how this shrinks further and further as our own control over our surroundings also diminish. These narratives take us back to interesting alternatives such as a road that could be aesthetically built with trees, and water and fruit trees along its side, or how forests as a lived space indicate the entire well being of the eco system, or how seasons tie into the lived space in numerous ways, and a thriving ecosystem has abundance and resilience even during natural calamities such as drought. Interestingly in these memories lies a resignification of the loss pointing to ways of life and alternatives that could be.

Settling the Unruly Tracts: Changes in the Jungle Mahals

We are sitting in Dhara's office in Bokaro with a group of community artists not too far from the planned Bokaro Steel city. A humdrum of traffic and noise is a background to our conversation. We are discussing culture and the changes around. Most of the members in the group speak in Khortha. There has recently been a proliferation of Khortha imitations of Hindi Bollywood songs. For the group working under Dhara, the beat and lyrics are unsuitable and alien to their local cultures. To counter this, the group has been trying to document and record older songs which were born at a time when television culture had not seeped in and are retained only in memory. When I ask them about cultural songs on the environment and Damodar, it is ironic that amidst the semi industrial landscape the first song should be about agriculture. Drumming to a quick beat, we are locked into a past of green fields of wheat as Asok Kumar Mahto who resides along the river, Gowai, a small tributary of the Damodar in Kasmar block, sings: "Chaal Chaal Gohumbadi Torab Humin Saag" (Come sister let us go to the wheat fields to deweed it). The gathering explains that the weedsmustard (saag), 'khairka' and 'karthuwa' are important sources of nutrition. It is ironic that the songs bring in a different reality from the present, recording memories for the community of a past which is rapidly disappearing. Across the border lies Purulia, and we are close to Dhanbad as well. I look around at the semi urban landscape, juxtaposed against the songs, the undulating lands in the horizon a 'spatial remain' bearing stories of dramatic environmental changes in the past.

Shifting from agrarian and forest-based livelihoods into a sudden industrialized landscape was a very dramatic change in the lived space of people in this region as highlighted earlier. Here I discuss

another important 'spatial remain' along the river basin, the Jungle Mahals. I, thus, try to resignificate this loss by understanding the natural space as a lived space in a time when transitions had not happened. What meaning did this hold in the minds of the inhabitants?

On the extreme east of the Damodar Basin lie what was once called the 'unruly tracts'[37]. These tracts lay in the area that the British would later constitute as the Jungle Mahals[38] a considerable part of which lies in the lower and middle valley of the Damodar. Some important historical events are automatically connected to these parts, the Battle of Plassey, the Famine in 1770 and the Santal Revolt in 1855. The tenuous relations that these tracts had with the British state always posed a challenge for the 'imperialist powers' that needed to expand territorial control over resources. After the Bengal famine, these areas fell to becoming wastelands, and were later called 'jungle' by the British, which had to be cleared and cultivated. This moment is dramatic as the landscape is suddenly converted for agrarian activity so as to meet the revenue needs of the colonial state. It is also the first time that these parts begin to interact with the British state. The area called Jungle Mahals comprised parts of Midnapur, Pachete, which is essentially the lower valley of the Damodar River Basin.

Several moments of environmental loss were recorded among

[37] Dr. Suchibrata Sen, *The Santals of Jungle Mahals: An Agrarian History 1793-1861*, Ratna Prakashan, 1984.

[38] The term 'Jungle Mahals' was used during Akbar's rule and formed part of Circa Gopalpara. Later, the area was transferred to Chakla Midnapur in 1722 and, in 1805, the East India Company constituted the Jungle Mahals whereby it added some *parganas* and *mahals* from Midnapur which included Chatna, Barabhum, Manbhum, Supur, Ambikanagar, Simlapal and Bhalaidih, the district of Burdwan which surrendered Senpahari, Shergarh and Bishnupur and Pachet, Bagmundy, Bogan, Kaodan, Taraf Bahapur, Katlas, Habila, Jhalda, Jayapur, Mukundy, Nwagarh, Kismat Chaontly, Torang, Tung, Nagar, Kiasi and Patkum which formed parts of the then district of Birbhum. Out of this Manbhum, Bhalaidih, Pachet are located in the area under study (Sen, 1984).

the Santal communities residing in this area[39]. The Bengal Famine in 1770, which led to much of these lands falling into wastelands, called 'jungle' later, are cleared for agriculture with major incentives from the British.[40] This forms the initial marker of transition over the landscape, while the Santal Revolt of 1855 marks the end of this period. The nomadic Santals play the environment-altering role of clearing forests and reclaiming these wastelands by bringing more and more land under cultivation (Sen, Areeparampil et al).

The Santals, one of the tribes among the cosmopolitan mix of citizens that now live in these parts, are an important people in its history. The seventeenth and eighteenth century was a crucial period for the Santal society, where the Santals settled from shifting to sedentary cultivation. This time period meant a 'disciplining of the space'[41] entirely controlled by the British, quite different from the 'notions of space' and 'spatial practices' imagined by the Santals themselves.

One of the versions of the story goes like this: the British used several oppressive laws on existing systems, which ultimately

[39] The term 'Jungle Mahals' was used during Akbar's rule and formed part of Circa Gopalpara. Later the area was transferred to Chakla Midnapur in 1722, in 1805, the East India Company constituted the Jungle Mahals whereby it added some parganas and mahals from Midnapur which included Chatna, Barabhum, Manbhum, Supur, Ambikanagar, Simlapal and Bhalaidih, the district of Burdwan which surrendered Senpahari, Shergarh, and Bishnupur and Pachet, Bagmundy, Bogan, Kaodan, Taraf Bahapur, Katlas, Habila, Jhalda, Jayapur, Mukundy, Nwagarh, Kismat Chaontly, Torang, Tung, Nagar, Kiasi and Patkum which formed parts of the then district of Birbhum. Out of this, Manbhum, Bhalaidih, Pachet are part of the Damodar valley (Sen, 1984).

[40] Soumitra Ghosh with Nabo Dutt, Haldida Yasmin and Tarun Roy, Commons Lost and 'Gained'?Forest Tenures in The Jungle Mahals of South West Bengal, Overseas Development Group, University of East Anglia, Norwich, October 2007.

[41] The disciplining of space imposes abstract space on everyday life, and in doing so predisposes the users of those spaces towards certain social or spatial practices. (Adare, 2013).

resulted in the Santal Revolt of 1855. Having emptied the coffers after defeating Siraj ud Daula in 1765, the British had to think of new ways to increase revenue. In 1770, the famine in Bengal had created further distress and shortage. In the lesser fertile areas or dry laterite zones of Birbhum, where there was depopulation, these farmlands fell to becoming wastelands. The British realized that this region was lying in the hands of Zamindars who had paid little or no revenue since the time of the Maratha troubles when Ali Vardi Khan was the Nawab (Sen, 1984). It was important for them to settle these areas and extend tillage into the wastelands to improve revenues. Santals were employed to do the same given their rare skills with working these lands and handling wild animals.

Some scholars speculate that earlier agricultural activity had ceased on these wastelands but the British preferred to call these areas 'forest lands'. These changes in definitions meant that these lands continue to hold a vast range of complicated customary and tenurial rights over land and how it is defined for years. [42]

Forests, prior to this period, were represented as an ambivalent category — an area where wars were fought, lying in the periphery of empires and kingdoms, comprising the social and political other, the alien and evil. Forests were also places of 'exile' or a space for 'meditation', frequented by outcastes, mavericks and the holy men in society. But the situation began to change with the entry of the East India Company. The Company began to quickly map these areas, and unlike earlier times where the ambivalence of forest tracts remained, for the Company, a better solution was to clear them. Clearing forests was a part of the civilizing mission. A few years later, however, the British realized the importance of retaining forests with the rush in demand for *sal (shorea robusta)* trees for sleepers for the railways. Yet again, began a new oppressive regime of bringing privately held forests under state

[42] Soumitra Ghosh with Nabo Dutt, Haldida Yasmin and Tarun Roy, Commons Lost and 'Gained'? Forest Tenures in The Jungle Mahals of South West Bengal, Overseas Development Group, University of East Anglia, Norwich, October 2007.

ownership, and overriding laws on commonly held forest lands leading to a host of conservation conflicts.

R.C. Mukherjea's accounts on who the Santals were and their stories of migration written in 1960 give some instances and evidences of the compulsions on the Santal's side to migrate and convert from a nomadic life to that of a settled one. From the genesis story of the Santals it is obvious that the Santals too were facing shortage of land and were having inter-tribal feuds which, thus, encouraged them to keep moving in search of new lands and settling in new areas from 'Campa gar'[43]

The Santals were not accepted into other agrarian communities from Hindu society and to prevent themselves from exploitation they moved in community groups of self-governed units such as the *Parha* units to protect themselves and negotiate rents when the migrated out to do agricultural work. However, conflicts with landlords in the Jungle Mahals and in the plains of southern Bengal meant that more and more Santals started flocking to Damin-i-koh for protection in Dumka district. As soon as the lands became cultivable lands, the Santals would flee to newer wastelands while the cultivable lands would pass on to permanent settlers. Thus, after a decade of this going on, it was no wonder that the Santals began to retreat from Bengal and the Jungle Mahals into Damin-i-koh, the only secure place for them, due to the wrath of the landlords and money lenders, as lesser and lesser wastelands were available, they finally decided to revolt. The repeated problem faced by the Santals and other tribals in Jharkhand was that while they offered and arranged governance regimes which were community based collectives of organizing resources, the colonial government found this inconvenient, especially in terms of determining and ensuring that revenues increased.[44]

Forests prior to this period are represented as always having

[43] R.C. Mukherjee, *The Santals*, A Mukherjee & Co. Pvt. Ltd., 1962

[44] Soumitra Ghosh with Nabo Dutt, Haldida Yasmin and Tarun Roy, *Commons Lost and 'Gained'? Forest Tenures in The Jungle Mahals of South West Bengal*, Overseas Development Group, University of East Anglia, Norwich, October 2007.

been an ambivalent category, an area where wars were fought, lying in the periphery of empires and kingdoms, comprising the social and political other, the alien and evil. Forests were also places of 'exile' or a space for 'meditation', frequented by outcastes, mavericks and the holy men in society. British law and policy created the dominant spatial practice in these parts. Revenue extractions during the colonial period played a crucial role in 'ecological degradation' and 'deforestation'. The British administration first transformed the space, and then experienced losses in the space. It instituted formal definitions of this loss as 'deforestation' and developed new ideas on 'forests', 'wild tracts', 'productivity' and 'settled agriculture'. It was the apocalyptic events which the British woke up to—namely famine, shrinking cultivation, the wrath of marauders and finally deforestation.[45]

The Santal Revolt in 1855

The Santal Rebellion of 1855 was the final marker of the disturbances and discontent that British rule caused to the peace and tranquility of the Jungle Mahals comprising a part of the middle valley tract of the Damodar. In 1855, thus, we find considerable alarm among the British and evident in the following letter addressed to the Secretary of Bengal by the Commissioner of Chhotanagpur, is a description of this revolt of "an outbreak of the Santal population" with an appearance of "a very general and serious rising".[46] The movement meant a lot of direct loss to the Santals themselves. Sidhu, Kanhu and other leaders of the movement who were arrested, were sentenced to death and hanged in 1856. The others were not only dispossessed but falling

[45] Vinita Damodaran, "Gender, Forests and Famine in 19th Century Chotanagpur, India". *Indian Journal of Gender Studies*, Sage Publications, 2002. access date 3.9.2012

[46] P.C. Roy Chaudhury, *Singhbhum Old Records*, MA, BL, Printed by Superintendent Secretariat Press, Bihar, 1958. A selection of important letters written between 1833-1875 found in the District Record Room. Four series were published, of Saran, Hazaribagh and Gaya, of which *Singhbhum Old Records* is the fourth in the series.

to penury chose to become daily wage labourers or went back to settled cultivation. Members from the Santali community became a stable pool of labour for British Enterprises through most of the nineteenth century, after this [47] Santal Pargana Tenancy Act (SPTA) in many ways tried to settle several of these disputes and conflicts that the Santals attempted to voice during the spate of rebellions. However, one cannot help wondering how amidst all this exploitation the Santals worked out their notions of space and their daily lives. Sources for these are close to absent, and hence I try to access some of the Santali folktales documented at that time.[48]

Bodding's Folktales

There has been a continued debate in tribal studies on the role of missionaries during this time. Traditional researches show that the missionaries worked in tandem with the colonial state with the sole aim of bringing in a civilizing mission among the 'natives'.

[47] S.J. Matthew Areeparampil, *Struggle for Swaraj: A History of Adivasi Movements in Jharkhand*, Tribal Research and Training Centre, 2002.

[48] Most studies documenting the colonial environmental history of that period give a clear narrative on the oppression of the colonized and the colonizers and sharp distinctions between the rulers and the ruled. Exploring folktales and local histories of the 'colonized' helps to unravel the imaginations and thoughts not always available in the reconstruction of British administrative texts on tribal resistances, for in these administrative texts lie only the methods of rule and resistance to that rule. This in no way helps us to understand the environmental consciousness which guided the inhabitants. New researches have broken away from the earlier emphasis on insurgencies by tribal communities to exploring dimensions such as gender relations, the role of local elite in ousting tribals from their resources, the influence of migration on tribal societies. In the analysis of the historical trends in tribal studies, B.B. Chaudhuri reinforces what S.C. Roy argued for, the need to look at "the inner life of the community", and how they perceived the power groups from oral narratives and songs of the tribals, which still remains a neglected area of research (Dasgupta and Basu, 2012:48).

However, recent researches show that the role of missionaries continues to be debatable, while Tripti Chaudhuri[49] stresses on their evangelical rather than imperial roles, whereby their main goal was to educate the Santals and improve their life situations hence emphasizing that their records were not always encapsulated with interests of the state, during periods of rebellion they chose not to oppose the state, Alpa Shah highlights the missionaries as a force which acted against the State (eg. the Jesuits) but concludes that thereby they actually eased the entry of the state into the area in the long run which she compares as similar to the Maoists[50] (Bodding belonged to the European missions, but considerable criticisms have been made by tribal scholars on Bodding's misrepresentation of Santali religion (Archer, Cecil Henry Bompas, and Soren), though all acknowledge the contribution his body of work has made to the cultural resources located in that time. Given the complexities of religion in today's world and the assimilation of Christianity, particularly among tribal communities, I hence only try to locate whether these folktales carry the notions of space and environment in daily life of the Santals in the eighteenth century which was different from the notions of the state.

Do these folktales incorporate observations on environmental loss? In recognizing this imagination one hopes to look at the emerging "political praxis of the Santals" and their spatial tactics, which find expression in these folktales at that time. This critical look into Santal place-making gives the Santals a "nuanced placement in a specific geographical landscape (and time) which has historical significance in socio cultural practices, due to spatial configurations and concomitant ideologies about the built form".[51]

[49] Tripti Chaudhuri, "Evangelical or Imperial? Re-examining the Missionary Agenda Among the Santals, 1855-1885", Edited by Sanjukta Dasgupta and Raj Sekhar Basu, *Narratives from the Margins*, Primus Books, January 2012.

[50] Alpa Shah, "Religion and the Secular Left: Subaltern Studies, Birsa Munda and the Maoists", *Anthropology of this Century*, Issue 9, London, January 2014. Access date 15.1.2014

[51] Amoo-Adare, Epifania Akosua. *Spatial Literacy: Contemporary Asante Womenís Place Making*, New York: Palgrave Mcmillan, 2013.

It is well known that the Jungle Mahals have continued to witness conflicts with the state and peace efforts have often failed in these parts. While disciplining of these spaces today continue to be along the lines determining productive activities on that space and increased state military activity, exploring the time period between a change in productive activities and rebellion and military control of the space in the past provides an insight into the minds of the oppressed who were trying to seek out "liberatory spaces" amidst this disciplining. In this work, I explore the same in a single cultural resource, though there may have been many others available at that time.

The Santal folktales provide a wealth of information on the way the Santals viewed their natural spaces amidst serious environmental conflicts that they were having with the British. Highlighted in this chapter are some of these narratives.

Reverand Paul Olaf Bodding (1865-1938) was a Norwegian missionary, linguist and ethnographer who worked with the Santals for 44 years. He arrived in India, in 1890, a young Norwegian priest who came to help Skrefsrud and Borresen in their missionary work and resided in Mahulpahari in Dumka (Damin-i-koh). His main work was around Santali literature and much of his interests lay around the mythologies, legends, folk tales, songs, witchcraft, medicines and daily life of the Santals. Among the several works credited to him is a collection of folktales. After Bodding died, his wife, Christine Bodding, handed these manuscripts over to the Oslo University Library in Norway, which were put into press by another folklorist Steven Konow.

A man of the name Sagram Murmu from Godda Subdivision of the Santal Parganas helped Bodding with his work on the Santali language. Sagram Murmu[52] had great knowledge of his

[52] Others who helped Murmu with writing the manuscript included Durga Tudu, Mohon Hembrom, Bhuju Murmu, Kanhu Marndi, Somae Murmu, Kandna Soren, Hari Besra, S Hasdak, Sugri Haram, Dhunu Murmu and Sona (Soren, 1999). Soren highlights the presence of women who also submitted these stories, though in the 1929 printed version of Bodding's folktales by Gian Publishing House used here, many of the

people and Bodding encouraged him to write his stories down as well as collect stories from distant villages against a nominal remuneration. Soren's research of the original manuscripts corroborates Konow's claim that most of these folktales were in fact written down by Murmu himself and not Bodding. Konow, of course, went one step further to state that it may thus be considered an authentic source or cultural wealth of the tribals[53], though this may be debatable.

It is evident from the explanations in the Preface by Steven Konow that the documentation of stories on behalf of Santals was being conducted with the fear that almost all of this community was getting 'Aryanised' and little history of ancient India will be left.[54] Santals were from the ancient Kolarian race and hence documentation of their folktales would help throw light "on the mentality preserved in their ancient speech" mentions Konow. One gets a hint of the reason for this fear where Tripti Chaudhuri highlights that after the Sidhu Kanhu movement, in 1874, many Santals joined the Kherwar movement[55] initiated by Bhagirathi

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names are not mentioned. In these volumes just a few find mention. Sagram Murmu from Godda, Kanhu Marndi from Chondorpura, a better educated Santal who died in Mesopotamia during the period of war, Bijhu Murmu and Phagu among others. There is a possibility that some of the tales were told by women as some characteristics and motifs clearly represent this (Ramanujan, 1997). The confusion of motifs suggests that having adapted itself from original teller's characteristics and motifs of both women and male authored tales are found. Most of these stories have a free flowing structure and the stories are left open ended with a scope for multiple interpretations based on the life experiences of the listener.

[53] Santalia: Catalogue of Santali Manuscripts in Oslo compiled by Sagram Santosh Kumar Soren, Nordic Institute for Asian Studies, 1999.

[54] Stephen Konow, "Preface", P.O. Bodding, *Santal Folktales, Vol I*, Gian Publishing House, New Delhi, 1990a.

[55] The time when the Kherwars were the forefathers of the Santals was marked as a golden period of the Santals. Therefore with famine, epidemics, death and pauperization, the time of the forefathers were used as the main memory of the Santals to rise in rebellion (Areeparampil,

Manjhi of Godda, having a lot of Hindu influence which appealed to the Santals and threatened the Christian Missionaries.[56]

Konow concludes these Aryan influences in the stories because of the inflection of some Aryan words related to domestication of animals, trade, craftsmanship, money and time but also mentions the likeness that the tales have with Pancatantra and that it is difficult to guage whether the Aryans adapted their stories from the stories of the Kolarians, the root community of the Santals

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2002). In the larger narrative of the Santals on their migration history, it is evident that they were originally Kharwars and adopted the name Santal after their final settlement in Saont in Southern Midnapore district (Mukherjea 1962). In the story of origin of the Santals, the Santals have been an ever-migrating tribe. "It took them a long time to cross the mountains and they finally came to settle in Cae and Campa or the land of seven rivers." At Campa, they established the various tribal deities, built shrines in sacred groves, began to worship Maran Buru (big mountain), Sin Bonga (The Sun God) and believed the Kharwars to be their forefathers (Mukherjea 1962). From the genesis story of the Santals documented by Charulal Mukherjea, it is obvious that the Santals too were facing shortage of land and were having inter-tribal feuds, which thus encouraged them to keep moving in search of new lands, and settling in new areas from Campa gar. Mukherjea states that the "Santal sojourn at Campa is also noted for a serious civil war between the Kisku and Marandi clans" after they won Campa gar back. Many Santals flee Campa when king Kisku Rapaz's son, Mandȍ Siṅ grew furious and threatened to marry each and every girl by forcing vermillion dust on their foreheads. As the forefathers of the Santals moved from here they fixed their religious rites and ceremonies and hence they decided to observe ceremonies related to child's birth and death and these customs resembled those of Hindus. While they did not burn their dead earlier, here onwards they decided to burn their dead and carry the bones of the dead to the Damodar. It is from here onwards that they get scattered and the Santals come under a lot of non-Santal influence, where they are no longer called Kharwars but Santals from the country of Saont in Midnapore. (Mukherjea, 1962).

[56] Sanjukta Dasgupta and Rajsekhar Basu(eds.), *Narratives from the Margins: Aspects of Adivasi History in India*, Primus Books, 2012, p. 110.

or whether Murmu had documented stories which had adapted themselves to Aryan influences over time. Furthermore, in the first story in Volume 1, the writer, Sargram Murmu, tells us about how the Santals are learning to read and write after the *Sahebs (the Missionaries)* have come in and taught them. He considers these folktales to be the unwritten laws of the Santals which help carry down the traditions and customs of the Santals. I, thus, trace here some of the ideas on nature embedded in the folktales.

Environmental Loss in the Santal Folktales

Unlike the drastic changes noticed by the British, the Santal folktales do not record 'loss' in a dramatic form. However, in them, it is evident that they are constantly coping with the changes in their environment, and what is termed as 'wisdom', is what they try to advise the next generation on survival and issues of justice.

Like in administrative documents, floods, cholera epidemics, and famine are also recorded in the folktales. For instance the river's flood scatters the family of the King, Queen and their children, till they meet after a whole lifetime. Similarly, after a cholera epidemic, a Brahmin (who seems to have miraculously survived) is startled to find amidst the rotting dead, that no privileges exists after, as vultures choose the bodies of animals and the lower castes, mentioned here as the 'Bauris' and 'Hadis' first. (He must use a vulture feather, to revisit social hierarchies, and realize that they are not what they seem or are prescribed in the society). Similarly, Santal family miraculously save themselves from famine by burrowing excess stock and grain underground and beneath their house. Of course this means that the neighbours wonder how this family has food and come to question them and the story unfolds on how the family then distributes their reserve food. Many other losses around death, houses getting burnt, loss of goods, food and goods being stolen, the death of parents in childhood are also written about. In many stories, however, it is the loss of forest cover, which is written about most dramatically or described in visible terms in the folktales.

The Santal Country and the Nature of Beings

The folktales carry an essence of how the Santals viewed the 'nature of beings'[57] and their landscapes. The tales give a rich diversity of observation among the Santals, and their construction of the natural space around them.[58] While folktales need not have matched the actual practices, they give an idea of the values, ideas and aspirations of the Santals in terms of how they wanted to work the environment. For the Santals, the inner and the outer world, the house and the world they inhabited, were equally important. The typical Santal country comprised the presence of flat rocks, many Arjuna (Terminalia Arjuna, Kahua) and palm (Borassus Flabelliformus) trees and 'tanks' or water bodies.

The Santals give so much recognition to the small creatures such as the termites in their tales.[59] "Termite hills were to be found everywhere," observed Bodding (Bodding, 1990a: 172). The Santal folktales show the keen observations that the Santals had made of the intricate nature of the termite nests, as the characters (chickens) get lost in the narrow passages of the termite hill and save themselves from the hungry Jackal. This Bachelard would interpret as the labyrinthine journeys down a *cellar,* while here the Santali subconscious comprises a journey into the intricate underground passages of a termite hill where chickens find *refuge*, experiencing adventure and protection from the enemy who could not access these parts. It is in fact the subterranean and irrational forces pointed out by Bachelard, probably 'fear', that finds various *underground manoeuvres* in the underground tunnels where takes place the resolution of the plot in a story where a friend turns foe.

There are also some indications on the customs related to the use

[57] Philippe Descola, *In the society of nature: A native ecology in Amazonia*. Translated by Nora Scott, Cambridge University Press, 1994.

[58] The botanical and zoological names have also been listed by Bodding.

[59] Termites play a crucial role in dry environments, particularly in the area of nutrient recycling and the creation of soil. Termites also trap moisture and help it travel crucial to decomposition process of plant and animal material in dry environments.

of space. Water bodies and tanks were segregated for drinking and eating and for cleaning or washing. These norms are considered important, since failure to adhere to the norm is used as a source of blackmail by the Jackal, when a small King fails to establish this practice in his kingdomTanks are usually surrounded by palm trees since the leaves of palm trees don't fall and rot, thus ensuring that the water remains clean. Bamboo trees are planted a little away from the water since the leaves could fall and pollute the water observes Bodding in his footnotes (Bodding, 1990a). Since folktales were also a method of educating the young, it could be that in their documentation, the Santalis recording these stories for the missionaries included messages and agendas for the society as well.

The natural landscape bears symbols of familial connections and ancestry and this is evident when one culls out the role of trees and grasslands in different plots. In the story, *"How the Sabai Grass Came into Existence"(Backom Cet Leka Janamen*)[60] the slain sister of seven brothers takes the form of a bamboo shoot which is cut and converted into a flute and the sister comes alive through the music in the flute and calls her brothers for a meal. While serving the meal, as she relates the story of their act of slaying her, the ground opens up to swallow them, which includes the youngest brother who tried to rescue her but failed. The sister tries to save her youngest brother from being swallowed into the ground by holding on to his hair. While he too faces the same fate as his brothers, his hair remains above the ground and becomes *sabai grass*[61] (Backom, Pollinia Eripoda) and covers the landscape.[62] While for the environmental researcher the importance given to *sabai* is important, Bachelard points to the

[60] P.O. Bodding, *Santal Folktales*, Vol II, Gian Publishing House, New Delhi, 1990b, p. 296.

[61] Sabai continues to be used for the use of different products such as ropes and baskets by Santals.

[62] Note by Bodding: "Backom is used for making twine and also making paper, naturally not by Santals". The plant is found wild and cultivated.

natural surroundings bringing to the fore the idea of *elsewhere* which have detailed memories of the past where, while the past here holds harsh memories of loss of ancestors and family and lessons for the Santals, the *sabai grass,* provides a *vast* space, of immensity and dreams.

In fact, so important is the trope of the natural surroundings in the daily life of the Santals, that this enters their daily rituals and customs. In a sub plot, which includes rituals and customs involving the river Damodar, the story on the Jackal and the Prince (*Toyo ar raj hopon rean*) (Bodding, 1990a: 58) is about the pauperised prince boy, Bodding explains in a footnote, 'that for Santals among the numerous death rituals or ceremonies performed, the last ceremony is called *bandhan* performed after some of the bones of the cremated body are thrown into the Damuda river'. This connection is better explained in the tale on *Kara and Guja* (Bodding, 1990c: 162), where the story unfolds on the sub-sept of the Hasdak sept of the Santals, or *Cil Bandhis*. In the story, two kites have been plaguing the community; it is Kara and Guja who manage to kill them. The two kites fall into the Gangi Jamin spring or fountain head of the river Damodar, symbolizing the ancestral history of the *Cil Bandhis*. The Damodar is thus an established symbol of ancestral history for the Santals.

These stories are also used to orient children to the forest and the animals and plants besides the *ancestral* symbolism that forests hold in literature. We are oriented to the kind of activities women undertook in the forest and the range and the nature of animals as well. In the "The Story of a Princess" (*Raj Kumari Reak Katha)* (Bodding, 1990b: 162) when the sister is plagued by her seven sisters-in-law, she finds friends in the forest. So when her sisters in law trick her by giving her a pot full of holes while sending her to fetch water, the frogs offer to lie flat over them, so the pot does not leak, or when she is asked to bring leaves from the forest without tying them, the tree snake (*Dipsadomorphus trigonatus*-non poisonous) stretches itself and wraps itself around the leaves hence tying the bundle and unbundling it when the sisters in law come to see how she has managed the feat. In the same way the rat-snake (*Zamenis mucosus*-non-poisonous) fastens itself around

the firewood, which she must carry back for her sister in laws. Through the story we are informed of those snakes, which are harmless, or friends in the forest.

In the story (*Toyo ar tarup rean*) (Bodding, 1990 a: 8), a ravenous leopard, who has been attacking the Santal village, is saved by a group of traders travelling along the road in the forest, and after this generous act of the traders, it decides to turn around and eat them instead. The 'mahua tree' and the 'waterpool' sit in judgement giving environmental lessons when the traders call upon the *mahua* tree and the waterpool to save them from the leopard. The tree and waterpool believe that the leopard should surely eat the traders given the ingratitude of 'human kind' to them and nature.

Trees are also that *poetic space* where the inner and outer worlds blend in these tales. In many of the stories, trees bring respite and a twist in the protagonists' otherwise difficult life. Trees are important marking points which change events or turn around fate. For instance the 'Banyan Tree' (*Ficus bengalensis)* is a camping ground in between a long journey and also brings a twist to the story when the Mongoose Boy (Cemen Kora) who (Bodding, 1990b: 144-175) loses his house and belongings because his brothers burn it down, and strikes a fortune under the 'dream space' of the tree.

The tree acts as a space for solace, forgiveness and redemption as well. Thus, in the story, *'Seven Brothers and One Sister' (*Bodding, 1990a) where the sister is constantly plagued by her seven sisters-in-law, the narration goes like this:

"Hurt by all this, the girl went away to a sandal-wood tree (Santalum album) and sat down at the foot of this tree. Having thought over all, she mounted the tree to hang herself, but she was not hanged, she was transformed into a fruit and stayed there. A long time passed.

Then one day her brothers were coming back from their trading tour, and camped at the foot of this tree; while there, people tell, a tear-drop fell down on them."

While trees come in as a symbol of 'immensity', the blending of the inner and outer worlds, it is important to note that many

of the plots around the trees have a sense of tragedy associated with them, though Bachelard associates *grandeur* and immensity with trees, in more occasions than one in Santal folktales, trees are found to *weep*.

Some of the spatial demarcations highlighted in these stories are the carved niches in the walls, near the fireplace for fowls within the dwelling, the walls offer protection and a place of refuge. The *bhitar* or inner world is where the Bongas (spirits) and ancestors reside. The house-field at the end of the dwelling is where Santals grow corn and vegetables in the cold weather. There are demarcations of the forest from places of habitation. The forest is a place of proximity that suits all domestic purposes of fetching water, firewood and leaves and fruit gathering and planting. The limits to this constructed imagination of space is that the space beyond where strange adventures take place. These are: the road frequented by traders, the ambivalent market place to make a fortune or get robbed, the place beyond the river Ganga where lives 'the other', the source of the Damodar in which lie the ancestors and to which the last funeral rites are offered, and the deep forest where sometimes the cattle are taken in to graze. The Santals also visit distant lands or the lands of the other in these tales, but here it is usually for the purpose of exchange, to exchange cloth, cattle, and charcoal. This gives the drastically different conception of territory and space in the minds of the Santals as well as conceptions of time in contrast to how the British were trying to rearrange the state.

The Santali Folktales trace gradual changes in the landscape, "one that was ever changing with past forests giving way to settlement, shifting agricultural practices and altering boundaries between villages and forests". In the tale *Jhades Jugi (*Bodding 1990b: 46)[63], a description of changes in the forest landscape is linked with the notion of time.

[63] The ascetic is another character that appears in the Santal stories, and the relationship the Santals had with ascetics would come from the northern parts of the country, north of the Ganges to live in these forests, were both to be revered and feared. In the stories about Jugis, most often

After the bride of the youngest brother of seven brothers is kidnapped by the Jugi:

"*As time passed, who knows how long a time, people tell, they took care of the child whom she had borne and gone away from, until he grew up. And people also cleared the primeval forest and settled all over and filled the place."*

Negotiating Lifestyle Changes among the Santals

Some of the stories lock in the numerous conflicting decisions and new norms that needed to be established in the community as the political and economic and environmental events are turning around them. This is reflected in some of the stories particularly around the shifts in agricultural practices from shifting to sedentary agriculture, dilemmas on conservation, or the flux that the community was facing due to migration, or how the Santals chose coping mechanisms around the atrocities of Zamindars (landlords) and moneylenders, or the simple changes in technology, some that the Santals willingly took on for their own betterment at that time.

In Volume 1 of Bodding's folktales, a separate section is devoted to stories on women. While Bodding notes that the Santali women are not projected in equal light as the men, it is interesting that plots and stories around women also depict several conflicts faced by the society in the outside world, and most of these conflicts are a negotiation on lifestyle.

The importance that the Santals gave to the combined form of living agrarian and forest-based livelihoods is highlighted several times in different tales. In the *Kara and Guja* story the situation is described clearly, where rent free land earlier provided to Santals was being converted into rent. Here Santals have continued some of their older practices of support from the jungle to supplement their food. There is a mention of jungle tubers such as *Zehneria Umbelleta* used for consumption.

In one of the stories of animals borne by women titled "Hanuman

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these ascetics are shown to have magical powers that may impact the everyday family life of the Santals.

Boy" ("*Haru Kora Rean") (*Bodding, 1990b: 110-143), the plot revolves around the shifts in agrarian practice. The Hanuman boy, born of a widow, is used to highlight this difference.[64] The story unfolds with several incidents of how the Hanuman boy outwits his seven human brothers in spite of his limited resources. The competitive conflict among them starts when Hanuman boy and his brothers decide to clear the forest to begin cultivation. Each of the brothers choose a patch of the forest to clear, but here the Hanuman boy strikes his axe at a tree and comes back home. The Hanuman boy does not light fire in his part of the clearing while his brothers have cleared their patch and begun to use ploughs and bullocks too. The Hanuman boy asks his mother for ploughs, bullocks and seeds, only to hear that she has none of these assets. His mother gives him pumpkin seeds *(kodu kutki)* instead. Thus, while his brothers sow highland paddy[65], the Hanuman boy plants pumpkin seeds (*Cucurbita lagenaria*) which grow as climbing creepers around the tree stumps in the forest. At this point the conversation between the Hanuman boy and his brothers flows like this:

' *"Look here you, when are you going to plough? You do nothing to clear the ground"*

[64] It is important to note here that like the use of illegitimate children in literature in eighteenth century cultural narratives in Britain, here 'animals borne by women' are used to bring a critical topic into public eye. We don't know if similar cultural concerns were prevalent in the Santal community as among Europeans, though S.C. Roy denies the existence of the illegitimate child among tribal communities. However in cases where the father dies before the birth of child, we find in these tales similar predicaments of the child as that of orphans and illegitimate children. It could well be an adaptation of the trope from Victorian traditions by Bodding or the missionary influence in these tales. Nevertheless, it is important to notice how the plot is arranged around the child and how the voice of the child is used to highlight practices otherwise 'criminalised' in the colonial context.

[65] Bodding notes that this type of paddy is rarely seen among the Santals except for those migrating to Assam.

"O brothers," he (Hanuman Boy) replies, "I have sown without clearing the ground."

"What have you sown, you fellow?" they asked.

"Look here brothers," he on his part asked them, "what have you sown?"

"We," they replied, "We have sown highland-paddy."

"I also," he said, "have sown highland-paddy; or rather I have not sown, I have planted."

The brothers soon realize that Hanuman boy has planted pumpkins instead of rice, and at this point he tries to convince them that he can barter these pumpkins for rice. During the harvesting season, a ritual is followed of offering the first rice harvest to the *bongas* (or spirits) on a sacred spot or *khond* after which a feast is prepared. Hanuman boy must also follow this ritual even though he has planted no rice. To his mother's surprise, when they cut open the biggest pumpkin picked from the forest, out falls a whole lot of rice, symbolically seeds here. The story points to the fact that there is some prosperity in planting as well.

In the story of "The Jackal and the Leopard" ("*Toyo Ar Tarup Rean"*), we are introduced to the typical dilemmas related to conservation. While stories of hunting as a sport are replete in several accounts by the British and local elite during this time, in this story a clear rationale of survival is given for killing the leopard that has been eating the villagers' cows and bullocks. The leopard is given a voice in the story, and chooses to escape to another forest when he hears the din of the Santal drums in the villages. However, here he meets a group of traders along the road which bifurcates the forest, who try to save him from the people in the village. We are, thus, introduced to competing interests vis-a-vis the leopard, the people in the village and the traders on the road. In the story, when the traders save the leopard, he threatens to kill the traders, who ask a 'mahua tree' and 'a waterpool' to sit in judgement. Both give their verdict against the traders given the 'ingratitude' of human kind. It is at this point, that the jackal is introduced in the story. He ignores previous judgements and instead outwits the leopard. The leopard is induced to enter into a sack and then beaten with stones to death.

There could be numerous interpretations of this story. The story could be of competing interests. What the jackal does is take us back to the original intention of the village people who were being harassed by the leopard in the forest and who decide to work in larger interest of saving the forest and the traders rather than just serving the vested interest of the traders of saving themselves, or the self-interest of the leopard. On the other hand, the leopard being given a voice, could well be 'nature's being' that has lost a sense of home and place, and must meet its end given the numerous forces against him, the lack of food, the traders, the villagers and the jackal, who can outwit anyone.

In the stories on women, "The Silly Women" ("*Dundhi Maejiu Rean"*) and "The Story of Some Women" ("*Maejiuko Reak Katha"*) indirectly establish that women are not to engage in the sacrificial rituals associated with paying homage to the ancestors ("*Kutam Dungra*"). The plots in the stories revolve around a time when all the men leave the village, leaving the women behind to perform these rituals, an exclusive domain of men. In the first story, the narrator mentions that the story is located in a time 'when the Santals were all foolish', and a Zamindar forcibly takes the men away. The women pray to the Bongas that their men return safely. In the second story, the story is located at a time, when the village was an endogamous village and hence when the men all went off to trade (which Bodding captures in his notes as moving far into the Assam districts to trade in cloth, cattle and charcoal), women are left behind to perform the sacrifice. In both the stories, it is established that this knowledge rests with men indicating that the men are needed in village rituals as well. In smaller plots, in "The Moneylender and his Debtor" ("*Mohajon ar Khatok*") (Bodding 1990a: 263), a Santal outwits the moneylender and settles his case. A considerable portion in the story is devoted to the interaction between the moneylender and the Santal's wife, who does not understand the language of the moneylender and this comes forth in a dramatic scene when the moneylender finding the Santali man unavailable in the house, must accept the postponement of the payment of dues, but instead eyes the beans grown in the house-field by the Santali woman. The moneylender begins to argue.

Not understanding the alien language the argument flares into a physical act of the woman chasing him out of the house with a pestle. A clear message is given to Santali women on how to cope with the threats of changing and powerful forces around them.

The Santal Cultural Hero and Attitude to Justice

The jackal[66] is an important cultural image in most of these tales. Though the jackal is a trickster he is established as greater than the King. The jackal may also represent an ambivalent character who could well be the missionaries for the Santals narrating these stories.

In most of the stories the jackal enters a plot when all other systems of justice seem to be failing in the narrative. Since folktales are being handed down to the next generation one can assume that the jackal is trying to tell the next generation not to make the same mistakes as the previous generation and keep their wits about them. Thus, this section explores in the voice of the jackal, the larger messages that are being given on justice, and the voice of wisdom in these trickster narratives. One locates some of the connections with the environment as well highlighted here.

The Jackal in Judgement

In the story "Jackal Judgement" ("*Toyo Bicar"*) (Bodding 1990a: 39) the she-jackal plays a crucial role where the overall morality of the society seems to have failed. Here a young boy is cheated by an influential man who manages to bring in a group of arbitrators whom he pays beforehand to be on his side. The jackal manages to convince the arbitrators that passing 'unrighteous judgements

[66] Konow tries to make distinctions between Aryan and Santal tales, especially through the depiction of jackals in these tales. In Santal tales, jackals are shown to be treacherous and malevolent while in stories with Aryan influence they are represented with great wit and intelligence and a minister and advisor to the King in the organized animal kingdom, he concludes.

Analysis of the Voice and Action of the Jackal in Judgement (Bodding 1990a)

Santali Name of the Folktale Name of the Folktale	**Core concern in the Folktale**	**Resolution offered by the Jackal**	**Environmental Plots/Wisdom/ other concerns offered through the story**
Toya ar haram budhi rean The Jackal and Husband and Wife	Explores a husband and wife relationship, and the entry of the *bhoot (ghost)* who claims that the woman is his wife	The jackal stops the fight and instead asks to investigate the case. Cleverly throws a challenge and makes the *bhoot* enter a *kupi* (earthenware pot) and thus banishes him. He also instructs the woman to leave the earthen pot behind	The story talks of a lot of changes in the Santal community such as the entry of bottles instead of earthenware and bamboo receptacles, reading and writing brought in by the 'Sahebs', and the customary importance of folktales and riddles in passing down tradition and customs in the community. The wisdom offered, is the need to judge the case instead of quarrelling and an introduction to the importance of folktales put together by ancestors for the community

Toyo ar tarup rean The Jackal and the Leopard	A ravenous leopard is eating up the cows and bullocks of the Santals. What do the villages do with the leopard? Should they save the leopard or cut the forest down? They decide to save the forest and kill the leopard instead	The jackal enters at a moment of ingratitude when the leopard threatens to eat the traders who have saved him from the villagers as he crosses a road in the middle of the forest. He outwits the judgement of the *mahua* tree and *waterpool* who believe the leopard is right, due to the ingratitude of humankind to nature and manages to trap the leopard and save the traders and villagers	The story looks at several layers of interests; the Santals who needed to save their cattle and believe that it is indeed better to save the forest than one leopard, pointing to larger interests, the traders who work in vested interest as they save the leopard without thinking of the Santals. The self-interest and the ingratitude of the leopard that is rescued and then wants to eat the traders. This justifies the action of the jackal who outwits the leopard and finally stones him to death. The jackal saves the traders and also works in interest of the Santals. Smaller messages are given by the *mahua* tree and *waterpool* to the traders who cut and axe even the roots of the tree while basking under its shadow, and drink water from the waterpool though they constantly pollute it.

Toyo Reak Khisa The Astuteness of the Jackal	A father-son quarrel which is not submitted to the Panch in fear of fine. How do we support our children? How do we use our wit to support ourselves?	The Panch members talk of a jackal story where a she-jackal outwits a leopard. Here the Panch is held synonymous to a leopard which may devour the younger jackals as the he and she jackal quarrels. Both the jackals enter their cave, the she jackal offers a solution to the leopard and exits his trap and manages to enter the cave inaccessible to the leopard.	The father and son decide to settle their quarrel without the Panch members. A basketful of wit is needed to do this. Women like the she jackal are considered to have wisdom and are an example to the Santals to avoid punishments and fines from the Panch, by sorting out their own matters.
Toyo bicar The Jackal's Judgement	A father tells his son to seek protection under a big man after his death.	The jackal is established as a cultural hero in the story where the Jackal is greater than the King. The jackal offers a magical gift-the cow, to the poor boy. The cow gives him many goods and rewards for his well-being. The cow is stolen unfairly by elders in the village and the jackal enters when an unfair judgement is about to take place over the ownership of the cow.	The jackal reminds the arbitrators that unrighteous judgements should not be passed on the younger generations

Toyo hor kora rean The Jackal and the Santal	The jackal again is established as a cultural hero. How did you know that I am the big one?	The story points out that though the jackal is a big one, it is not necessary that he has material wealth, but wit and wisdom	The plot is similar to the previous story. Several other strategies are made available in this story for the boy to protect his cow. The cow is an important asset for Santals at this point in time a part of the changing lifestyles which was being accepted by the community
Toyo ar raj hopon rean The Jackal and the Prince	A father tells his son to seek protection under a big man after his death	Jackal again gifts the boy a prized cow	The cow is an important asset for Santals at this point in time a part of the changing lifestyles which was being accepted by the community

which impact the seventh generation' would result in a mockery of the arbitrators themselves. Here indirectly, the jackal is suggesting that there is a need for honest arbitration in order to keep the moral fabric of society intact for future generations. The following table locates the possible messages from the jackal in Judgement in some of selected folktales.

The Jackal as a Trickster

Where the jackal is a trickster, the jackal is constantly cheating the Santalis, and hard lessons need to be learnt along the way, so the jackal does not get the better of them. In the story titled "The Jackal's Craftiness" ("*Toyo Reak Porphundi"*) (Bodding 1990a 92), we find the plot unfurl between the jackal and the leopards, where the Jackal is actually a moneylender who comes to the leopards asking for grain. The elder leopards find that their young ones are left starving even though they bring enough food home at the end of the day. They realize the jackal's antics. A tragedy unfurls as the jackal kills the father when the parents try to take revenge and the young ones and the mother must now accompany the jackal. Throughout the story we are exposed to the craftiness of the jackal, how he uses the leopards to hunt, how he manages to eat the bigger share, how he manages to trick the crocodile while crossing the river and destroys him.

In a large collection of stories on the jackal one finds the mention of the age old ritual of friendship among Santali women of exchanging two leaves and branches of the Karam tree (*Adina Cordifolia*) and thereby declaring their friendship in the community for life. In the stories, the jackal makes friends with Hen and her chicks, paddy birds (*Ardeola grayii,* Kok) or a hare, showing that these friendships happen between the strong and the weak as well. The jackal manages to gobble his weak friends in the stories and if one were to explore at what point the weak are killed, in most cases it is in a moment of over intoxication[67], for

[67] The essence is association with greed and excess rather than the consumption of alcohol here. Many other tales in the volumes talk of the

most of the ritual ceremonies of accepting these friendships are in sharing rice beer together. In most of the plots, the story unfurls around the idea of 'greed'. In some greed devour all that is in front of him, paddy bird, goat, sheep, cow, bullock but finally meets his own destruction. In other cases, the society punishes him.

Debates on Supremacy between Man-Nature

Grouped under Humorous Tales by Bodding are some very crucial stories, which locate the debate between supremacy of man or nature. This is beautifully captured in the story about the conflict between Santals and the Hare, symbolic of Humans and Nature.[68] In the context of the story the Hares are causing chaos in the Santal's lives who in turn appeal to the Supreme Being for help. But both the Hares and the Santals deny the respective allegations of creating an inconvenience of living for each other. The Supreme Being intervenes by saying the judgement thus will be pronounced by asking them each to sit under the tree to wait for the first leaf to fall and saying this, the Supreme Being asks the Santal to sit under a Korkot tree (Dillenia Indica) and the Hare to sit under a dwarf date palm (Kita, Phoenix acaulis).

In the judgement given by the Supreme Being, the Supreme Being states:

"Hare, I am ordering thee to watch the dwarf date palm. If within the space of this year thou watchest and seest a leaf of this palm fall down, thou shalt be free to eat human beings; and if not, then they shall eat thee."

And to the man he says:

"Watch thou the leaves of the korkot tree. If thou watching seest this

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practice of brewing beer as part of the ritual activities of paying respect to the ancestors of the Santals for instance.

[68] P.O. Bodding, *Santal Folktales, Vol III,* Gian Publishing House, New Delhi, 1990. p 142. Among the set of Humourous Tales in Vol III, there are a few stories Bodding documents as narrated by a 17-year-old school boy on Hares and Santals.

fall down, thou shalt be free to eat the hares; and if not, then ye human beings shall be liable to be eaten by the hares. Within this year both of you watch and see the leaves fall down. Next year in this month and on this very day bring me the leaves of those trees, and I shall have a look at your leaves. Now thou watch this tree, and this one that tree over there; watch both from noon today. When a leaf falls down, bring it at once. Any day it falls, bring it at once that day."

Man or the Santal was at an advantage over the Hare, since the Korkot tree leaves fall, while the Hare had to bite off the leaf of the dry date palm and thus the Supreme Beings very verdict was in favour of Humans in the first place. However, the Supreme Being gives a blessing to the hare saying:

"I am giving thee this blessing that from today thou shalst run like a leaf that is carried away by the wind; they shall surely not be able to reach thee quickly." And also that if the Hare should be caught humans would eat his 'excretements'.

Bodding makes a short note of a variant here whereby he quotes *Chando*(or Supreme Being of the Santals) to have made the following consideration before giving humans this superior ability

"These hares are such small beings; they are able to get under any shrub and lie quietly in wait there, and would be utterly able to eradicate man. It would never do to let these become the 'big ones'; I shall let man become the superior one, so when the hares see human beings come, they shall run away."[69]

While we cannot tell for sure, but can only wonder whether the Santals were noticing the sudden discord taking place in human-nature relationships, were they through their stories trying to work with these dilemmas of separating human from nature as well?

We may thus broadly conclude that though Bodding's documentations of folktales from the eighteenth century may have included within them reformist or evangelical missionary agendas, they provide a wealth of information in understanding

[69] *The Santals and the Hares*, P.O Bodding, *Santal Folktales*, Vol III, Gian Publishing House, New Delhi, 1990, p. 135.

the inner life of the Santals during the eighteenth century. The stories highlight the actual situation and the aspiration of the Santals. They also provide us with interesting insights into the environmental attitudes and spatial constructions by the Santals.

While administrative texts and researchers on tenurial rights and resistances by the Santals show a rapid change in landscapes, Santal folktales give an idea of the aspirations of how the Santals worked or wanted to work around these landscapes. Thus in the moment of loss of the 'unruly tracts of forest', we find in the folk narratives of Santals some of their wisdom on nature and justice that needed to be kept intact for the Santals to survive.

In terms of the dramatic changes around the Santals, the Santals stake their claim to space through establishing identities through rituals, and customs and ancestral linkages that they have, or the simple poetic space of the different trees in the landscape, the dream space where Santals change their fortune overnight. Through the exploration of 'spatial concepts' and 'environmental imaginations', in the folktales, one thus finds a broad idea of the kind of symbols or manifestations available in a select set of stories of these ideas on space. The folktales subtly suggest some of the counter spatial tactics chosen by Santals. These include the importance the community continues to give to the forest to supplement their food, which comprised a range of 'nature's beings' distinguishable into friend and foe or the space of reserves, such as the 'house field' an important reserve of food which is outside the scope of access to the moneylender, or the warm fireplace at home, the protective spaces for Santals. In the critical negotiation over the imaginations of space is the crucial link of identity, and given the time in history when the folktales are documented, the dismantling of the physical and local spaces around the Santals meant a constant need for negotiation of the self and identity[70]which also find expression in the folktales, documented at that time.

[70] Amoo-Adare, Epifania Akosua. *Spatial Literacy: Contemporary Asante Womenís Place Making*, New York: Palgrave Mcmillan, 2013, p. 126.

Remembering the DVC Dream: Of Nationhood and Development Visions

The flood of 1943 is yet another crucial moment in the Damodar Valley tract where several new decisions begin to inform the workings on the environment. Definitions of 'power' change at this time as water resources begin to get harnessed for power, in the same way as coal was in the previous century. It is the flood in 1943 that begins to generate the debate around hydropower.

Kanangopal Bagchi, describing the flood of 1943, writes:

"In July 1943, when the Second World War was in full swing, Calcutta was the headquarters of the supply base for the Southeast Asian command of the allied nations. The Damodar Valley had experienced continuous rains for four days and the accumulated run–off caused a breach in the northern embankment around Amitupur village in Burdwan district. The escaping water shot forward as a jet, undermining the two embankments bordering the Eden canal on the way, drilled through the Grand Trunk Road and rammed against the Eastern Railway lines, melting the earthen embankments on which the railway tracks stood. The fury of the floods abated shortly afterwards, but the water that escaped the river stagnated over fields and surrounded the dwellings; sand spread over cultivated fields and the flood water dug into the mud plinths of walls leading to the collapse of houses.' Along with these damages there was also breakdown of all communication. Thus the hardship to which the people were exposed provided a fresh momentum for agitation at a time when the people of India were in the midst of a campaign for freedom from the British yoke."[71]

[71] Kanangopal Bagchi, "The Damodar Valley Development and the Impact on the Region", in Allen G. Noble and Ashok K. Dutt (eds)

The flood of 1943 was a landscape-altering event for the Damodar Valley tract. In response to the catastrophe of the flood a slow logical idea was established around the construction of the Damodar Valley Corporation (DVC), which would change the economy, and the environment of the region permanently. The DVC project was an important symbol of development, an experiment which was thought up in 1944, planned and institutionalized by 1948, and implemented post-Independence. This chapter traces the debates and conflicts around the establishment of the DVC and the discontent projected around it to locate patterns or histories in the ideation and conflict around large dam projects in the country for resemblances with the present.

Immediately after the dam was constructed, several locally mobilized protests erupted on uncompensated displacement and unkept promises. These voices of protest have continued since 1953. By the 1960s, the river was popularly proclaimed by peoples movements as 'Damodar not just the sorrow of Bengal but Bihar too' or *'Bihar Dooba, lekin Bangal Ubra Nahi'* (Bihar drowned but Bengal did not benefit). People in the affected areas had witnessed displacement in the upper tract and recurrent floods in the lower tract. Other issues raised were drought and irrigation problems experienced during the 1980s and the biased interest of the multipurpose DVC project only towards power generation.[72] Later movements in the 1990s in Dhanbad erupted on the grounds of pollution and unequal distribution of water resources.[73] While each of these demands had their own location politics, these issues became politically volatile easily mobilizing local residents, indicative of the discontent and disillusionment with what the DVC promised. Probably most dramatically put in terms of disappointment of the dam not serving its purpose of

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Indian Urbanisation and Planning: Vehicle of Modernisation, 1977, Tata-Mcgraw Hill Publishing Company Limited, p. 235.

[72] Hemant and Ranjiv (ed), *Jab Nadi Bandhi*, Jayprabha Adhyayan Evam Anusandhan Kendra, Madhupur, April 1991, p. 72

[73] Prabhat Kumar, *Damodar Ko Jeene Do: Damodar Nadi Ki Gatha*, Kisan Vikas Trust, 2005.

flood control is in the song of a scroll painting artist, *Dhukushyam,* who narrates the devastation that floods from the now dammed Damodar brought to the residents in the 1970s[74] (Sarkar, 1977).

Dhukushyam's Song

"Listen! O Listen! All of you people listen attentively
I have brought out a new book-"Description of the Flood"
(They say) in sal 1385 on the 14th of Bhadra
(Then) a calamity took place in the district of Medinipur
The water from the DVC comes with terrible swiftness
Sheep, goats, cows, calves
Come floating down
Floating down comes rui, katla, and many kinds of farm raised fish
I am unable to write all
There is no rice in my belly……
Men a hundred years old say
We have never seen the like.

It is only in the eighteenth century that the Damodar was infamously called 'the river of sorrow'. The first recorded flood was in 1730 when the Damodar was shifting its course southwards away from its original mouth at *Naya Sarai* or *Kansona Khal*. The mention of 'Kansona Khal' makes it evident that there had been considerable human intervention in channelling the river waters for agriculture earlier. Studies by Willcocks for instance state that these embankments were the evidence of a neatly crafted system of managing floods by traditional agriculturalists. Some reports say that these *khals* (canals) fell into utter ruin after the Maratha raids due to the agonies experienced by farmers and peasants who could not maintain them. After the entry of the British administration system, the maintenance of irrigation systems were transferred from the hands of the peasants to the British Army, and later the Irrigation Department, which was similar to the systems followed in England by the British Government at that time.

The lower tract of the Damodar being agricultural land (located

[74] Aditi Nath Sarkar, *The Scroll of the Flood*, 1977.

on the Bengal side), right up to the mouth of the river, there were embankments on either side, however these embankments could not always contain the fury of the river. As a palliative, the British Government in 1855 decided that the right side embankments be removed for a stretch of 30 km so that the waters are allowed to spill over and the left side embankments be raised to protect the 'vital interests' of the East Indian Railway, the Grand Trunk Road and the Calcutta Port.[75] Several investigations were made every time floods hit these parts. Was there a possibility of engineering flood control? With each recurring flood the plans proposed for dams and reservoirs became more expensive and the costs involved were far higher in comparison to the benefits of flood control.[76]

Eighteen years later, in 1913, a disastrous flood devastated the right side bank and raised considerable public outcry. However, it was only when a moderate flood, half the size of 1913 breached the left embankments in 1943, that shock and alarm hit the Government. The 1943 flood occurred during a critical period of the Second World War when the British were fighting the Japanese in Burma (Myanmar). The floods blocked off all lines of communication. This was also a period of famine in Bengal. It was at this time that the Bengal Government urgently formed a committee called the Damodar Flood Enquiry Committee in 1944 which would finally propose the construction of the Damodar Valley Corporation project. The Committee comprised the King of Bardhamman, Meghnad Saha among others. It is from here onwards that the plans for the DVC began to take shape. In the sequence of events and decision-making, the changing mindsets on nature is further clarified.

Scientists, the Emerging Nation and the DVC Dream

The DVC dream may be situated within the scientific imaginations of the nation-state in the 1940s. Several Indian scientists either

[75] Imperial Gazetteer: Bengal, 1905.
[76] Imperial Gazetteer: Bengal, 1905.

trained abroad or home-grown, quite unlike their previous generation began to emphasise 'science' and 'industry' as a necessary and important part of independent nation building. Scientists like P.C. Mahalanobis, M.N. Saha, S.S. Bhatnagar and Homi Bhabha through the National Planning Committee began to bring in the role that science would need to play within Industry. Thus, scientists played an active role in planning and development. Meghnad Saha was one among them who was considered to be a key proponent of multipurpose river valley projects in India.

Meghnad Saha: The Scientist and His Influence

Born on 6 October 1893, in the village of Seoratali in the district of Dacca, now in Bangladesh, Saha was the fifth child of his parents who depended on a meagre income from a petty shop keeping business. Saha's early education was beset with many hardships which were funded by a local medical practitioner Ananta Kummar Das. In his later years, he received a scholarship in the Government Collegiate School, Dacca where he was thrown out because of the boycott he was part of. The boycott was protesting the visit of the Bengal Governor to his school in 1905, during the partition of Bengal. He continued his education in a private run school and later stood first among all the East Bengal candidates at the Entrance Examination of the Calcutta University. He joined Presidency College, Calcutta, with a major in Mathematics and Applied Mathematics where his contemporaries included eminent scientists such as N.R. Sen, J.B. Mukherjee, J.C. Ghosh, P.C. Mahalanobis and J.C. Bose among others. He received the second position in the Examinations in Bachelor of Science, while S.N. Bose was awarded the first position in 1915. Saha and S.N. Bose continued as lecturers in Mathematics in the University College of Science under the leadership of the Vice-Chancellor, Ashutosh Mukherjee. It was here that both Saha and S.N. Bose finding it difficult to work under the Mathematics professor shifted to the Department of Physics, while C.V. Raman joined the Department later. Here Saha, who had pursued Physics only in his under graduation, worked ardently on the theory of relativity, writing

profusely about his findings and experiments in journals and making major contributions specifically in the area of astrophysics.

In 1919, Saha was awarded the Premchand Roychand Scholarship of the Calcutta University, and this made it possible for him to spend two years in Europe. He first went to London and spent about five months in the laboratory of Prof. A. Fowler. Later he moved to W. Nernst's laboratory in Berlin, and did some experimental work on the conductivity of heated caesium vapour to seek an experimental verification of the theory of thermal ionization. Saha is best known for his contribution to the theory of thermal ionization and its application to the interpretation of stellar spectra in terms of the physical conditions prevailing in the stellar atmospheres[77]. On his return to India, Saha worked for fifteen years in the Department of Physics at the University of Allahabad, making it one of the major centres of research activity during those years. He returned to Calcutta in 1938 as a Palit Professor of Physics, replacing C.V. Raman who returned to Bangalore as the Director of Indian Institute of Science. It was during this time that Saha spent substantial time on resolving the problems of refugees from East Pakistan, writing about floods and river planning. He had instituted the Indian Institute for Nuclear Physics and was ardently arguing for River Research Laboratories in the region. He was also made a formal member of the Damodar Flood Enquiry Committee where he argued for the adoption of the DVC project along the Tennessee Valley Model. Besides being a part of important institutional bodies such as the National Planning Committee where he was part of the sub-committees working on industry, river planning and irrigation, Saha also became an Independent candidate and Member of Parliament from Calcutta.

Saha emerges as this many-sided individual, a scientist, dissenter, an enthusiast in proposing some of the key industrial and river valley projects, a flood relief worker, proponent of Western sciences, supportive of native scientists, suspicious of private

[77] D.S. Kothari, Meghnad Saha: 1893-1956, *Biographical Memoirs of Fellows of the Royal Society, (Feb 1960),* The Royal Society, pp. 216-236. http://www.jstor.org/stable/769288 .Accessed 30.4.2012.

industry and foreign expertise, a believer in science for social justice, who had a scathing critique of the caste system. Being from an underprivileged background himself, it was his scientific abilities that helped him to strive forward. Some scholars say that it is, thus, no wonder that Saha had so much faith in Science. Besides Saha's scientific achievements, Saha was also keenly interested in development, taking science to the public and his emphasis on river planning. Thus, one finds copious notes written by Saha around the DVC, the problems of Indian rivers and river planning needs in the country.

Saha and the DVC

Saha had a personal experience of some of the catastrophic floods in the Damodar Valley area in Bengal and he often took active part in relief measures. As the General President of the 21st Annual Session of the Indian Science Congress Association held in Bombay in January 1934, he drew pointed attention to the serious problem of recurring disastrous flood prior to his appointment in the Committee in 1944.[78] Saha was also part of the sub-committee on irrigation and research under the National Planning Committee (NPC). Saha's ideas on river planning and the DVC found in his *Collected Works-Volume 2*, in *Modern Review* and *Science and Culture* edited by Santimay Chatterjee gives some inkling of how Saha through the perspective of science was propagating a whole new way of perceiving human-nature relationships, religion, science, society and the future of the industry.

Saha's opinions and arguments that built up to the argument for the development of the Damodar Valley Corporation may be arranged around his initial reactions to flooding as a relief worker; this led him to the realization that floods are not 'natural catastrophes' but man-made and due to the unplanned construction of civil works; after which he becomes an ardent propagator of the

[78] D.S. Kothari, Meghnad Saha: 1893-1956, *Biographical Memoirs of Fellows of the Royal Society,(Feb 1960),* The Royal Society, pp. 216-236. http://www.jstor.org/stable/769288 .Accessed 30.4.2012.

DVC as a solution to local as well as bigger national problems and finally to his emergence as a dissenter due to his disgust as a Parliamentarian that the DVC project is not being followed as planned due to a corruption in practices. Though one sees in Saha's motivations the primary need to be a good social citizen his solutions are mostly technocratic in its approach to the problems, and we can trace how he slowly builds the idea for the DVC.

Floods: The Hand of Man

During Saha's direct experience of floods in the Damodar, he explains that floods are not the 'freakish events of nature' or 'the Act of God' as propagated by the then British-led state, but in fact 'the Hand of Man.' Thus, in his understanding of the causes of the flood in North Bengal in 1922 for instance, he states:

"I approached the problem with an impartial mind and I find the conclusion irresistible that "the Hand of Man" must have a fairly large share of the blame. To put the matter in a nutshell, my considered opinion is that if the railways were provided with sufficient waterways, the loss of crops would have been slight, and the destruction of houses and property would have been greatly reduced."[79]

Though Saha agrees on the beneficial qualities of a normal flood, he tracks different incidents of 'catastrophic floods' and highlights in these catastrophes the unique situations which produced them. These reasons mainly centre around poor construction of waterways on the railway lines, and the railway lines acting as embankments with limited breaches. Saha blames the recurring Damodar floods on the erection of bunds and canals to safeguard the East Indian Railway, and agrees with the observations made by Willcocks who gave three reasons for the occurrence of floods, the railway lines themselves acted as embankments, the embankments on one side running parallel to the railway line was made extra

[79] Santimay Chatterjee (ed), Collected Works of Meghnad Saha: Vol 2, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, p. 177, p. 19

strong, and other parallel embankments such as the Eden Canal and District Board roads created the problem.[80] He observes that "the British Government made breaches in the embankments which was needed for irrigating the fields a criminal act. Thus while a safe highway for trade to Calcutta was maintained this was done at a terrible cost to people living in Burdwan division".[81]

In most of these flood situations, Saha concludes that the piecemeal building of bridges, railways and embankments have resulted in natural floods becoming catastrophic. Thus, there is a need to look closely at the natural hydraulics of rivers in the Ganga-Brahmaputra systems which are dynamic. Negligence in this aspect has led to a late response to the devastation that the rivers have brought in. He advocates thus for better river planning, river research laboratories, and periodic hydrographic surveys.

In a detailed article titled 'Flood' in *Science and Culture* in 1943, Saha elaborates four significant economic interests around the Damodar: the damages to the rural population residing in Burdwan, Hooghly, and parts of Howrah and Midnapore; the railway interests which are the arterial railway lines connecting the city line with Upper India which are constantly breached; the interests of coal miners in the Upper Damodar valley; and the threatened existence of the city of Calcutta due to the diversion of Damodar to the east and excessive discharge of water into the Hooghly lying to the north of the city, which thus calls for immediate action on the floods.[82]There is no mention of the agrarian communities in Chhotanagpore; the primary interest is around coal and the benefit of agriculturalists in Burdwan, Hooghly, and parts of Howrah and Midnapore.

[80] Santimay Chatterjee (ed), *Collected Works of Meghnad Saha: Vol 2*, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, p. 177, p. 51

[81] Santimay Chatterjee (ed), *Collected Works of Meghnad Saha: Vol 2*, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, p. 177

[82] Santimay Chatterjee (ed), *Collected Works of Meghnad Saha: Vol 2*, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, p. 177, p. 92-93

After highlighting these significant interests, Saha advocates for the recommendations made by Messrs Glass and Adam Williams in 1920, who recommended the construction of reservoir dams in the upper tracts of the river but the plan was obstructed by coal magnates operating in the area who suspected that the water may percolate and damage their mines. Saha debunks these claims and sings the virtues of the Aswan Dam over the Nile and the possibilities of triple cropping that the dam opened up in Egypt and continues to advocate that the Government must adopt radical measures to solve the problem. Thus, 1943 onwards we can see Saha slowly beginning his propagation of the DVC multipurpose project as a solution to the problem.

Arguing for DVC: The Temple of Modern India

Through the DVC project Saha wanted to meet the ends of large-scale industrialization and better manipulation of natural resources in India. Each of Saha's recommendations after flood incidents finally builds towards the DVC as a solution in his essays. His initial concerns start with countering the monetary losses due to floods, providing better irrigation research and planning for better 'manipulation of water resources', institution of hydraulic research laboratories to correct river planning and exploring capacities for reservoirs in upland tracts to store excess water of the Damodar, institution of a river physics laboratory to understand the changing course of rivers and countering the possibilities of cities such as Calcutta disappearing due to flood.

However, later his recommendations transform into proposals for new pathways to development. These broadly include the introduction of 'perennial irrigation' and hence reduced monsoon dependency in agriculture, rivers as convenient and cheap alternatives for transportation, and as providers of electrical power and efficient use of India's natural resources towards its industrialisation. Thus, the idea of the multipurpose dam, which would ensure flood control, provide irrigation, navigation facilities and electrical power is an attractive scheme given the

typical concerns of the young nation state in Saha's time.[83] By reorienting some myths, he builds a rationale for the DVC project. Saha counters the myth in the official version which states that floods are because of excess rainfall. This official version, he feels, takes away from the real causes of the incorrect construction of railway lines in the area.[84] However, interestingly it is to this very excessive rainfall that Saha refers to when he counters the myth that afforestation may help prevent floods due to excess rainfall, and thus instead cites a study on the TVA (Tennessee Valley Authority) which highlighted that deforestation helped to prevent floods.[85] Here, Saha refers to Glass's observation of the 1913 floods that due to excessive rainfall and weeks of precipitation it is not possible for the soft soil to hold, and hence the 'resistance offered by sea, dykes or terracing' may give way and can never prevent a catastrophic flood.[86]

Saha explains that 'India being an agrarian nation' was a convenient myth, placed by the colonizers who preferred to access raw materials and keep the Indian population as slaves and peasants. The import of cheap factory goods for the masses, from England, resulted in the industrial workers such as the blacksmiths, cobblers, artisans, metal workers in losing their jobs. Distressed with the loss of occupation, they took to agriculture resulting in majority of the population becoming peasantised[87]. Saha calls for

[83] Santimay Chatterjee (ed), *Collected Works of Meghnad Saha: Vol 2*, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, pp. 1-98.

[84] Santimay Chatterjee (ed), *Collected Works of Meghnad Saha: Vol 2*, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, p. 14.

[85] Santimay Chatterjee (ed), *Collected Works of Meghnad Saha: Vol 2*, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, p. 132; Klingensmith Daniel, *One Valley and a Thousand: Dams, Nationalism and Development*, Oxford University Press, 2007, p. 124.

[86] Santimay Chatterjee (ed), *Collected Works of Meghnad Saha: Vol 2*, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, p. 133.

[87] *Collected Works of Meghnad Saha: Vol 2*, 1987, Ibid., p. 463.

modernisation in agriculture with perennial irrigation and infusing industrial activity to absorb more workers to improve the standard of living.[88] Obviously, the DVC multipurpose project is part of this larger dream to booster industrial activity in the region.

The DVC dream, like other dams in the country, was projected as a 'temple of modern India' and though this is often credited to Nehru, Saha's debates on Science and Hindu religion give some indication of his positions on the need to infuse a scientific temperament within indigenous traditions which explain why the project got this popular adage attached to it as well. In a debate that Saha had with Anilbaran Roy on Science and the Hindu religion in 1939, Saha argues for scientific thinking as opposed to dogmatic religious worldviews: "We cannot build modern day spirituality on the experience of the human character, historical wisdom and world phenomena in ancient scriptures' he states. To him spiritualism of a modern kind based on scientific attitude could be established.

Planning and Industry

Saha focuses on the wealth of natural resources that India has which places it at par with several developed countries and suggests the energy index as the index for development rather than national incomes or per capita income focused on commodity production.

Saha draws on examples from Sweden, US and Russia to establish how national planning can be usefully and scientifically conducted. According to him, planning does not need to be political or follow any 'ism' but needs to be scientific and well thought out. He is frustrated with the way politicians were envisaging industrialization. For him, the process of industrialization is not about setting up 'matchstick industries and spinning wheels' referring indirectly to Gandhi's views here, but what he calls the need for the state to set up some 'mother industries' which include coal, power supply, production of metals, chemicals,

[88] Proceedings of National Inst. Sci, Ind 4, 23, 1938, *Collected Works of Meghnad Saha, Vol 2*, p. 67

etc. In 1938, he supports Netaji Subhash Chandra Bose, the then President of Indian National Congress, on the idea and criticizes some Industries Ministers in Congress Provinces for their myopic insights on industrialization. He states:

"To use a metaphor, the ministers are not attending to the root and stem of the tree but to the foliage. They forget that if the root is properly watered, the foliage will take care of itself. But at the present times, the Government exercise no substantial control over these key (or another) industries and have allowed them to fall under private hands. At any moment these small scale industries may be killed by corporations which control the mother industries."[89]

Praising Russia's enormous steps in development in comparison to Poland, Saha states that the difference in:

"Russia's pace in development 'lies in the fact that Russia has been inspired by a new philosophy of life, a will to conquer nature, and has been able to evolve practical plans to put ideas into practice."[90]

This probably puts the final picture to what Saha was viewing as human-nature relationships, though later in the article Saha acknowledges the evils in the modern capitalistic cum scientific world and the dual role that science can play and hence agreeing with Gandhi here:

"*The evils have arisen, because man gained considerable control over forces of nature, before he has gained moral control over his own self. The developing miracle of science is at our disposal to use or to abuse. But what should not be forgotten is the fundamental fact, that if popular leaders and popular governments are as intelligent and farsighted as Mr. Bose, if business men are more disinterested, and if we all work for social welfare and social justice, we can, with the aid of science, enter into an era of plenty and prosperity; where every man and woman in India can live in comfort…"*[91]

[89] Sci&Cult 4, 137, 1938, *Collected Works of Meghnad Saha, Vol. 2*, p. 387.

[90] Sci&Cult 3, 1937. Ibid., p. 378.

[91] Sci&Cult 4, 137, 1938, *Collected Works of Meghnad Saha, Vol. 2*, p. 387.

Located within this scientific temperament are also his views on the 'medieval mind' and caste. In his criticism of the education system, he states that the faulty education system actually seeks to perpetuate the 'medieval mind' which fosters 'competitive communalism' within India and 'competitive nationalism' in the free countries. Infusion of scientific temperaments may help to combat medieval mind and there needs to be a greater dissemination of the advancement of science for a wide public to inculcate the scientific temperament in the country he opined.

Caste is an impediment to development for him. In his exchange with Anilbaran Roy on Science and the Hindu Religion, he states:

"For ages India has not produced any new process in weaving, ploughing, architecture, metallurgy and warfare. The reason is we have always looked down upon using the hand. Thinking was meant to be superior hence the hand and the head have lost all connection."

Thus, in Saha's views on development is this heady mix of social justice and plenty for all which may be answered through natural resource exploitation and heavy industrialization and scientific revolution which will take the nation onto a promising path ahead.

Dissent on the Dream

Nehru and other scientists were in agreement with Saha's views on industry and science. It is only in the 1950s that Saha's views start to diverge with Nehru and other scientists such as Bhabha where Saha feels that private interests should be kept out of planning exercises and scientific endeavours. However, the only national dissenter amidst the optimism that ruled in the 1940s and amidst the scientific unity in thought was Gandhi. While he warns Nehru about the 'evils of industrialism' stating that industrialism is inherently capitalist and these evils may not change by socializing industrialism. Gandhi also raises an insightful ecological dilemma in his opposition to large-scale industry, which says:

"God forbid that India should ever take to industrialism after the manner of the West. The economic imperialism of a single tiny island kingdom

(England) is today keeping the world in chains. If an entire nation of 300 million took to similar economic exploitation, it would strip the world bare like locusts.'[92]

A Rebel Engineer

Unlike the open dissent against large hydropower projects today, there was little public dissent on the DVC particularly when it was planned. Though there were these larger debates on industrialization and later protests emerged as reactions to the impacts of the dam by those displaced, or left uncompensated, there was very little debate on the DVC itself. Among the minority of voices to be found opposing the project in India was Kapil Bhattacharjee. Ashis Nandy carries a detailed commentary on Kapil Bhattacharjee which traces Bhattacharjee's troublesome life and the 'hostile milieu' within which he had to survive for having critiqued the dam in an atmosphere of great optimism.[93]

Bhattacharjee, born in a lower middle class Brahmin family in Hooghly district, spent a considerable amount of his childhood in Katihar, Bihar. He completed his civil engineering at the Bengal Engineering College, Shibpur, and graduated in 1928. He spent a considerable number of years in Paris where with the support of a patron he opened up an engineering firm in France and also came under the influence of a French expert on hydrology and water management. Bhattacharjee later returned to India and worked in different routine jobs and regularly published his essays in Jugantar. In 1939-40, Bhattacharjee 'drifted closer to Marxism where he regularly published his essays in Svadhinata, a Bengali newspaper which served as the official mouthpiece of the Communist Party of India. In the later years of his life, "after witnessing the ruthlessness of law enforcing agencies to root out Maoist militancy (in the seventies) in West Bengal",

[92] Young India, 12-11-'31, p. 355.

[93] Nandy Ashis, "The Scope and Limits of Dissent: India's First Environmentalist and His Critique of DVC", *Bonfire of Creeds*, Oxford University Press, 2010, pp. 394-419.

Bhattacharjee spent most of his life devoted to human rights and was the chairperson of the Association for Protection of Democratic Rights (APDR).[94] Nandy states that Bhattacharjee late in his life becomes a "disappointed, silent, somewhat sullen person who had also come to regard his environmental activism as a futile misconceived project amidst the widespread public rejection of his position on large dams in this heady atmosphere of optimism".

Reasons for Opposition

This section assesses his compilation of writings titled *Swadhin Bharate Nod Nodir Porikolpona* (River Planning in Independent India). This compilation was published in 1986 by Kalam publishers and the three essays specifically detailing out his views on the DVC include Swadhin Bharate Nod Nodi Porikolpona written in 1966*, Damodar Porikolponar Sangskar Chai* (Demand for a Reforming in Damodar Plan) written in 1953 and *Damodar Upotakya Porikalpona o Poschimbonger Biporjoy* (Damodar Valley Planning a disaster for West Bengal) written in 1959.

In the essay written in 1953, Bhattacharjee gives several reasons for his insistent opposition to the project for the last six years. In this essay, he exposes a set of politics, which he feels is governing the planning of the project, and raises some questions thus, on the development agendas being promoted through the idea of the DVC. He agrees with Saha stating that it has been a colonial conspiracy to reduce India to an agrarian state, which will continue to provide raw material, and he is not opposed to the idea of the need to support the reviving of industries in the country, and the possibility of the Damodar Valley Project changing this situation. However, his opposition comes from the fact that the project was not planned in participation and in tune with the views

[94] Nandy Ashis, "The Scope and Limits of Dissent: India's First Environmentalist and His Critique of DVC", *Bonfire of Creeds*, Oxford University Press, 2010, p. 402.

of common people. There are some important insights he gives which again bring in the other engineering view towards nature.

While both Saha and Bhattacharjee are concerned about development and industrialization and agree that the British tried to confine India as an agrarian nation and raw material provider, and neither necessarily conform with Gandhi's views on industrialization, the basic difference between Saha and Bhattacharjee lies in the propagation of people based or state centred technologies in the visions they see for development in this area around the Damodar. Saha tries to provide an objective analysis to all the scientific developments and decisions while Bhattacharjee makes a conscious attempt to expose the political motives (which he calls colonial and capitalist conspiratorial motives and motives of the exploiting class). While Saha sees the justice in science in its ability to ensure provision of 'plenty for all' through scientific revolutions, research and economic activity, Bhattacharjee assumes that decisions of justice is implicit in the very application of technologies and their impacts and hence calls for a reconsideration of the way in which the Damodar Valley Project is envisaged.

Revisit the Colonial Construction of the River

Bhattacharjee points out that the British had failed to recognize the 4000-year-old ancient irrigation system as the craftwork of the agriculturalists themselves. While Saha credits these problems to the railway lines, Bhattacharjee calls for a relooking at traditional engineering and architectural knowledge in the country and explains that the problems arose in the area in the eighteenth century. He emphasizes the need to make a distinction between channeling of river waters for agriculture and building of 'embankments' for flood control.

He cites the observations of Dr Bentley, Willcocks and others on ancient irrigation practices in Bengal that were 4000 years old and similar to practices followed by the Babylonian and Sumerian civilisations. The floods brought free irrigation for peasants and an added income from fish in these parts for which they paid no taxes.

These intricate systems fell into decay during the Maratha raids in the eighteenth century in the Damodar area. After the institution of the Zamindari system under the British, these river channels got mistakenly assumed to be embankments for flood control and the heights of the low embankments were raised. The rights over these embankments and over the waters were transferred to landlords and making breaches in the embankments a criminal act. The British had failed to realize that these embankments and channels were in fact the craftwork of the agriculturalists and only replicated the systems in their own country where irrigation systems were state run.

Bhattacharjee disagrees with Willcocks' recommendations that are only limited to reviving these waterways for agriculture, he feels that Willcocks fails to realize that society and civilization has moved far ahead from these ancient times, and industry and commerce is an important part of the economy as well and in his recommendations lie the coloniser's wish to keep the nation dependent on mainly agriculture.[95] Unlike Bhattacharjee, when Saha discusses Willcocks' observation on ancient irrigation practices in Bengal he basically establishes how while he supports his idea of restoring old waterways, he also recommends that this should be backed with research through a River Physics Laboratory and done less haphazardly in the current age of science.[96] But Bhattacharjee however holds commerce and industry as important but something that must be divorced from imperial control.

The Damodar Project: Non-Participative and Imposed

In Bhattacharjee's opinion the project is largely an 'imposed and non-participative one' and a conspiracy of the capitalists who used the cries of people affected by flood in these districts as a great

[95] Bhattacharjee Kapil, "Damodar Parikalpanar Sangskar Chai" *Swadhin Bharate Nad Nadir Porikalpana*, Ashok Kumar Ghosh, 1986, pp. 24-25.

[96] *Collected Works of Meghnad Saha*, *Vol 2*, p. 53.

opportunity.[97]The project was conceptualized by scientists and experts who have little idea about the daily lives of people residing in these parts (here he emphasizes on the farmers of Hooghly, Howrah and Burdwan and not the upland farmers)[98]. It is evident that this essay is being written when the fertile lands of some of the project affected farmers are being acquired in these three districts of Hooghly, Burdwan and Howrah for canal constructions. These areas are triple cropped rich fertile lands and an area, which gets adequate rainfall and has several traditional water harvesting mechanisms through which prosperous agriculture may continue he observes.[99] In the current scenario, fresh alluvial soil is deposited by the flood on these farmlands which will be stopped once the project comes in and Bhattacharjee argues on behalf of the farmer wondering on whether the farmers will be able to afford the chemical fertilisers that will be sold by the Sindri fertilisers factory once they lose access to this *pali* (fertile alluvial soil)? [100] He, thus, calls for justice to the people who suffered severe loss and devastation from floods caused by the raising of the left embankments of the railway lines, who should be compensated with the crores of rupees being spent on British and American governments and engineers for the construction of the project.[101] He is also not convinced of whether the ordinary man can really consume the expensive electricity that the DVC promises to provide. He observes that in spite of the increase in availability of electricity in Calcutta most of the ordinary men still survive on earthen lights.[102] He establishes that the region gets adequate rainfall and the flood waters bring in a huge pool of fish stock which acts as additional income for the farmers here.[103]

[97] Bhattacharjee Kapil, Ibid., 1986, p. 16.

[98] Bhattacharjee Kapil, "Damodar Parikalpanar Sangskar Chai" *Swadhin Bharate Nad Nadir Porikalpana*, Ashok Kumar Ghosh, 1986, p. 15.

[99] Bhattacharjee Kapil, Ibid., 1986, p. 16.

[100] Bhattacharjee Kapil, Ibid., 1986, p. 26.

[101] Bhattacharjee Kapil, Ibid., 1986, p. 21.

[102] Bhattacharjee Kapil, Ibid., 1986, p. 25.

[103] Bhattacharjee Kapil, Ibid., 1986, p. 26.

While Saha feels that the TVA could easily be replicated to the Damodar Valley, in Bhattacharjee's opinion the "blind copying of the Tennessee Valley Project" will create a lot of problems. His primary concern is that the construction of the project will lead to a destruction of the Calcutta Port which in turn will completely hamper the industrial and commercial activities of the entire eastern region.[104] The floods brought in by the Damodar help to clear the mouth of the Hooghly and this in turn helps the ships to navigate in the area. It is evident from his writings that a Committee was set up at that time just to enquire into the degree of destruction of the Port, however, Bhattacharjee is not satisfied with the observations of this committee.[105]

His objections to the project are more to do with faulty planning and his recommendations include alternative development visions through the dam. He believes that alternative livelihoods gained from fishing should be encouraged; that radical changes need to be made and hence the Maithon and Panchet dams work should be stalled for the next five years; and instead the embankments should be repaired. Adequate scientific research should be conducted on the Calcutta Port and on ways of maintaining the same. Once the project begins to generate hydropower, water transport or navigation should be encouraged so farmers may access the markets on their own. Though Bhattacharjee is in disagreement with the DVC project he is not too distant from the large number of Indian scientists, engineers and technocrats of his time. He is in agreement with them on the need for industrialization. In fact, in his alternatives he believes that the river acts as a good trading route between farm villages on its banks and is an easy access for farmers to the market. He is instead calling for better development of water transport to improve domestic trade. Like Saha, Bhattacharjee too fails to notice the concerns of the displaced communities in the upper and middle valley tract.

[104] Bhattacharjee Kapil, Ibid., 1986, p. 16.
[105] Bhattacharjee Kapil, Ibid., 1986, p. 18.

The Aftermath

The experience around the DVC shows that in the 1940s, the nation's new elite was excited by the freedoms in the post-Independence period. America and Russia were the two economies that they looked towards for solutions. They stressed on scientific thinking and rationality being the need and hour of the day like the rest of the world. Modernizing was very important for this nationalist project and yet within these plans of modernity are situated ominous silences which vocalise themselves later in the 1970s and 1980s around development plans. The main promise to people around the building of the DVC was flood control.

Both Saha and Bhattacharjee failed to see the impacts on the people of Chhotanagpore who resided in the upper tracts of the Damodar. There are no clear estimates on how many people got displaced but unofficial estimates say that the number was at least 1, 50,000.[106] People lost their land and livelihoods and floods continued to affect the lower valley in Bengal after its construction.

After the development work started, Saha became more and more of a dissenter, in the 1950s. In an article titled Multi-Purpose River Scheme carrying the Lok Sabha debates in his Collected Works, it is clear that Saha had begun to question the authorities on corruption and money laundering during the construction of the Konar Dam where he alleges that a Swiss Company, the Greuner Brothers has cheated the Authorities.[107] Klingensmith mentions that Saha's imaginations of the "TVA model were not fully correct and he sought to implement in India what was partially a fiction in the United States."[108]Though the inspirational concept of multipurpose river valley projects shifted the discoursefrom

[106] Nandy Ashis, "The Scope and Limits of Dissent: India's First Environmentalist and His Critique of DVC", *Bonfire of Creeds*, Oxford University Press, 2010, p. 398

[107] Santimay Chatterjee (ed), *Collected Works of Meghnad Saha: Vol 2*, Saha Institute of Nuclear Physics, Orient Longman, Calcutta, 1987, p. 177.

[108] Klingensmith Daniel, *One Valley and a Thousand: Dams, Nationalism and Development*, Oxford University Press, 2007, p. 154.

'embankment protection' to the provision of hydro-electricity, multipurpose river valley development (MPVRD) was floated as an idea in the US to cater to the need for the state to provide cheap electricity to encourage industrialists to invest in certain regions and break the oligarchy among a few private utilities providing electricity. The US states conjured up the MPVRD which would play the twin purpose of provision of hydro electricity and flood control as well as provide employment for workers in the US after the Great Depression of 1929.

The US was, thus, overcoming an economic crisis where several sectors had suffered. An ecological crisis, like the Dust Bowl winds, had also affected the agricultural sector which had contributed to the economic crisis. Kligensmith clarifies how the TVA model gets commodified and replicated to various parts of the world and gives birth to multipurpose river valley projects in several other countries. The projects were less about engineering and more about satisfying the political constituencies motivated by economic interests. In fact, the difference in operationalizing the project in India and the US was that in India it was only seen as a science and engineering issue, with committed scientists and engineers at the helm of issues, who did not have the same political motives as the designers of the TVA and, therefore, were unable to create a similar autonomous working structure of the DVC like the TVA. Besides, the costs for engaging engineers from the US were indeed dear, given the fact that India was a newly independent nation. This is pointed as one of the reasons for the failure of the Corporation to buy in adequate support in completing the project. But on the other hand, we may note that the TVA in itself was borne out of a response to ecological and economic crisis in the USA and the need to create employment rather than a path-breaking scientific innovation.

Bhattacharjee wrote an essay in 1959, almost a decade after the conceptualization of the DVC that catastrophic floods have increased as seen in 1956 and 1959. In his article in 1959, on a rather sarcastic note Bhattacharjee writes, after a flood in 1959, that the DVC authorities have been forced to declare publicly that "the DVC never promised that by building dams in the upper

tract, floods would be controlled in the lower valley" anyway.[109] Bhattacharjee elaborates that Voorduin the main architect behind the DVC never promised that the building of dams would necessarily manage to prevent floods in the lower reaches. In case of high precipitation the Maithon and Panchet dams would be forced sometime to release the waters.

Till date the problems of flood continue to exist with additional problems of siltation have also risen. In the 2013 monsoons, several deaths were reported due to floods in the DVC catchment area. While the Jharkhand and West Bengal government continued to blame each other[110] on warning systems, neither of the states have been willing to use newer technologies to assess and predict the real situation. Nor have they owned up to the trajectory of irresponsibilities[111] and corruption in running the project, the various ways in which they have shirked or transferred responsibilities, either refusing to work with the corporation or divesting certain responsibilities away from the corporation. The lack of unity and numerous centres of authorities has only led to further inaction affecting the local people. While the DVC was meant to be managed by a tripartite system of two states and the Centre, the vision of each state vying over resources superceded the interests of the entire basin. Today, the total hydroelectric power generation as per Central Electrical Authority (CEA) 2010-11 data shows a drop in power generation by 79.43 per cent in the last 26 years.[112] Floods have continued to affect lowland farmers over the years till date.

[109] Bhattacharjee Kapil, "Damodar Upotyokar Parikalpana o Poschim Bonger Biporjoy" *Swadhin Bharate Nad Nadir Porikalpana*, Ashok Kumar Ghosh, 1986, p. 33.

[110] MamataBlames Jharkhand DVC for 'man-made' floods, Express News Service, October 17, 2013.

[111] Blame it on Hercules not Mortals, *The Telegraph*, October 19, 2013.

[112] www.sandrp.in

Violent Geographies: The Red Corridor and Gangster Capitalism

"It is just after 6 am that Kujama village is waking up… underneath fire is raging turning high quality coal into ash creating voids. Above, not a single stray of green grass can be seen.

Kujama a village of about 400 households is situated in northeastern India, right at the southern tip of Jharia, a sickle shaped belt of very high quality coal…

Among the numerous casualties in the area is Gayatri Devi's granddaughter. As her husband listens silently in the shadows of the mud courtyard, Devi shares her memories of what happened to her granddaughter on 19 September last year.

It was 6:45 in the morning and she went to relieve herself in the fields. She fell into a small pit and then I heard a lot of shouting and cries from the village. I went there and heard that my grand daughter had fallen inside this pit. What I saw was horrendous. There was a lot of smoke coming out and the smell was not that of coal burning. It was something else burning. It took me minutes to understand: it was the smell of my burning granddaughter."

(From a web documentary by Bombay Flying Club)[113]

The burning Jharia coalfields are yet another significator of loss.

It is again this devastating and burning 'spatial remain' that takes us back to the early eighteenth century of the history of coal in the region.

The Industrial Revolution in Britain is closely intertwined with

[113] http://www.bombayfc.com/wasteland/ acccess date 27.12.2016

the rapid transformation of the coal belt along the Damodar River Basin. In this moment of Industrial Revolution, 'the coal rush' formed the main spurt of trade and industrial activity, a crucial link where the Damodar River Basin gets linked to global politics.

As shared earlier, and by many English writers who were visiting India, several legends and comical stories exist around how those living in rich coal belts really did not know the real use of coal. While they were aware that it was a stone that burns, its potential as a fossil fuel was unknown. "By 1830 Britain produced four-fifth of the world's coal, and by 1848 it produced more iron than the rest of the world put together."[114] The British had to put in extra hard efforts to work with speed across the seas. Steam ships became a revolutionary invention for sea travel. It is amidst these influences that we find at the port of Kolkata new rumblings among local elite. The first recorded account of coal mining is in 1774 when some shallow mines were dug near the township of Raniganj. The English firm given the contract to supply coal to the government was Heatly, Summer and Redferne. This was concentrated around Raniganj mainly. The British took less interest in these efforts hence explorations took time. In 1814, after nearly 40 years, the Government deputed an expert, Rupert Jones to usher coal mining in Raniganj area. The only rivals were the Chinakuri mines but coal from Raniganj that was extracted was much more than that from Chinakuri. The Santals worked the Raniganj mines with crowbars, which caused a lot of wastage, while the Bauris from Chinakuri used picks. However, it was impossible to get the Santal miners to change this manual method of extracting coal.

By 1820, some more coalmines started operating near Chinakuri, Damulia and Barakar. Due to a lot of legal issues and hence smaller coal mines amalgamated to form the Bengal Coal Company. This dominated the scene for a long time till in 1845-1860 a scientific geological survey was conducted in the area.[115]

[114] Barbara Freese, *Coal: A Human History,* Arrow, 2006.

[115] U.C. Mehta/P.K. Mishra, *Damodar Basin Through Ages* (An Environmental Approach), MM Publications, 1995, pp. 12-14.

It is evident that the main interests of the local elite, was the need to compete with the international market and prove their economic potential competitive to the British merchants. Thus, while considerations of shortage of resource pushed the British to use coal, for Indians it was always a struggle to leverage its natural resources in the competitive market in the correct way and struggle to get a fair price for it, fair incentives and investments so as to compete with British merchants. It is obvious then, that extraction was careless and exploitation much more in the mines, indigo plantations and sugar factories, as well as wastage.

The railway lines played an important role in opening up the Jharia coalfields for mining. In 1858, Borrodaile and Company applied for a mining lease for the area of Jharia estate. This was the onset of coal mining in Jharia coalfield. Systematic operation of Jharia coal mines, however, started around 1890. By that time the East Indian Railway undertook a plan to develop a railway link in Jharia area. In 1895, Katras, Kusunda and Patherdih were connected by railway lines and this considerably helped the mining industry of this area to take a dominant position. In 1893-94, nearly fifteen thousand tonnes of coal was produced in Jharia coalfield, which touched a million ton mark in 1896. The haphazard exploitation of this belt has however resulted in numerous problems. There was a sharp decrease in the production of coal in the Damodar basin over the years. Pre-Independence the production was very high, in 1901 the Damodar basin coal belt made a total production of 92 per cent of total annual production in India, this continued till 1950 where the share of production fluctuated between 96 per cent and 91 per cent. Post-Independence coal mining also took place in other places, it shrank from 65 per cent to 52 per cent from the 1970s to 1980s to 31 per cent in 1993[116] (Mehta & Mishra, 1995).

In Jharia, the first colliery fire was reported in 1916 in Bhowrah colliery. At present, 60 coal mine fires have destroyed millions and tons of bituminous coking coal in the past and blocked large

[116] U.C. Mehta/P.K. Mishra, *Damodar Basin Through Ages* (An Environmental Approach), MM Publications, 1995.

quantities in the periphery. Out of 450 sq km of Jharia coalfield-BCCL (Bharat Coking Coal Limited) accounts for about 258 sq km and about 18 sq km has been due to mine fires. BCCL records indicate that 62 per cent are due to spontaneous combustion and 38 percent due to accidental and other causes (Singh and Munshi).[117] Coal mining rapidly increased from the early years in 1774 from a total production of 400 tonnes in 1815 to about 2.8 lakh tonnes in 1860 when nearly 50 collieries were working in the Raniganj coalfield. During the nineteenth century the Raniganj field was the most important producer of coal in India, but the importance of Jharia slowly increased and exceeded that of Raniganj by 1906. Lt Harryngton in 1839 mentioned the occurrence of abundant coal in Jharia. In fact, in the last decade of the nineteenth century as the Grand Chord Line of the Eastern Indian Railway in 1907 was being built, there was a 'coal rush' between 1907-1908. There were as many as 50 companies registered in one year in 1908 with a record of at least 14 companies registering on one or every other day. Given this rush, the demand exceeded supply leading to a coal famine of sorts, "where anything that was black seemed to sell as long as it would burn". In this rush, old abandoned places were reopened regardless of quality. In terms of ownership, many Zamindars handed over leases to the shrewd entrepreneurs who knew the value of coal much more than the Zamindars, sometimes leases were given till perpetuity of 999 years. As the awareness grew, lease periods became shorter and the areas smaller, but with the period of the 'coal rush' the Jharia coalfields were crisscrossed by a complex mesh of middlemen between the Zamindar and the producer and range of intermediaries in this process of transfer and share rights. There were other competing interests where local coal producers had to fight British interests which largely controlled the railways and hence coal wagons for the transportation of coal and in most cases *Indian* collieries suffered from the paucity of the supply of railway wagons.

[117] A.K. Singh, M.P. Singh, T.N. Singh and P.L. Munshi, *Exploring the Causes of Jharia Mine Fires: An Integrated Approach,* Central Fuel Research Institute/ BHU/CMRI and BCCL.

Despite these obstacles the entire Bengal-Bihar field was studded with small coal mines, and numerous leases giving rise to chronic problems where the diversities and differential characteristics were not studied properly, thus leading to chaotic production, collapses, fires, floods, explosions and problems of safety in coal mines. Through its development the coal industry evolved three structural forms, captive collieries owned by consumer interests such as the railways, iron and steel factories which represented vertical integration, collieries controlled by Managing Agents also financed and operated with other industries, private collieries operating in small units and representing individualistic enterprise. During the years of the *First World War,* the Jharia and Raniganj fields continued to supply large quantities of coal to the government specifically for military purposes. Given this situation of requisitioned coal being earmarked for transportation purposes, the prices of non-requisitioned coal increased rapidly irrespective of the quality of the coal available. The war meant addition of joint stock companies, where the numbers increased from 140 to 236 companies from 1914 to 1920, the biggest coal companies at this time were the Burrakar Coal Company, the Bengal Coal Company, the East Indian Coal Company and the Villiers Colliery Company. New laws and systems were put in place, in 1919 where a Coal Controller was appointed to restrict the closing and opening of mines, and in 1914 the Bihar Mining Settlement Act imposed a levy on mine owners and royalty receivers to finance the functioning of the Jharia mines. Post-1920, the *war time prosperity* seen by the mines, slackened bringing the industry into a period of depression at this point. There was a recovery in the industry between 1943-46 again due to war and because of domestic demand for coal had increased and concessions were now available on rail freight and port terminal charges.[118]

We, thus, find that by 1943 the Raniganj and Jharia coalfields had become a mature coal-producing belt. Both these coalfields had also seen the vagaries of the industry, and due to fluctuations

[118] A.B. Ghosh, *Coal Industry in India: An Historical and Analytical Account Part 1 and 2* , Sultan Chand and Sons, 1977.

been vulnerable to indiscriminate mining, called *slaughter mining,* especially during the period of depression. When mines were nationalized in 1973 several years later, it was with the objective of reorganizing and restructuring the coal mines in the back drop of the then existing unsatisfactory mining conditions, violation of mine safety laws, industrial unrest, reluctance to mechanise and the need to meet long range coal requirements. Thus, under the Coal Mines Ordinance, 1973, 711 non-coking coal mines nationalized under the Coal Mines Authority Limited (CMAL) in 1973, later Coal India Limited (CIL) merged from three entities to form five subsidiaries, Eastern Coalfields Ltd (West Bengal and Jharkhand), Bharat Coking Coal Ltd. (West Bengal and Jharkhand), Central Coalfields Ltd (Ranchi), Western Coalfields Ltd (Nagpur) and Central Mine Planning and Design Institute (Jharkhand). In 1985, there were two more subsidiaries, the Northern Coalfields Ltd. (Madhya Pradesh) and the Southern Coalfields Ltd (Chhattisgarh), while in 1992, the Mahanadi Coalfields Ltd. (Orissa) was also added to this group. Captive coal mining was allowed for private captive consumption 1993 onwards (Coal Directory of India, 2004).

Today, Jharia remains one of the single most hazardous sites in the world. Among recent studies done on the Jharia coalfields is the chronic problem of a lack of economic diversification. There is now scope for no other occupation besides mining in these parts. In this understanding of loss, besides Jharia other parts of the Damodar Basin also exhibit a similar problem. Today the region is caught between two kinds of polarities, armed resistance and gangster warlordism on the use of natural resources. The following section looks at contemporary narratives and place making imaginations.

Violent Geographies: The Red Corridor and Gangster Warlordism

The upper and middle Damodar Valley tract has experienced symbolic violence through circulating images in the media in two different ways in current times. The Valley lies in what is called

'the Red Corridor', a zone of internal conflict, where a civil war is raging between the Maoists and the State and the second is its association with being a coal belt populated by the coal mafia and gangsters. Thus, we find in the same area a continuum of violence of armed conflict and gangster warlordism. I try to browse through some media articles and a popular gangster Bollywood film released in 2012, *The Gangs of Wasseypur I and II* which relates an inter-generational story of coal mafia or gangsters based in Wasseypur, a small town in Dhanbad district in the middle valley tract of the Damodar and contrast this with the narratives of local human rights activists and writers and intellectuals such as Gladson Dungdung's book in English, *Whose Country is it Anyway?* and Nirmalangshu Mukherji's book titled *Maoists in India: Tribals Under Siege*. Through the reading of these narratives, I try to understand the co-relations between forms of violence and resource conflicts and the commodification of the Damodar Valley as a place and space of abundant resource.

Simon Springer states, "Whether we recognize a place as 'home-like' or 'prison-like', a 'utopia' or a 'killing field', is dependent upon the stories-so-far to which we have participated in forming that place, but equally, and indeed wholly for places we have never visited, the imaginings that have been circulated, rendered, and internalized or rejected, inform our cartographic understandings. The experience, threat, or fear of violence in a particular place is perhaps the single most influential factor in our pronouncements of space." There are, thus, numerous ways in which violence is 'rationalized' and a space is carved into conceptual partitions and enclosures between 'the same' and 'the Other', which configure 'our' space of the familiar as separate and distinct from 'their' unfamiliar space that lies beyond. Springer calls these practices 'virulent' or those imaginative geographies that invoke a profound sense of hostility and malice, which may thus produce tremendously harmful effects for those individuals cast within them. Through the simplicity of the essentialisms they render, some imaginative geographies which may be readily and uncritically accepted, thus making them highly infectious and easily communicable among individuals subjected

to their distinct brand of 'common sense', and in this way they operate as symbolic violence.[119] In his paper, "Violence Sits in Places? Cultural Practice, Neoliberal Rationalism, and Virulent Imaginative Geographies", he emphasizes on questioning the how and where of violence. "While violence is clearly mediated through and informed by local cultural norms, it is equally enmeshed in the logic of globalized capital," he states. Springer calls for the need to challenge colonial geographies whereby geographers may reinterpret places or "Orientalist accounts that bind violence to particular peoples, cultures, and places, as was the mandate of colonial geography… and instead initiate a more emancipatory geography that challenges such colonial imaginings by questioning how seemingly local expressions of violence are instead always imbricated within wider socio-spatial and political economic patterns."

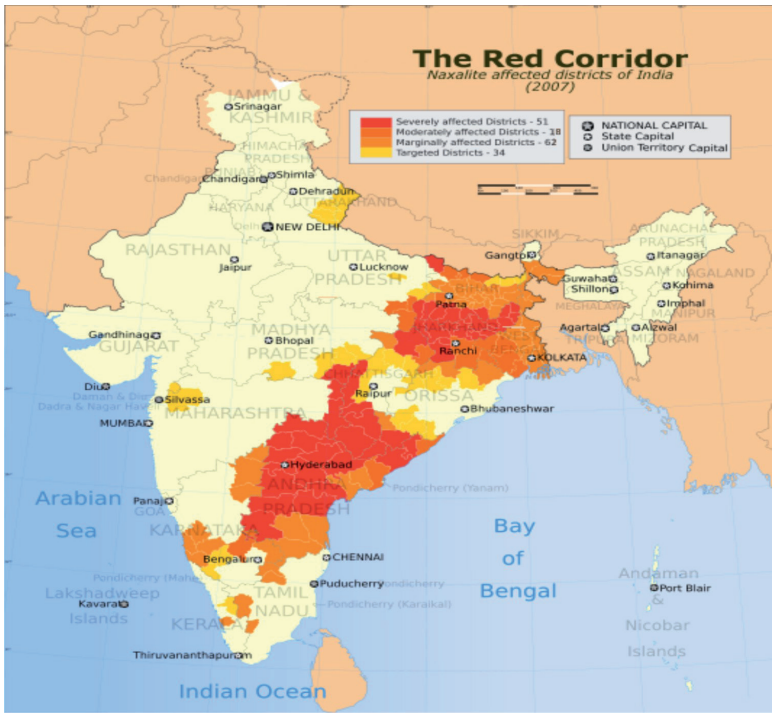
Derek Gregory points to the need for critical geographic imaginations which may illuminate the spaces through which terror, fear and political violence are enacted; of the distinctions that are made between 'wild' and 'safe' spaces; and the popular geographical imaginaries which reproduce a "public through an assiduous dissemination of prejudice". He theorizes that the "way space is identified draws critical boundaries between identities, self and other". This identification is also linked with knowledge and power. While the causes or the forces of violence may be de-centred, scattered, diffused or dispersed, it is in these reported pockets that they seem heightened. Very often these pockets are considered to be 'primitive', 'backward' or 'least developed'.[120]

Typing 'The Red Corridor' on a wikipedia search throws up a map which includes the different states and districts as Naxalite affected districts of India (2007), and defines the Red Corridor as "a relatively underdeveloped region in eastern India that has

[119] Simon Springer, *Violence Sits in Places? Cultural Practice, Neoliberal Rationalism and Virulent Imaginative Geographies*, Political Geography 30, 2011.

[120] Derek Gregory and Allen Prad, *Violent Geographies: Fear Terror and Political Violence*, Routledge, 2007.

Naxalite communist militant activity". In most media reports 'Naxalite', 'Maoist', tend to be interchangeably used in a blanket manner, though the histories of each of these terms have different connotations and legacies as well as the relevance of the usage of these labels also have a set of time frames in the evolution and dissolution of these resistances which the contemporary media tends to overlook.



A scrutiny of some leading news dailies in the country reveals the intensity with which 'Maoist violence' is reported on the whole. Typing 'Maoists'[121] in the search box of five online editions of

[121] Though distinctions are made between Maoists and Naxalites, the term Maoist and Naxalite is used interchangeably by the media. The most well-known Maoist party in India, is the Communist Party of India(Maoist), which is a banned party in India though there are several

regular English periodicals and magazines in the country clarifies the high visibility of the Maoist issue and 'The Red Corridor' in the media. Most of the articles relate to incidents of death and many of them are from Jharkhand. However, most often these are 'obscure' accounts of Maoist activity on the ground, (as substantiated below), which institute an overall vulnerability to the entire region.

If we simply trace the media reporting on Maoist violence and disturbance in Palamau and Chhatra districts for a period of eight months, February to September 2012, it is easier to understand what these narratives tell us and how they build up. An article in February 2012, titled "Splinter Cells and Chaos Theory"[122] (*Tehelka*) is dotted with several incidents of deaths in the regions of Palamau and Chatra. The report starts with a killing incident of a Manager from Reliance Power, the death of an MGNREGA activist reported some months earlier which is mentioned again, death at a village fair due to a clash between rival rebel outfits, and in shoot outs in the forest area between rebel outfits and Maoists.

The main purpose of the article is to however report the collapse of all security systems in the area and the need to revisit the boundaries delineated between Maoists, Police and Civilians which have changed as several new rebel outfit groups such as Tritiya Prastuti Committee (TPC) and Jharkhand Prastuti Committee (JPC) and PLFI (Peoples' Liberation Front of India) have emerged and engaged in killings but seem to fall through the cracks of the police system. It does not fail to highlight that the caste backgrounds of the members of the Maoist Coordination Centre (MCC) comprise the Yadavs and the TPC comprise the 'lower caste community' of Ganjus. It seems that several rebel

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smaller groups working with the Naxalite ideology of armed rebellion. The CPI (Maoist) is an underground party which aims to overthrow the government of India through peoples' war and armed rebellion.

[122] Kunal Majumdar, "Splinter Cells and Chaos Theory", *Tehelka*, February 4, 2012, Issue 5, Vol 9. http://www.tehelka.com/splinter-cells-and-the-chaos-theory/

outfits were earlier floated by the police to target Maoists but these have now turned into 'criminal armed groups'.

The report on the death of the MGNREGA activist clarifies that there is a tension between Maoists and social activists as well. As the Maoists, police and rebel groups fight for power and dominance over territorial control, the stretch between Ranchi and Khunti through Rania a contested area for those entities vying for territorial control, has turned into a 'killing field'.[123]

Three months later, the same journalist reports another disturbing incident from Palamau in an article headlined "Who will answer for Lucas' death?". It is clear that by now Palamau has been undergoing combing operations and Central Reserve Police Force (CRPF) personnel encircle and watch over villagers as they go about their daily livelihood work of 'farming and collecting *tendu* (diospyros melonoxylon) leaves'. It is during one such patrolling event when Lucas Minj, both deaf and mute and of 'Christian tribal background' (his father had converted to Christianity), is shot and goes missing at the same time that security personnel were combing the area for Maoists. This happens, the report explains, when Lucas takes the cows and goats to graze near the river in the evening. This incident brings his family's otherwise ordinary peaceful daily existence into direct confrontation with the state. The article elaborates in detail the degrees of harassment and threat Lucas' family faces, when trying to fight for a fair and just enquiry into his death.[124]

In articles by the Business Standard two months later in August 2012, we learn that Palamau is now being blocked off from near the borders in fear of Maoist infiltration and 'the state is trying to 'flush out' the Maoists through 'Operation Marangdeo'.[125] There

[123] http://www.tehelka.com/story_main51.asp?filename=Ne040212Splinter.asp

[124] Kunal Majumdar, "Who will answer for Lucas' Death"*, Tehelka*, Vol 9, Issue 24, 16 June 2012http://www.tehelka.com/story_main53.asp?filename=Ne160612Who.asp

[125] PTI, "Operation Against Maoists Launched in Jharkhand", *TOI*, 4 August 2012. http://articles.timesofindia.indiatimes.com/2012-08-04/india/33035157_1_crpf-man-maoists-left-wing-guerrillas

are several missing links in the story, we don't know why Manish Ojha of Reliance Power was killed by TPC in the first place, in the face of several splintered groups and rebel ex-allies of the police or Maoists, we no longer know what their demands are. While we have some hints of a nexus between Maoists and contractors in the reports, especially in terms of collection of levies, in the chaos we are left swimming in obscurity over the several incidents of death in Palamau. While splinter and chaos indicate high instability, it also creates a rationale for instituted violence.

A week later, one finds an announcement of *Operation Marangdeo*, in the *Times of India* reports a killing of four youth in their early and mid-twenties who are 'bludgeoned to death' in the 'Maoist-hit' Khunti district[126]. However, these deaths are not accorded to the extremists since, the report claims, extremists only kill by 'slitting throats' or 'use of bullets'[127]. The killers here are not known.

"The violent act and event is a bodily occurrence," writes Alfraed Arteaga[128] and "while violence is red, through black, or the black alphabet and typeface we call to mind the attacks on the body. Black serves to articulate the image and memory of unspeakable acts and events."

Though these incidents tell a partial tale about the people, the place, the history and culture of the region, many articles clarify that State definitions typecast Palamau into an 'extremist affected area' or one of the 'most backward regions' in the country. This means that the State must make available through a flush of funds adequate 'development solutions' to develop the region.

An article on the Saranda forests in Singhbhum by Jharkhand

[126] "Four Persons Bludgeoned to Death in Jharkhand", 17 Aug 2012 http://post.jagran.com/four-persons-bludgeoned-to-death-in-jharkhand-1345198475

[127] Operation Against Maoists Launched in Jharkhand http://www.business-standard.com/generalnews/news/operation-against-maoists-launched-in-jharkhand/40600/

[128] Alfred Arteaga, The Red and The Black in Foreward, Arturo, Aldama, *Violence and the Body: Race, Gender and the State*, Indiana University Press, 1984.

State News portal titles a piece as "Maoists out, Ramesh in". Several development programmes such as provision of drinking water, offering bank loans and construction of roads have been announced by the Minister Jairam Ramesh[129] as a means to mitigate problems and discontent giving rise to the Maoist issue. The Minister of Rural Development has challenged the idea that the Maoist issue may be resolved through security solutions and instead looks to development as a way out. However these actions by the state too are not without controversy. An earlier article dated July 2012 talks about a *dharna* (sit in demonstration) outside the office of the District Rural Development Agency (DRDA) by District Council members (Zila Parishad members) who are demanding speedy release of funds under the schemes under the BRGF (Backward Region Grant Fund) allotted for Palamau where labourers are still to be paid for the work done and a release of Rs 8 crores of payment is pending.[130] Under the BGRF programme, 21 districts have been identified for Backward Area Grant Fund in Jharkhand, and Palamau is one of them.

There are several articles on failing negotiations between the Maoists and the State. But who are these Maoists who have scripted for themselves this role in the region seemingly resorting to violent means in their attempts to cope with the festering poverty and mounting inequality? There are interviews with

[129] Jairam Ramesh (born 9 April 1954) is an Indian economist and politician belonging from Indian National Congress in the United Progressive Alliance (UPA) ruling coalition of center-left political parties heading the Government of India. He is a Member of Parliament representing Andhra Pradesh state in the Rajya Sabha since June 2004. In July 2011, Ramesh was elevated to the Union Council of Ministers of India and appointed Minister of Rural Development and Minister (Additional Charge) of the new Ministry of Drinking Water and Sanitation. He was previously the Indian Minister of State (Independent Charge) at the Ministry of Environment and Forests from May 2009 to July 2011.

[130] Dharna by Palamau Zila Parishad Members, *Times of India*, 11 July 2012. http://articles.timesofindia.indiatimes.com/2012-07-11/ranchi/32632189_1_dharna-mlas-and-mps-brgf

Maoist leaders, Maoists in jail and rebel Maoists in the media that give us some idea. They range from being men and women from wealthy middle class families in cities like Mumbai and Delhi, to young educated men from colleges in *mofussil* towns, to young tribal and non-tribal men and women from extremely modest economic backgrounds. The state has announced the 'Maoist issue' as the single most important security threat. Articles with interviews with 'self-identified' Maoists, gives some idea on the multiple perspectives.

In an article titled "If Giridih Falls First, Gurgaon Must Fall Next", which covers an interview with Ganapathi CPI (Maoist) Commander and journalist Rahul Pandita, it is important to notice here the pronouncements of place and space again. The names of both the places are sharply contrasting, where Giridih is based in the natural resource and labour providing state of Jharkhand, Gurgaon is Delhi's service capital. Here we find a subtle connection being made between the the 'violent spaces of exploitation' and the 'peaceful spaces of consumption' (Today the recent Maruti Suzuki worker struggles counter this notion about Gurgaon).[131] In the interview, the Maoist leader is stated saying:

All the riches between Giridih and Gurgaon have been produced by people from poor areas like Giridih. It is the poor, Dalit and Adivasi labourers who are spilling their sweat and blood for the construction of huge mansions and infrastructure by Indian and foreign corporate lords. The majority of the workers and employees who work in the shopping malls and companies are from these areas. Either in terms of social, economic and cultural ties, or in terms of movement relations, Gurgaons and Giridihs are not two unconnected islands as such. They are both influencing each other. This is creating a strong base for our extension. If Giridih is liberated first, then based on its strength and on the struggles of the working class in Gurgaon, Gurgaon will be liberated later. This means one is first and the other is later.

In a similar vein critiquing the government's development agenda is yet another article, this time written by Kobad Gandhy a

[131] Derek Gregory and Allen Prad, *Violent Geographies: Fear Terror and Political Violence*, Routledge, 2007.

self-proclaimed Maoist, a Central Committee member, the highest decision making body of the CPI (Maoist), from Jail. Gandhy writes about development policies and indiscriminate mining and harm done to the environment. His recommendations echo what many intellectuals and policy makers are saying about the current problems in India. Gandhy recommends:

If India is to be serious about environmental protection, it should take the following steps on a war footing: systematic afforestation programmes and a total ban on cutting forests (whether for mining or any other purpose); extensive schemes for watershed management to rejuvenate groundwater sources and putting an end to the rampant sinking of borewells; develop proper drainage systems and clean disposal of waste and/or its recycling; implement strict environmental restrictions for industry and mining and stop the pollution of air and water resources; and reduce carbon emissions in a planned way with a focus on developing wind and solar power.

The demands being made by Maoists blur and coincide with core environmental questions and environmental conflicts. Is this then a point of departure for us, a reality of the kind of conflicts that exist around resources today which works as a thriving ground for militant activity and armed struggle, the question is why in this form and does what Kobad Gandhy say, resonate with stories from the ground?

Gladson Dungung, an activist journalist from Jharkhand, in his book *Whose Country is it Anyway?* published in English in 2013 by *adivaani* raises all these issues from the *adivasi* perspective, elaborating on how this conflict has had a discriminatory impact on *adivasis* mainly. In Dungdung's accounts we find here a lot of data and information on the persistent alienation of *adivasis* (who are mostly forest dwellers and agriculturalists) from their lands. According to Dungdung, the creation of the new state in Jharkhand was to essentially serve corporate interests as the State in 2001 formulated the 'Industrial Policy' first which resulted in a flush of multinational and Indian companies into the area. In his account, the *adivasi* is suspended in between, the Maoists and the State, and this is the crucial difference that Dungdung tries to

articulate in an attempt to delineate the core concerns of *adivasis* and non-violent *adivasi* and human rights movements which get blurred with the Maoist movements sometimes. Here, *adivasis* are not Maoists or Naxalites, though through several courses of history and historic legacies of discrimination the *adivasis* have continued to be assumed to be 'enemies of the state'. Ironically, however, even Dungdung's narrative is unable to free the *adivasi* from these images in the reality he tries to depict for us. Here *adivasis* remain in between, but again outside state systems, and in opposition to it. Dungdung writes: *"In the 21st century they have become the worst sufferers of violence, either inflicted by State agencies or non state actors like the Naxals/Maoists"* (Dungdung, 2013:16).

He points several problems in the underlying architecture of law which escalates this problem. There are numerous ways in which *adivasis* have been displaced, firstly because of non-implementation of laws, where land is yet to be transferred to original owners, despite several cases of illegal transfers having been recorded under the Chhotanagpur Tenancy Act (CTA) 1949. Further, by amendments where the CTA has been amended to suit the needs of urbanization after Independence and thirdly through the Land Acquisition Act, 1984 due to which "17,10,787 people were displaced as 24,15,698 acres of lands were acquired" in Jharkhand (Dungdung 2013:22). Referring to the problems in the Red Corridor, Dungdung's accounts throw some light on the availability of resources in the area:

"The Saranda forest is the largest Sal forest in Asia. The area has 25% of iron ore deposits in the country and the reserves are exploited by more than 12 mining companies with 50 mines. The Chiria, the biggest iron ore deposits in Asia is also located in Saranda. The State government has sanctioned leases to 19 more mining companies in Saranda including Tata, Jindal, Mittal, Essar and Electro Steel etc, Hence the State has been sponsoring crimes against adivasis merely for business interests" (Dungdung, 2013:11).

Dungdung's accounts on Maoists and Adivasis are not very different from the media accounts. For instance, in Baruhatu

village, the narrative is the same as most stories from the Red Corridor, where a 15-year-old *adivasi* boy angry with the social justice system in the village joins the Maoists, gets disillusioned with the Maoist strategies and leaves them, gets employed under temporary recruitment by the Police Forces, as an SPO, but is not empowered enough and receives a very low salary for the insecure job, and is then killed. There is no recognition of his service by the security forces and a compensation for the same or anxieties within which he chooses to opt for armed forces work for the two parties in question as his main vocation. While the *adivasi* youth are divided by being armed with a flush of guns from either side in this declared war zone, 60 km from Ranchi district, Dungdung highlights three important incidents resulting in this war like situation in Baruhatu. These were hijacking of a cash delivery van of ICICI bank, the killing of the local political leader, Ramesh Singh Munda, a sitting Janata Dal (United) legislator and the beheading of a Police Inspector, Francis Induwar. In spite of an investment in arms and personnel, the security situation deteriorates rather than improves in these parts in Dungdung's narrative.

The rest of the book is dotted with different accounts of the situation of *adivasis* and their interface with the state, and in most cases the accounts highlight state apathy in terms of the series of human rights violations and atrocities against *adivasis*, who suffer starvation deaths, gender violence, worker exploitation and discrimination and the several mechanisms in which state agencies have failed to understand the problems of the *adivasis*. Here, specific cases of displaced families who did not receive proper rehabilitation, and various ways in which attempts are being made by entities with vested interest to skip over the laws favouring the interests of the *adivasis* such as the CNT Act, 1949, the Forest Rights Act, 2006 which empower them to stake control over their land and resources are highlighted. In most cases where land conflicts exist, the victims are small agriculturalists or forest dwellers pitted against powerful interests of mining lobbies, land sharks, state security agencies, corporate entities and dam authorities. Dungdung's accounts do not digress much from the

media accounts discussed above, though he attempts to raise other issues of *adivasis* besides the Maoist conflict.

The accounts clearly show that in the Red Corridor the tribals are under siege as many innocent tribals have been mistakenly assumed to be Maoists like the case of "Lucas" highlighted earlier. In fact, when reporting about a place 60 km from Ranchi about Baruhatu, Dungdung paints the capital of Jharkhand, as 'home', and safer than Baruhatu, which has the probability of being dotted with landmines and militant activity. Ironically though the Wikipedia map, marks Ranchi as 'affected', showing the different ways in which 'wild' and 'safe' spaces begin to circulate as images in our minds depending on our locations.

Nirmalangshu Mukherji tries to get down to the heart of the problem in the structure of narratives around the Maoist conflict in India in his book *The Maoists in India: Tribals under Siege*, published by Pluto Press in 2012. Mukherji tries to unpack for us the armed struggle of the Maoists which has become a problem. Acknowledging the fact that armed struggles in no way means a 'picnic for the masses' and always has the consequence of mindless violence and atrocities on the unarmed people, in the case of Maoists in India, the struggle has 'impeded democratic forms of resistance' and "enabled a beleaguered state to regain its illegitimate authority. In imitating the repressive forms of the ruling system, an ill motivated armed struggle turns into another force of oppression…" he observes (Mukherji: 4). However, what conditions have reduced these democratic spaces driving youth towards Maoists remain unanswered. The common claim by writers writing in sympathy with the Maoist issue, often points to the situation of the hapless *adivasis* and the mineral rich areas which Maoists are trying to protect from corporate and state interests and Mukherji believes that these circulating stories are not asking the right questions. Highlighting some real practices of the Maoist cadre on the ground we are yet again exposed to the practice of the Maoist groups accepting 'levies', 'royalties' and extortions from minor contractors in the area, and a 25 per cent cess from numerous mining operators, which is in direct contradiction to the claims being made about the Maoist struggles

alignment with environmental problems or issues of displacement. This is clarified further by Mukherhji when he highlights the case of Soni Sori in Chhattisgarh as follows:

Tata and Essar are not going to pay 'royalties' to armed groups after a point; they want the whole thing to themselves and the area of their operations totally secured and sealed. For example, for an integrated steel factory, there will be long conveyor belts and other mechanisms, running through the forests, from the mines to the processing area. The steel giants cannot leave these essential part of the system exposed to extremist attacks or blackmail, as the case may be. From this perspective, for both Maoists and the corporate giants, mining operations in that area basically pose problems of security. For them, adivasis and the environment are of little concern (Mukherji, 2012:83).

In his suggestion of the solutions to the problem Mukherji mentions the need to create an enabling environment to de-arm the struggle and under the supervision of the Maoists ensure proper implementation of Acts such as PESA, FRA and MGNREGA which is facilitative in improving the condition of *adivasis* in the area. He, thus, calls on intellectuals to relook at their narratives critically on whether all the issues in mineral belts and the concerns of *adivasis* are really connected to Maoist operations or not. Why is Maoism predominant in mining areas such as eastern and central India and not others such as Karnataka or Goa where mining is as widespread?

The Damodar Valley, unlike other 'Maoist' areas excluding Palamau, is neither forested nor under PESA. Instead, here we find several irregularities of the CNT Act, calling for several nuanced and creative strategies, which organized groups are ideologically blind to. For democratic spaces to survive and thrive, the absence of citizen action is stark, as gains are made only through feudal and caste-based networks, organized ideological groups and organizations, leaving common people vulnerable to several manipulations of power. Mukherji highlights other successful non violent struggles which have taken forward *adivasi* demands, and environmental issues in Niyamgiri in Orissa for instance and succeeded, hence leaving us to ponder on what it is in these

areas, which have prevented the space for similar democratic negotiations and created a situation for armed conflicts.

Just as Maoist violence and the conflict has been projected from the area with notions of scarcity, unemployment and poverty readily being attached to the conflict on one hand, on the other hand one finds circulating images on violence in the activities of the coal mafia or warlords in the Damodar Valley tract. Here too like Maoist activity, mafia activity is informal, illegal and unrecognized operating in small splinter groups, through multiple rebel outfits and gangs. It is important to notice how this reality gets relayed through a Bollywood film hence commodifying and also creating a new virulent image or imaginative geography of the same space, as a site of gangster capitalism.

The Gangs of Wasseypur (*GOW*), directed by Anurag Kashyap and also located in the coal belt of Dhanbad district, tells us about the resource conflicts and their 'representation' through the *warlordism* or *mafia* activities of coal mafia in Wasseypur. Set in the small town of Wasseypur, the film and its sequel unravel a story of rivalry, among three generations of rival gangster families fighting for power and dominance in the town of Wasseypur.

The narrator, in the introduction, explains that though Wasseypur gives a picture of 'peace' from outside, from inside the story is something else. Through Faizal Khan's family history we get a range of insights into the trials and tribulations associated with a coal abundant area like Wasseypur and the underbelly narratives of the numerous actors and agents involved in the extraction and processing of resources in the area.

Almost translating Springer's observations on violent geographies we see how the film in many ways makes violence sit in a place, in cultures and ethnicities, and in an 'other'. Wasseypur earlier dominated by the *Quereshis*, who were mainly butchers in the area is a 'Mahabharata of the Muslims' we are told reinforcing a kind of cultural stereotyping that already exists in associating Muslim communities with the underworld in mainstream Bollywood cinema. The last scene in the second film shows the grandfather (Shahid Khan's brother) carrying his grandson out to look over across a crowded cluster of tenements and a

mosque, beyond which lie the high rises of Mumbai. In a way the scene indicates a seamless continuity between the communities of Wasseypur and the underworld mafias in Mumbai. In its attempt and desire to stay with 'the real' the film tries to break or confuse stereotypes within these larger stereotypes, making a slight departure by showing the main warlord of the area as a member from the dominant community Ramadhir Singh, who is a Hindu. It also shows how these religious differences are not the main consideration when getting into business as several conflicts emerge between the different dominant Muslim families themselves.

Moreover, the film tries to recreate the culture and lifestyle of the Muslim community residing here, the degrees of 'closeness' and 'openness' of the community not always guided by cultural taboos but new taboos generated out of the social relationships carved out in loyalties of the trade. Unlike in a state of feudalism, 'loyalties' are broken, forever shifting between the employers and the employed and the emotions in the film swing between righteous 'revenge' and 'ambition'.

This nature of survival, other than daily living is emotionally linked with respect, honour and family pride. While the complex fight and tension of resource politics in the area is depicted, the film adds another layer of emotion where, Sardar Khan's (Manoj Bajpai) (son of Shahid Khan) entire life goal revolves around avenging his father's death. While Ramadhir Singh is shown growing from strength to strength, from a contractor to a mafia to a Trade Union leader to a politician, Sardar Khan and his son Faizal Khan (Nawazuddin Siddiqui), provides us a foil through which we get a better view of how gangs operate and facilitate the business-capturing transport systems, petrol pumps, seizing lands and taking advantage of the huge land ownership irregularities in the area. Women in the film are portrayed as wives and mothers, for whom jail terms, killings and the illegal occupations of their husbands and sons, are the terms of respectability used to marry them off, and mothers hone in their sons the arch skills for survival in the whirlpool and labyrinth of death that forever develops with

this need to do and live with the evil, that encircles the lives of people in the reconstructed world of the coal belt in the film.

Violence, death and murder are established as intrinsic and justified. It is important to note that the film received a lot of attention and coverage from mainstream media and faired reasonably well at the box office. Reviews trying to assess what the movie-goers in big cities such as Mumbai, Delhi, Bangalore liked about the film, repetitively said that they liked the depiction of 'reality'. The promotions around the film constantly harped on this aspect, that reality was being brought to the audiences, since the script writer belongs to Wasseypur, and the actors, musicians, cast, crew and the filmmaker come from this place, hence adding to the sense of 'authenticity' that was being construed up on the screen for audiences. Though not the first among the whole host of gangster films made in India, while the film evokes a past of the area, it is a matter for reflection on why mafia histories in their linear forms draw greater contemporary Indian audiences. We find some of the causes revealed and explained in Sutton and Worgan's explanation for the popularity of the mafia film, *The Godfather* among American audiences. Sutton and Worgan argue that *The Godfather* (which traces the story of the family history of Italian mafia in America), is one that serves the American myth of suggesting resolutions to key contradictions in the American society brought in by capitalism; rather than assuming whether the film tells us anything authentic about the Mafia or Sicilian culture in America, it is crucial to understand why Americans were fascinated by the film and whether the film actually toys with the ambivalent and messy strains and tensions of American culture.'[132] They argue that "the image of the Corleones in *The Godfather* is compelling because it offers the possibility of reconciling capitalism and personalism, the public and the private. *The Godfather* offers a mythic capitalism redeemed—capitalism with a sense of honor, family, and personal commitment, thus

[132] David Sutton and Peter Worgan, "The Gun, The Pen and the Cannoli: Orality and Writing in *The Godfather*", Sutton, *Anthropology and Humanism*, Vol 8, Issue 2, June 2008, p. 2.

seemingly bridging the split in industrial capitalism between the "public" world of markets and the "private" world of morality and strong emotion and the movie also offers a vision of the opposite: the destruction of private worlds that goes along with a commitment to "rational" market behaviour." For the Americans the film played on their ambivalent feelings and fantasy for authenticity.

Patricia Rawlinson in her analysis on *Mafia, Media and Myth: Representations of Russian Organised Crime* states that "in the less accessible areas of society, media representations become a crucial and often the only entrée into a reality of which few of the general public have first-hand knowledge. Organised crime, elusive by definition and exclusive by design, is one such world… The obscurity and *occasional* dramatic displays of violence as in gangland killings provide a lucrative and attractive hook for the media".

Thus, acknowledging that *GOW* has placed before us a hyper-reality, one cannot drag the film away from its function of commodification of the place in real terms. What function does it play by projecting the real is the question we need to ask?

Like the imagery of violence along the Red Corridor discussed in media articles earlier, violence is portrayed again, on a bedrock of resources and primary commodities, with similar sociological formations of groups and rebel outfits but with different official functions this time. Interestingly, despite its hyper real images, the film is not shot in Wasseypur but elsewhere, the dialect spoken in the film is a Bihari Bhojpuri dialect, more popular in parts of Bihar rather than the mixed communities who speak Khorta in these parts, and the music is a concoction of several interesting musical strains and instruments from migrant Bihari communities belonging to other parts of the world, which fuse traditional and modern into a heady beat for the masses.

Though the film here recalls a past, one cannot help but notice the underlying dystopic elements here as well. There are two moments on environmental loss. In one scene it is shown that to prevent collapse of mines, contractors are asked to fill mines with sand. This has become a profitable business by the 1980s in

the film. However, this is not done adequately and the film gives ample impressions to prove that belligerents wait for the mines to collapse so open cast mining may be started. Shrouding the entire narrative, however, is the decreasing value of life itself, thus making death choices a viable option or way out for the living. Just as the landscape is slaughtered so too are bodies where the film depicts disturbing images of the violent slaughtering of bodies in different scenes.

We see many changes in this unfolding drama of gangsterism in *GOW* — the changes in weapons from hand-made guns and bombs to automatic guns, the entry of new amenities into the household such as the fridge, pagers, phones and TV and change in the resources being controlled, fuel for transport, coal, sand, scrap iron, water bodies and fish. Stealing resources, adulterating the goods, give an advantage in the market and earning through illegal levies and protection money locally called *hafta* on sales in the local market, continue to provide income to the mafia. Control of the mafia on resources makes the abundant resources scarce and the illegalities in the systems ensures adequate base for 'spoil politics'. The resource dependence changes with technological changes and environmental changes. Thus, older trades such as '*koyla chori' (coal robbery)* are shown to have become 'dead occupations' (*coal smuggling* continues to be a popular trade in these parts today as well) or for big entrepreneurs in the film, and shifts made to other gainful professions of sand mining and dealing with scrap iron. Both sand mining and dealings with scrap iron are part of the business of the second generation of mafias.

But the more troubling and truthful observation by Rawilson about Russian organized crime which echoes in this film too is its depiction that, 'getting to the truths behind different manifestations of Russian organized crime is difficult and dangerous, this is especially the case where organized crime has penetrated the legitimate structures, that is the financial world of business and banking.' The various points at which Sardar Khan in the film crosses paths with Ramadhir Singh, gives us glimpses into the kinds of nexus that exist between the coal mafia, the police and

political systems which is a suffocating reality. This similar nexus is also highlighted in reports on Maoist violence in the media.

In contrast to this, local narratives such as *Hiranyaretangh* a biographical account based on the life of leader of coal union workers, A.K. Roy elaborate incidents of atrocities committed by the political leader cum mafia on mine workers, but also carries accounts of how coal mineworkers begin to fight for their rights through several creative means and find strategies to break this nexus between politicians-police-coal mafia in the 1980s the similar time period reflected in the film. Thus, we find coal union workers fighting in elections, new political parties formed to counter this, worker cooperatives, and some successful strikes to name a few. Similarly, Nirmalangshu Mukherji highlights several instances of how democratic movements by the marginalized has been able to take on mining giants and how leaders such as Madhu Koda have been arrested for identified coal scams providing some hope to these depictions of hopelessness.

The "transformation of nature into tradable commodities is a deeply political process; involving the definition of property rights, the organization of labour and the allocation of profits" (Billon). Different states have dealt with this differently. The nature of violence changes on whether this includes production or extraction, while for productive resources (crops) leads to structural resources and everyday forms of low resistances and occasionally peasant uprisings, urban riots and strikes, in the case of extractive resources (minerals) violence takes the form of battle for state and territorial control.

Philip le Billon[133] provides a framework to understand the issue of violence and war like situations along 'resource scarce' and 'resource abundant' areas. Billon notes that very often we mistakenly assume that violence occurs because of resource scarcity, marginalization and poverty, but it has been seen that

[133] Phillip Le Billon, The Political Economy of Resource Wars, Insititute of Security Studies Africa, http://issafrica.org/Pubs/Books/Angola/3LeBillon.pdf accessed on 25 February 2014.

resource abundance spurs many more conflicts than scarcity. "The dominance of the resource sector in the economy and its political control by the ruling elite leaves little scope for accumulating wealth and status outside state patronage"; thus, as wealth and power gaps increase, the marginalized experience greater frustration and seek political change which includes competing elites and disenfranchized groups. Billon points out that those developing countries with abundant resources tend to have 'predatory governments' which serve sectional interests and so face a risk of violent conflict. Thus, societies with specific environmental circumstances of abundant and scarce resources are often unable to address the problem of resource management without using violence. Billon argues that violence always groups to create and sustain profitable patterns of resource exploitation and wealth distribution.

Geography is an important factor, where remoteness from the centre of control tends to enhance the inclusion into a war economy, and the greater the amount and availability of resource the greater likelihood of prolonged conflict. Billon does not rule out the importance of 'networks' enacting this violence, where a chain of relationships from where the resources lie to where the resources are consumed are established through different actors and agents, who directly and indirectly feed into the conflict or violence in this war economy. While different methods are used to establish political control over economic resources, sometimes 'criminalization' of the normal activities in the extraction process through imposition of different sanctions, pushes the state to actually work with criminal gangs and smuggling operations fuelling a 'political economy of disorder'.

These popular narratives from the Damodar Valley shows several strains of the same, where armed conflict operates in the forest areas and warlordism operates in coal abundant areas and an emerging environmental conflict over slowly disappearing resources such as fertile lands and water, and safe non toxic areas for dwelling. Though Wasseypur, Dhanbad and Palamau may not be typified into a Rawanda, Angola or Chiapas, it is crucial that we are able to place these places along the continuums of resource

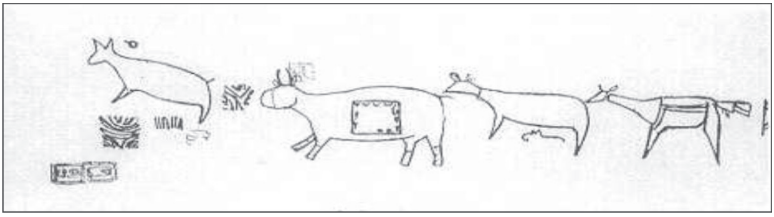
conflict to understand the deeper meaning and significance in the way violent cultures are projected from various parts of Jharkhand which in turn has the tendency to feed into the logic of a resource war economy.

PART 3

Conclusion

Dream Space: The Rock Paintings of Hazaribagh

Watching Putli pursue her art work on a mural amidst the silence of trees and birds and lush green fields, one finds a narrative devoid of words, not of loss, but on form and creation, on primordial cultures bringing in a sense of harmony, in her bold strokes and the natural surroundings in its backdrop. While she draws these figures one is bound to look at the meanings that they have in their direct connection with nature and the imaginations of a lived space.



It is with the rock art paintings at Hazaribagh that I end the unfolding of the story along the Damodar. Here lie deep traditions of a lived space which continue to hold the imaginations of local people through their daily rituals. Can these imaginations be relived as a source of healing from the devastation that the last century has brought in the region? Can these expressions in some way recreate or provide a source of recuperation and rejuvenation towards imagining futures? Do they carry in them some message or expression, or a possibility for those along the abandoned mine sites, I met earlier, to relook and reconnect towards lived space? Or possibility to reintegrate and reimagine?

In the Eastern North Karanpura Valley in Hazaribagh in the upper tract of the Damodar Valley, the famous Isco Rock Art of man of over 5000 to 7000 years ago are to be found. These figures are found as inspirations in the tribal architecture and home of the communities living in these parts. Rich with nature metaphors, the figures hold messages, meanings and significance passed down from the ancestors to future generations about the interconnectedness of life and nature.

Women living along the Damodar river record the significance of Buddha's sojourn into the forest through the designs painted by them during the *khovar* and *sohrai* festivals. The *puranpaat* (ancient flowers) are lotus pods found painted along the mud walls, a symbol of the Lord's lotus feet. In the marriage art, *khovar,* the symbol of the elephant is most sacred and considered Buddha's previous incarnation. In this zone of the elephant corridor, the "Forest of the Buddha" also called *champa*, where elephants visit the villages from the National Park nature is sacred—a wild elephant crossing is considered auspicious in tradition.[1]

Animals and plant forms in household art is an extension of Hazaribagh's glorious heritage of prehistoric cave art. In this act of creativity, the women of these subsistence agricultural societies have a shamanistic and divinatory role where they continue to carry the sacred power in images from generation to generation and have the privilege of creating forms in their communities.

In the Karanpura Valley, a rift formation took place during the pre-Cambrian period, and due to erosion of the plateau on either side, a rare deposit of fossils from the Upper Carboniferous period is expected to be found here.[2] In fact, "coal is a highly concentrated vestige of extinct life forms that were themselves a critical link in the chain of environmental changes that made the emergence of advanced life possible".[3] This was the period when

[1] Bulu Imam and Philip Carter, *The Forest of the Buddha*, Sanskriti Publishing, 2005.

[2] Bulu Imam, *Tribal Art and Culture of Jharkhand*, Sanskriti Publishing, 2011.

[3] Barbara Freese, *Coal: A Human History*, Arrow, 2006.

life from the seas got entangled as it swept over vast parts of the landscape and complex tectonic movements created the exact and unique conditions for this carboniferous rock to form.

Along these rock outcrops are drawn several little images of animals, birds and plants, in simple forms symbolizing the experience of nature, the inner space of ancient man. Art by definition is an "expression of the existential predicament of human society" (Imam, 2011) and while today artists are finding it difficult to draw about their cultural landscapes, the works of these women artists provide an inspiration to do so. In the images drawn on the mud walls, there is a celebration of the male god, *Pashupati,* the lord of animals. The body is like Siva's drum and around him the six lotuses represent the six senses. The forest god is shown in the form a tree called *bhelwa* and the mother goddess in lotus form. The Prajapatis or potters living in the densely forested environment in southern part of Hazaribagh depict the wild flora and fauna on their houses and pottery.

In the journey along the Damodar valley one finds as one explores different 'spatial remains', a need to relook at the interconnections between life and nature. As I open up the stories and memories with each remain, I have founded a set of wisdoms thrown in the memories spun into those events. Here in the expressions of Putli and others like her, one finds a sense of healing and recuperation from that loss. What does the rock art now replicated onto the homes of tribal women and men tell us in terms of deeper wisdoms?

The rock art has portrayals of several animals like, bison, rhinoceros, jackal, boar and antelope. They, along with other domestic animals, find their depiction in the ritual paintings and walls of the homes of the people. The symbolic value this holds has many meanings taking us back to the memories of the Birhor leader on Grand Trunk Road, Bulu Imam notes that the need to portray animals arise as they are seen as "companions in life. Their well being assures man's plenty."[4] Interestingly Imam writes that

[4] Bulu Imam, *Tribal Art and Culture of Jharkhand*, Sanskriti Publishing, 2011.

the Koeris, Kurmis and Telis who currently continue to ritually paint on their decorative walls, believe that the Birhors are the "sacred possessors of the meanings of the elaborate ritual motifs of birds, fishes, lotus and creepers, tree of life and other designs". Explaining the 'cultural spatial concepts', Imam highlights that the Birhors relate the *bonga* to a certain *spatial essence,* 'the space within, by virtue of its position within this space, it is supposed to create a force'. The rock drawings considered sacred signify the origin of the people of Chhotanagpur, their personhood and a deep connection with their ancestral landscape. The village paintings signify a spiritual symbiosis with the ancestors and hence their past.

Probably in this resignfication of loss, what one thus goes away with is the Birhor's interprettation of dreams, where dreams are considered to be instruments that alter the future rather than a psychological interpretation of the past. Where dreams are medicine too.[5] It's a long journey across the valley and the Damodar basin, where I met the journalist who cried about the loss of culture, and a young artist struggling to find expression from within, to this point where women give expression and meaning to space everyday.

[5] Bulu Imam, *Tribal Art and Culture of Jharkhand*, Sanskriti Publishing, 2011, p. 28.

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