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Urban environments and situated institutions: Everyday governance in West Bengal

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Urban environments and situated institutions: Everyday governance in West Bengal

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Urban environments and situated institutions: Everyday governance in West Bengal

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Summary

How do processes of power shape the urban environment in small Indian cities? On a day-to-day basis, who actually controls access to and the use of environmental resources? How is this done? Answering these questions contributes to our ability to develop a nuanced understanding the urban condition.

In order to investigate these questions an actor-oriented approach is developed, drawing on the anthropological literatures on everyday governance and the everyday state. This conceptual framework informs an urban political ecology approach oriented towards everyday practices and the micro-politics of the (re)production of urban socio-natures.

This thesis employs a mixed methods approach to qualitative research. Three cases are presented to explore: *para* (neighbourhood) clubs as governance actors, the governance of the urban pondscape, and the urban political ecology of solid waste management.

These case studies serve to highlight how power shapes the (re)production of urban socio-natures through the everyday environmental governance practices of a complex network of governance actors. This work further demonstrates how multiple intersectionalities, including class, caste and access to political and social authority, shape these practices and their outcomes. Finally, the manner in which balances of power, place making and the formation of subject positions may both result from and shape everyday environmental governance practices and their outcomes is explored.

This empirical investigation makes a number of contributions to the literature. It has explores the hereto-understudied topics of environmental governance in small cities in India, the urban political ecologies of non-piped water and of solid waste, and the role of clubs as governance actors. It further contributes to conversations within the literature

on how to deepen and broaden Urban Political Ecology by engaging with everyday practices, and cases of ordinary, not-openly contested socio-natures.

Urban environments and situated institutions: Everyday governance in West Bengal

Natasha Cornea, Institut de géographie et durabilité de l'Université de Lausanne

Résumé

Comment les processus de pouvoir influencent-ils l'environnement urbain dans les petites villes indiennes ? Au quotidien, qui contrôle l'accès et l'utilisation des ressources environnementales ? Comment ce contrôle s'exerce-t-il ? Répondre à ces questions contribue au développement d'une compréhension nuancée de la condition urbaine.

Afin d'explorer ces questions une approche *actor-oriented* de la gouvernance quotidienne est développée, faisant appel aux littératures anthropologiques de la gouvernance quotidienne et de l'*everyday state*. Ce cadre conceptuel établit ainsi une approche d'*Urban Political Ecology* orientée vers les pratiques quotidiennes et la micro-politique de la (re) production des socio-natures urbaines.

Cette thèse emploie des méthodes qualitatives mixtes. Trois cas sont présentés afin d'étudier : les clubs *para* (quartier) comme acteurs de la gouvernance; la gouvernance de la *pondscape* urbaine; et l'*urban political ecology* de la gestion des déchets solides.

Ces études de cas permettent de mettre en lumière la façon dont le pouvoir influence la (re)production des socio-natures urbaines par le biais des pratiques quotidiennes de gouvernance environnementale d'un réseau complexe d'acteurs. Ce travail démontre également comment plusieurs intersectionnalités, y compris la classe, la caste et l'accès au pouvoir politique et social, façonnent ces pratiques de gouvernance et leurs produits. Finalement, cette recherche explore la manière dont les équilibres de pouvoir, la fabrication de lieux et la formation de la position du sujet peuvent à la fois résulter de et contribuer à façonner les pratiques quotidiennes de gouvernance environnementale et leurs produits.

Cette investigation empirique fait ainsi plusieurs contributions à la littérature. Elle explore les questions jusque-là sous-étudiées de la gouvernance environnementale

dans les petites villes en Inde, de l'*urban political ecology* de l'eau non courante et des déchets solides, ainsi que du rôle des clubs comme acteurs de la gouvernance. Celle-ci contribue également à des débats sur la façon d'approfondir et d'élargir l'*urban political ecology* en travaillant sur les pratiques quotidiennes, et sur des cas de socio-natures ordinaires, pas ouvertement contestées.

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Abbreviations

CPI-M	Communist Party of India (Marxist)
DM	District Magistrate
DPC	District Planning Committee
EO	Executive Officer
IHSDP	Integrated Housing and Slum Development Programme
INR	Indian Rupee
JnNURM	Jawaharlal Nehru National Urban Renewal Mission
MCIC	Municipal Chairman in Council
MPC	Metropolitan Planning Committee
MSW	Municipal Solid Waste
NGO	Non-Governmental Organisation
PE	Political Ecology
SC	Scheduled Caste
ST	Scheduled Tribe
SUDA	State Urban Development Agency
SWM	Solid Waste Management
TMC	All Indian Trinamool Congress
UIDSSMT	Urban Infrastructure Development Scheme for Small & Medium Towns
ULB	Urban Local Body
UPE	Urban Political Ecology
USD	United States of America Dollar

Non-English Terms

Adda	leisurely but often political or intellectual chat/gossip
Anganwadi	preschool
Ghat	stairs leading to a body of water
Mela	festival
Mouzas	An administrative term that denotes an administrative district that contains one or more settlements. Previously this term corresponded to revenue collection units.
Panchayati Raj	The system of rural local self government
Para	A spatialised moral community to which members are loyal.
Pukur	pond
Puja	a prayer ritual, an act of showing reverence to a deity
Sangha	association
Sabhadhipati	The head of the Zilla Parishod.
Zilla Parishod	The upper most (district) level of the system of rural decentralisation.

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Little is possible in life without the assistance of others. Many people have enabled my research and growth as an academic over the last 3 years they deserve mention and thanks.

My supervisor René Véron was of course crucial to this endeavour. I thank him for giving me the opportunity to do a PhD under great conditions: institutional, structural and not to be discounted geographical. I was given the freedom to follow the field and what excited me, within the useful boundaries of project, a model that suited me well.

I must acknowledge that privilege of working alongside of Anna Zimmer on the "Small cities" project. Her insightful comments on my writing pushed me intellectually and her companionship in the field was inspirational and sanity saving at key times.

Gratitude is also extended to Dr. Urs Geiser who was part of both my thesis committee and jury, and to Dr. Pushpa Arabindoo, who served as an external expert on my jury.

Social research is in many ways an extractive endeavour, as researchers we benefit far more directly from respondent's time than they do from giving it. Arguably most people are aware of this unbalanced equation and yet hundreds of people were willing to speak with about their lives and environment. Without them I would have nothing to say or thesis acknowledgements to write. They have my gratitude. Morevoer, I would have struggled much more to make contact with anyone without the varied assistance of: Gopa Samanta, Abhijit Guha, Sumita Roy, Amit Battacharya, Ipsita Ghosh, Sukanya Mitra, and Rinchen Lama amongst others. Thank you all for your help and kindness.

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Preface

This research occurred as part of a larger comparative research project on environmental governance in small cities in West Bengal and Gujarat. The "Small cities, urban environments and governance in India" project was led by René Véron, and Anna Zimmer conducted fieldwork in Gujarat (herein after the "Small Cities project").

The Small Cities project identifies a need for more sufficiently nuanced academic research on India's smaller cities. These cities have been under-explored in academic literature and largely neglected in policy. These cities face a "triple challenge" in regards to environmental governance (Véron 2010, 2841). Developing cities are confronted with "brown agenda" issues, that is, problems of underdevelopment, such as inadequate housing, and limited or uneven social provisioning of water supply or sanitation. At the same time they must face "green agenda" issues that result from development. This issues are often related to industrialisation and/or increased consumption; for example increased waste production, water pollution and air pollution (McGranahan and Satterthwaite 2000). Smaller cities however face an additional challenge due to their limited financial, human and organisational capacity (Cohen 2004). Moreover, they are generally poorer and are thought to have more severe "brown agenda" issues (Kundu, Bagchi, and Kundu 1999, Samanta 2013).

The challenges are compounded by a number of structural (political economic) factors. Following decentralisation under the *74th Constitutional Amendment* (discussed in more detail later in this thesis) cities gained new responsibilities. However, the extent of fiscal decentralisation has been limited (Mathur 2007) and some authors suggest that decentralisation has done little to improve service delivery (Jacob 2011, Samanta 2013). Moreover, small cities are overshadowed by the metropolises and other cities of "importance" within urbanisation policy (Ministry of Urban Development Government of India n.d., 10, Gupta 2004). Within these challenging structural conditions, little is known about how small cities respond to the triple challenge identified above. The Small Cities project aims to contribute to the understanding of how local politics and environmental conditions intersect with these broader challenges to shape city making.

The research presented within this thesis was embedded within this broader project. However, my research departed from the original aims of the Small Cities project in some key aspects. In particular less attention was given to the role of state actors in lieu of 'following the field' to understand the role of clubs. As well, both in the field and in this thesis the selection of embedded case studies reflected my own choices. Thus, while the work presented herein represents original effort by me and serves to extend the original project aims, it is not possible to make a clear boundary between project and PhD research. That is to say that each informed each other, and my research benefited from the intellectual stimulation that a group research endeavour develops (and this is reflected in the presence of co-authored articles).

1: INTRODUCTION AND RESEARCH PLAN

1.1 Introduction

Photo 1. Politics inscribed on 'nature' © N.Cornea

I am a very undedicated blogger, but on November 25, 2013 there is a post on my personal 'field' blog entitled "*How to politicize a curb – or observations on Bengali politics*". The repainting of Vidyasagar University, located just outside of Medinipur, inspired the post. The buildings, which had once resembled many public buildings across India, were previously off-white with brick red or terracotta-brown trim. They are now the gleaming white and sky blue colour scheme that is washing across West Bengal. Even the base of trees had received this colour washing and I was warned soon the curbs would as well. In the blog post I observe that politics is literally writ large and everywhere, politics permeates buildings and paint brushes. These colours act to connect public buildings and this 'nature' to the politician who favours them. While that post specifically discussed the inscribing of party politics onto the landscape, the observation holds more generally. Politics, understood broadly as the complex relationships of power between people, inscribe themselves both literally and figuratively on the both the built and the 'natural' landscape. It is the material of city making. At its core, this thesis is concerned with processes of power which are read through the way that they (re)produce a particular urban environment.

If one is to turn to the academic literature in order to comprehend urban governance dynamics or the urban environment in India the picture that emerges is

largely one of metropolises, that may have world city ambitions resulting in displacement and/or be characterised by "bourgeois environmentalism" (Baviskar 2003, 90, Arabindoo 2011, Bhan 2009, D'Souza and Nagendra 2011, Doshi 2012, Ellis 2012, Ghertner 2012, Jervis Read 2010, Véron 2006). The critical academic literature focuses on Delhi, Mumbai, and Bangalore, and to lesser extent metropolises like Chennai and Kolkata. While these cases are important and offer valuable insights, they offer only a limited view. On the ground it is ordinary cities, places like Navsari, Ferozepur, Bardhaman, and Medinipur that represent the majority of cities. They are demographically and arguably ecologically important. Cities with a population of 50,000 – 500,000 contain 35% of the urban population, but are largely marginalised within urbanisation policies (Véron 2010). Moreover, ordinary small and medium sized cities in India (as elsewhere) are only rarely the site of internationally published or available[1] empirical research (for exceptions see: Budhya and Benjamin 2000, de Bercegol and Gowda 2013, Dove 2004, Prasad-Aleyamma 2014). The work presented within this thesis seeks to contribute to addressing this knowledge gap. In doing so it responds to the work of Robinson (2006), Bell and Jayne (2009) and Véron (2010) who assert that nuanced analysis of small cities can contribute in important ways to our understanding of the urban condition.

This thesis explores environmental governance and politics through the everyday practices of both state and non-state actors in two small cities in West Bengal: Bardhaman [2] (population 314,265) and Medinipur [3] (population 169,264) (Census Commissioner of India, 2011). The environment and environmental governance serves as a lens through which process of power can be brought into view. I employ governance here as an analytical term that is centrally concerned with the actual processes through

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[1] See Ch 7.3.2 for further discussion on academic knowledge production about and in the South and accessibility.

[2] Bardhaman is also known as Burdwan, an anglicised spelling of the Bengali name. Within official use both spellings are used, for example the ULB is the "Municipality of Burdwan" while the census entry is for Bardhaman (also transliterated as Bardhhaman). Except when referring to the Municipality as a governing entity, I adopt the spelling of Bardhaman throughout.

[3] Medinipur is also known as Midnapore. In the same manner as Bardhaman/Burdwan, both Medinipur and Midnapore are used on official documents; similarly the Municipality itself retains the colonial spelling and is known as "Midnapore Municipality".

which societies are steered toward particular goals and with the on-going negotiations within these processes. Governance is understood to involve multiple actors within multiple, overlapping spheres and not just formal processes led by the state (Keil 2006, Le Meur and Lund 2001, Zimmer and Sakdapolrak 2012). Thus, this research seeks to examine the networks of actors who govern the urban environment and to explore the practices through which they control access to and use of particular environmental resources and conditions. Particular attention is paid to the politics of these processes and how they serve to (re)produce particular socio-natural conditions and structures of power.

In order to do this, an actor-oriented approach is developed. This occurs in two steps. First, drawing on the everyday governance (c.f. Blundo and Le Meur 2009a, Bierschenk and Olivier de Sardan 2014b, Le Meur and Lund 2001, Olivier de Sardan 2014) and everyday state (e.g. Corbridge et al. 2005, Fuller and Benei 2000) literatures developed primarily by anthropologists, as well as everyday approaches within geography (e.g. Bjerkli 2013, Hausermann 2012, Schindler 2014), an actor-oriented approach to everyday environmental governance is developed. Secondly, it is then argued that examining governance processes can usefully enrich urban political ecology approaches (see also Gabriel 2014, Monstadt 2009) in order to orient that literature towards everyday practices and micro-politics of the (re)production of urban socio-natures (Lawhon, Ernstson, and Silver 2014, Loftus 2012, Shillington 2012, Truelove 2011, Zimmer 2010).

Utilising this approach and based on over nine months of in-depth qualitative fieldwork, this thesis demonstrates the multiple actors, scales and rationalities that shape environmental governance and the (re)production of particular urban socio-natures in West Bengal. By exploring cases of both conflictual and seemingly innocuous environmental governance practices, it presents a narrative that is situated, complex and dynamic. This work particularly highlights the role of situated institutions, including neighbourhood clubs and political parties, in shaping the local environment. It further explores the complex ways in which power is negotiated within these processes. In doing so it attempts to make a contribution to the literature on a number of hereto

understudied topics including: (1) environmental governance processes in small cities in India; (2) the urban political ecology of non-piped water; (3) the urban political ecology of waste; and (4) the role of neighbourhood clubs as governance actors (in West Bengal). It also contributes to conversations about how to deepen and broaden investigations in to the (re)production of urban political ecologies (e.g Gabriel 2014, Lawhon, Ernstson, and Silver 2014, Zimmer 2010).

The remainder of this introductory chapter proceeds as follows: the methodology, study design, and methods are presented; and ethics are discussed. Following an inductive research approach led to additional themes to emerge from the data; these are briefly introduced (and returned to in the conclusion) before the structure of the remainder of the thesis is explained.

1.2 Methodology

The research presented within this thesis and the study design was informed by a general orientation towards a constructivist paradigm in social science (Denzin and Lincoln 2011). A paradigm is understood here to encompass the ontological and epistemological position of a researcher and to inform the style of research, the types of questions explored and the methodological procedures. My own ontological position is that of a critical relativist. That is I understand the world to be formed of multiple realities (relativist) (Denzin and Lincoln 2011, 13) but believe that these realities are "based on a struggle for power …lead[ing] to interactions of privilege and oppression" (critical) (Lincoln, Lynham, and Guba 2011, 102). I adopt a subjectivist epistemology that holds that people construct their understandings of the world and, in turn, research findings are co-created between the inquirer and the respondents (Denzin and Lincoln 2011, 13, Lincoln, Lynham, and Guba 2011, 103). In practice, these general positions have informed an inductive research style that is flexible and open to variance. A complexity of understanding, rather than the identification of 'truth' or objective reality was sought.

1.3 Study Design

1.3.1 General research aims

As noted within the preface, this research occurred as part of the Small Cities project, which was exploratory in nature and as such was guided not by a set research plan but rather by a set of research aims and objectives. The objectives (restated below) evolved both through meetings conducted as a team and during fieldwork in response to findings.

The research objectives were to:

- Identify the environmental challenges in the cities;

- Identify the key actors involved with environmental governance and their practices; map their relationships with each other;

- Explore the patterns of environmental governance in the cities and the politics around these patterns.

1.3.2 Case study approach

An embedded case study approach was employed. An embedded case study is one that employs sub-units in order to describe or understand the whole (Yin 1994, 41-42). Within this study the primary unit of analysis is environmental governance (in small Bengali cities). The research plan involved identifying and exploring specific objects and/or processes of environmental governance or particular environmental governance actors as embedded sub-units. Exploring these sub-units was intended to serve as a heuristic device through which I could begin to uncover broader patterns of environmental governance and the politics around these patterns. The embedded case study approach allows for a broad outlook on the way power works through environmental governance processes in small cities in West Bengal. In alignment with this approach, Bardhaman was identified as the primary field site (a choice explored below). Medinipur served as the second comparative field-site, where the sub-units explored were largely dictated by those identified in Bardhaman.

1.3.3 Site Choice

Field site choice was dictated by a number of factors, related to size, location, local politics and comparability. The Small Cities funding proposal identified small cities to be those with a population of between 100,000 and 500,000. In order to aid comparison, additional criteria were determined. Potential sites were limited to district headquarters. These cities were expected to have broadly similar bureaucratic structural endowments, in that the potentially influential District Magistrate would be present, as well as proximity to various other components of the district administration (courts, district level offices of various state agencies). District-headquarter municipalities that fell within the Kolkata Metropolitan Development Area and those in North Bengal (Maldha and north) were further excluded for reasons of their exceptional politics and/or environmental challenges.

Medinipur was pre-determined as a field-site due to a pre-established connection with Vidyasagar University and Dr. Abhijit Guha. A scoping visit was made to choose a second field-site and begin to develop local networks. Bardhaman was identified as the other field-site during this visit. A number of factors informed this choice. At the time of selection Medinipur was controlled by the TMC who had a small majority (two seats), while Bardhaman was controlled by the CPI-M who held 30 of the 34 seats. Thus different politics at a local level and in relation to the state government were expected. Bardhaman, on paper appeared to be more reform-oriented and had more established ward committees than Medinipur. Interviews during our scoping visit suggested that the bureaucracy and local politicians were open to our research. Finally, through the extended network of the other team members we were introduced to Dr. Gopa Samanta, a local Professor of Geography at the University of Burdwan who offered assistance.

Further discussion of each of these field sites occurs in Chapter Two.

1.3.4 Fieldwork

Fieldwork occurred during two substantive periods, plus the short scoping trip discussed above, which occurred in February of 2013. The first period of substantive fieldwork lasted 7 months, from July 28th 2013 – February 28th 2014. During the period I

lived in Bardhaman fulltime and visited Medinipur for 1 week per month from November onwards. Living in the primary field site was necessary to enable ethnographic observation. Activities in this first phase had both exploratory and substantive aims. In the initial months, research activities in the primary field site included transect walks, interviews, ethnographic observations and the collection of secondary data sources (see next sub-section for further detail), and were aimed at the first two research objectives. That is, research activities sought to identify the key issues and key actors involved. As issues emerged as being either particularly important or which were reflective of broader patterns more substantive attention was given to them. Additional methods, including the household survey and participatory photography were added to enable this. Fieldwork in the secondary field site of Medinipur began in November 2013. Research activities here were from the beginning more substantive and aimed at providing comparative data on the issues identified in Bardhaman.

The second period of fieldwork occurred between September 28th, 2014 and December 7th, 2014 (10 weeks). In order to facilitate the logistics of moving between the two sites, and conducting interviews with state-level actors, I lived in Kolkata and commuted between the field-sites as needed. The second period of fieldwork was designed to facilitate further, strategic investigation aimed at filling 'holes' identified following initial data analysis. In addition, interviews with state-level actors and experts in Kolkata were sought in this period and (ultimately unfruitful) archival research was conducted.

1.4 Methods

This research was approached from the outset with a significant amount of methodological flexibility. The use of multiple methods employing both qualitative and quantitative data collection allows for "several lines of sight" into the problem under investigation (Berg 2007, 5). The purpose of multiple methods here was not for triangulation as a strategy to verify data, but rather to contribute to developing increased

depth and complexity of understanding (Denzin and Lincoln 2011, 5). The particularities of the main methods employed are detailed below.[4]

1.4.1 Primary Data Collection
1.4.1.1 Interviews

For the purposes of this project and for recording data, I considered any purposeful interaction wherein I posed questions to a respondent/respondents to be an interview. It was through this method that the majority of my primary data emerged. Interviews were largely unstructured in nature, particularly in the first phase of fieldwork. In the second phase an interview guide was created and loosely followed for interviews with councillors and other state-associated governance actors in order to increase comparability of data collected. Interviews occurred in a broad range of situations and locations, ranging from standing at the side of the landfill ground in the rain, to the inside of homes and offices. The majority of interviews were conducted in the presence of multiple people. While these interviews often had a primary respondent it was not uncommon for the onlookers to interject with their own points or to prompt the respondent. In cases where the onlookers were perceived to have more social power than the primary respondent (i.e. in the case of men interjecting into a woman's response) I kept respondents separate in my notes.

Almost all of the interviews were conducted with a research assistant; the majority occurred in Bengali and were translated by the assistant. Data was collected via hand-written field notes. When possible I reviewed these notes immediately after the interview and clarified points with my assistant. These notes were typed as soon as possible (usually within 24 hours) and additional details and observations filled in. Nine interviews were recorded on a digital recorder, notes were taken from the recordings and portions directly transcribed and translated by a research assistant when needed. Three situations prompted me to record interviews: adverse conditions for taking notes (i.e. interviews conducted outside in the rain); interviews conducted primarily in

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[4] See Chapter Seven for a discussion of researcher positionality and reflection on these methods.

English; and interviews wherein the dialogue was expected to be particularly difficult to keep track of. Permission was always explicitly sought before recording an interview.

My interviews were highly variable and lasted anywhere from 5 minutes to well over an hour. I conducted 191 interviews, this dataset was extended with an additional 11 interviews conducted by my supervisor René Véron, primarily with State level actors who I was unable to access. The locational breakdown of all of the interviews is: 144 in Bardhaman and district, 39 in Medinipur, and 19 in Kolkata. Appendix 1 contains a list of all interviews, with respondents identities made anonymous.

Respondents broadly fell into six categories:

- current elected representatives: councillors (23);
- non-elected political actors: former elected representatives, party workers and ward committee members (12);
- bureaucrats: including municipal, district and state level officers (47);
- 'ordinary' citizens: housewives, merchants, male heads of households, etc (85);
- academics and activists (9); and
- club members (interviewed due to their involvement in clubs) (26).

People's identities are of course multiple and their inclusion within these categories is not mutually exclusive. I present them more as an organising heuristic and they align broadly with why I identified them as a respondent.

Respondents from the first three categories were purposefully selected due to their individual functions and/or their status as representing a particular municipal ward or area. First convenience and later purposeful sampling was used to identify respondents who I have broadly classified as "ordinary citizens". During the first phase of research I spoke with almost anyone who would speak with me. Later, my sampling became much more purposeful and aimed at reaching theoretical saturation on the topics identified during exploratory phases. Academics and activists were also sought out in a purposeful way and provided expert interviews on broader trends. Finally, a combination of snowball and purposeful sampling was used to identify club members as respondents. During initial clubs interviews I asked respondents to identify influential

clubs or those in receipt of public funds and I sought interviews with them. I additionally sought club respondents in areas I knew well, in those wards where the survey was conducted and with clubs identified by others as influential.

1.4.1.2 Ethnographic or participant observation

Ethnographic or participant observation is perhaps more accurately understood as a group of practices rather than a single method. Put simply it is process of "social investigation, whereby the researcher participates in the everyday life of a social setting, and records their experiences and observations" (Coffey 2006, 216). These practices are perhaps the most difficult to enumerate and yet were essential in developing the empirical analysis presented within this thesis.

As I spent long periods in the field-sites, particularly in Bardhaman, much of my exposure to how these cities worked (or did not) occurred while doing ordinary activities. In the processes of going to the market, eating at restaurants and food stalls, going to the movies, taking walks or drives on my scooter, negotiating bureaucracy, travelling on local trains to and from Kolkata and speaking with people I gained an understanding of the city and the broader context. The same can be said for the hours spent going to festivals and watching political activities such as rallies and marches. Even when I did not understand the discourse given the language barrier, there was much to be gained by watching how other people act at these events. By observing daily life and exceptional events I identified norms, such as: who sits or stands where; body language of individuals and groups; speech patterns and clothing, amongst many other details. Through these details I gained information that aided in interpreting the local context. Particularly useful was the time spent observing people while waiting in offices to speak with a respondent. These waits were at times lengthy (the longest being approximately 3 hours), and provided ample time to watch and listen to how citizens negotiated the bureaucracy. Finally, reading newspapers and watching the news on television provides essential context and opens up new lines of inquiry. Insight gathered during these activities was not recorded in an entirely systematic way. As I deemed it

appropriate or necessary, explicit observations were noted in one or more of: a field diary; personal blog; incorporated into the field report updated monthly during field-work; or recorded as memos in Atlas.ti (see below).

1.4.1.3 Shadowing

In order to better understand the relationship between elected councillors and citizens I obtained permission to shadow a locally powerful councillor for one day (Berenschot 2010). This was facilitated via a request to the Chairman, who asked the councillor to allow it. On that day my assistant and I spent approximately 12 hours attempting to shadow the routine of the councillor and observing the tasks that he and his party workers performed. While the councillor agreed to have us follow him, during the day it became clear that he was reluctant. During two periods (each approximately 1-2 hours) we were asked to leave and return later to a different spot. While the exercise did not work as well as hoped, it did provide valuable insight into how people access councillors and into their governance practices. During this day both my research assistant and I took notes. These were combined and recorded as a single 'interview'.

1.4.1.4 Participatory photography

The use of participatory visual techniques, including participatory photography, as a research method has emerged in the last 30 years as part of a broader trend towards increased participation and methodological innovation in the social sciences (Pain 2004, Harper 2002). The aim of such participatory methods is for increased reflexivity and creating opportunities to capture small-scale, local realities (Packard 2008). Within this project participants were recruited to produce photographs in response to the prompt of "show us things they would like to see more of and less of in their urban environment". In total six participants in Bardhaman were involved, five of whom were poor and lived in areas where I had previously done research work, and one middle-class participant. The participants were given small point-and-shoot analogue cameras to use and very basic operating instructions. After a pre-arranged period of time the cameras were collected, the films developed and follow up interviews sought with the participants.

The follow-up interviews utilised the technique of photo-elicitation, wherein the photos were used as prompts within the interview (Packard 2008, Belcher and Roberts 2012, McIntyre 2003). In order to allow the photographer to lead the interview, each photo was viewed individually and the photographer was asked to tell me why they had taken the photo. Additional details or follow-up questions were posed only after they finished explaining the photo. Data management from these interviews occurred in the same manner as the more conventional interviews, with the addition of scanned copies of the photos being embedded with the typed text.

As participation in the photography project was time-intensive and required significant self-motivation, participants were given a thank-you gift. This took the form of metal kitchen canisters. Such canisters are widely used and thus represented a class-neutral gift. Participants were not told in advance that they would receive anything in order to ensure that they participated freely and of their own will. In addition, one copy of her or his prints was left with each person.

In addition to the explanation of the project given at the time of recruitment, further discussions occurred in the follow-up interview. I discussed how the photos might be used and sought explicit permission from each participant. Each was also given the choice to be identified as the photographer by either their first name, or a pseudonym of their choosing. All of the participants chose to have the photos attributed to their real first name.

1.4.1.5 Household survey

A small household survey was also conducted in both cities (n=90/city). The survey was intended to provide illustrative data only, thus statistical representativeness was not sought. The questionnaire contained forty-three questions (including sub-questions) and one ranking exercise (see appendix 2). The questions included both quantifiable and closed and more open and qualitative questions. Two topics were explored: the presence (or lack thereof) and the use of environmental services, and governance networks. The later explored to whom people turn for assistance with various environmental problems. The ranking exercise consisted of ten environmental

issues, represented pictorially and in writing (English and Bengali) on cards. Respondents were asked to lay the cards on the floor or a table in order of their priority. They were permitted to give cards the same rank. Further, while enumerators encouraged them to rank all of the issues this was not forced (resulting in some non-answers).[5] A team of local graduate students were hired to conduct the survey and were given training prior to beginning.

In both cities the survey was conducted in three wards: one ward locally regarded as 'elite' and two broadly typical wards. As the municipal elections occurred just one month before the survey was conducted, one ward held by the opposition party before the elections was selected. Discussions with local actors, knowledge gained from prior research in the city and a review of available data on poverty rates or slum presence informed the choice of wards. In each ward a slum and non-slum area were identified for sampling. In the non-slum areas a transect that began at or when possible crossed a major road, was drawn onto a map to indicate the sampled area. This was not possible in the slum areas due to the irregularity of settlement. Fifteen households in each the slum and non-slum area were sampled, using a pattern of every fifth household. Enumerators were instructed that if a household refused or the house was not occupied to choose the next household as a replacement house but not to alter the original pattern. Further, they were to make two return visits to houses where adult members were temporally absent before choosing a replacement household. The selection criteria were intended to ensure comparisons on the basis of household class and the presence of a councillor who was affiliated to the ruling/opposition party where possible.

1.4.2 Secondary data collection

A significant amount of secondary data was collected in the field to supplement what is available online. This includes a range of government documents including budgets, planning documents and information pamphlets. Respondents were largely willing to share this information and I only rarely had my requests for data denied

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[5] See appendix 3 for the methodology followed for the analysis of this question. Some of the results are reported in the preface to Chapter Six.

outright. Additionally, local activists provided me with copies of some of their own research. Finally, during the initial period of field research I received an English daily newspaper (The Telegraph), from which I clipped relevant articles for future reference. My research assistants did the same with the local Bengali daily. In the field these documents informed the questions I asked during interviews. As applicable, they have been further analysed and inform my findings.

1.4.3 Data Analysis

Data analysis has occurred at different levels and is reflective of the varying types of data collected. As stated previously, the bulk of the primary empirical data was recorded as interviews. The typed field notes and transcripts from these interviews were entered into Atlas.ti and coded. Initial coding occurred in field and was largely thematic and descriptive in nature. This process of coding aided in the production of a field report that was updated at least once a month. This field report began as a largely descriptive document but evolved during fieldwork to include tentative thoughts on interpretation and analysis. Producing the field report and continually comparing new data with prior findings allowed for more analytical themes to emerge while still in the field. As this occurred I began applying these codes to future interviews and when possible re-coded older interviews. This process continued throughout both periods of fieldwork.

In the period between the first and second period of fieldwork the system of coding was refined and all of the interviews were coded again to reflect both newer descriptive and analytical codes. Doing so allowed for initial conference papers to be written and for gaps in the data and further lines of inquiry to be identified in preparation for the second period of fieldwork. During and following the second period of fieldwork the new interviews were coded in a similar manner. The process of preparing papers has resulted in the application of further codes to select interviews. The query, code-families and code-network tools in Atlas.ti have been used in order to extract quotes that have informed the empirical portion of each paper and portions of this linking document. Additionally, the aforementioned field report was drawn upon when writing papers.

Analysis of secondary data and of field-notes has occurred in a much more purposeful way. When secondary data was collected in the field it was reviewed and often insight from them was incorporated into the field report. Whilst writing papers and the linking portion of this thesis, these documents were also reviewed as needed to provide specific pieces of information. Many of the observations recorded in the field diary and elsewhere were also incorporated into the field report or as memos in Atlas.ti. Thus they have informed analysis in the manner detailed above.

Finally, until now only the quantitative data from the survey has been analysed. Under the direction of the Small Cities team, a student assistant has been engaged to produce descriptive statistics from this data using Excel.

1.5 Ethics

Conducting ethical research is a significant concern and one that I was cognisant of at all times. In the field, this translated into a number of key practices. Prior to conducting any fieldwork a discussion was had with each research assistant about the importance of confidentially, respect and trust. These principles were re-enforced regularly, particularly following interviews where potentially sensitive information was revealed.

I began each interview by providing my full name and that of my assistant, explaining that I was a PhD researcher from Switzerland. When requested I would provide identification, my business card or additional information. While I endeavoured to always explicitly ask if people would answer our questions and to advise them that what they told us was confidential, in reality this did not occur all of time. In these cases respondents freely answering the questions after the project was explained was taken to be implied consent (Berg 2007, 79). I acknowledge that this is not an un-problematic assumption given the power-imbalances between many of my respondents and myself. However, I attempted to remain aware of people's comfort level and used this as a guide to if or how I continued interviews. In some interviews additional levels of anonymity were offered and/or requested. When this occurred I made additional notes on the interview about what had been agreed. I understood consent to be contingent and that it

could be withdrawn at any time. When respondents indicated (verbally or non-verbally) that they wished to stop speaking, the interview ended. Finally, if pursuing a line of inquiry could in any way negatively affect prior respondents that line of inquiry was abandoned (see Ch. 5.2.8.2 for an example).

1.6 From general research aims to cross-cutting topics

As previously described this research was exploratory in nature and followed a general inductive approach. The third research aim, to explore the patterns of environmental governance in the cities and the politics around these patterns in particular is reflective of this approach. In practice each of the empirical case studies (Chapters Four, Five and Six) stand alone and have conclusions that contribute to our knowledge about particular situations. However, commonalities emerge through the process of analysing and writing these case studies. Reading the cases together allows for the identification of three broad dynamics of environmental governance in small cities in West Bengal. These dynamics are: issues of politics and power; place making; and the formation of subject positions. Each dynamic can be understood to both emerge from and shape governance practices and their outcomes. The remainder of this sub-section will briefly situate each of these themes. They will be returned to explicitly in Chapter Seven.

The concern with how politics and power shapes governance practices and in turn the urban milieu, is embedded within the third research aim and is dealt with throughout the thesis. Politics here is not only electoral or party politics, but rather is more fundamentally the everyday displays of power by particular actors. In line with the actor-oriented and broadly post-structural approach adopted throughout this thesis power is not explored in terms of a dichotomised, Marxian class analysis. Rather I seek to engage with the multiple intersectionalities of power. Thus there is a focus on highlighting "cross cutting – and articulated – power relations" (Loftus 2007, 42) including issues of class, caste, and access to economic, social, and political authority. As power is understood in broad Foucauldian terms as diffuse, relational and existing only when enacted (Foucault 1982), it is seen to be emergent from practices and interactions? but not attached to actors (Ribot and Peluso, 2003). Thus we must necessarily understand

power to be fragmented and to allow for the possibility that a governance actor may simultaneously be in a dominant position in one context and in a subordinate position to other actors in another context (Ribot and Peluso 2003, 160). Examining power in such a manner is to engage with variance in order to avoid the trap of viewing governance as only the practice of domination.

Issues of power as well inform a concern with space and place. Throughout the empirical case studies, examples of "the *political* nature of space – … the ways in which places reflect, disguise or reinforce relations of power and the politics of difference" emerges (Donner and De Neve 2006, 5). Place making is understood here to be an expression of power. It is the process of transforming bounded space into a place of meaning and obligation that concentrates actions and brings together social life (Shields 2004, Soja 1989). Thus, places are both constructed and experienced (Sharp et al 2000). As will be demonstrated, practices of place making are part of the environmental governance practices of both state and non-state actors. Further, the reproduction of places of meaning is seen to shape the practices of those who attempt to govern these socio-natures.

The final dynamic which emerges from the empirical case studies and which is returned to in Chapter Seven is the ways in which everyday environmental governance practices contribute to subject formation (Gabriel 2014, 42). Sharp et al (2000), drawing on Foucault, Harvey and Castells (amongst others), have highlighted the interconnections between space and the formation of subjects. For them it is in particular places that power relations become tangible and where subjects, identities and knowledges are (re)created. Following from this perspective then, engaging with issues of power and ideas of place making necessarily leads to considering how such relations may lead to the construction of particular subject positions and identities that shape behaviours. The imaginaries and practices that emerge from these subject positions are part of the processes that shape the (re)production of particular socio-natural conditions.

1.7 Structure of the thesis

The body of this thesis is composed of a contextual chapter, four articles that have been submitted to peer-reviewed journals and a concluding chapter. As of the original

submission date of this thesis (September 18ᵗʰ, 2015) all of the articles were under peer-review. They are presented here as they were when submitted (or re-submitted) to the journal, though they have been reformatted for consistency. Each article is presented with their individual works cited list; a comprehensive bibliography is also found at the end of this thesis. As the research was conducted as part of a research project, three of the articles are co-authored. A clear statement is made prior to the presentation of each about authorship and current status. A preface to each article situates the work within the broader project of the thesis, as explained below.

Chapter Two begins by providing contextual information about the nature of decentralisation and politics in West Bengal. This broader context informed site selection, as well as the selection of embedded case studies and helped to narrow research questions. The remainder of that chapter is devoted to providing an overview of each of the studies cities.

Chapter Three, "Governing Urban Socio-natures", presents the conceptual approach for this study. The first part of the chapter provides an over view of Urban Political Ecology as an approach. In the second part of the chapter, the co-authored article *Everyday governance and urban environments: Towards a more interdisciplinary Urban Political Ecology* demonstrates the benefit of engaging with the everyday governance and everyday state literature to offer a more nuanced account of the role of state and non-state actors in (re)producing urban socio-natures.

Chapter Four, "Para Clubs as Governance Actors" presents the solely authored article *Authority and the local urban environment: Neighbourhood clubs as governance actors in West Bengal*. This article examines the role of clubs, a particular situated institution, within everyday environmental governance networks. Through an actor-oriented approach to everyday environmental governance that engages with the work of De Certeau (1984) it explores the manner in which clubs utilise environmental governance practices to (re)produce a particular spatialised social structure, the *para*.

Chapter Five "Governing the Pondscape" further explores the role of clubs as well as other actors in governing the urban pondscape. This occurs within the article *Ponds, power, and institutions: the everyday governance of accessing urban water bodies in a*

small Bengali Town". The article develops an actor-oriented approach to Urban Political Ecology to explore the urban pondscape as a composite resource, characterised by overlapping (and at times parallel) access claims and complex differentiated rules in use for each component of the composite.

Chapter Six, "Governing Solid Waste" continues to use an actor oriented approach to UPE in the article *Clean city politics: an urban political ecology of solid waste in a small city in West Bengal*. It explores the implementation of a pilot segregation-at-source solid waste management project. In doing so the practices of state actors are explored in order to uncover the complex power dynamics that shape policy implementation and this contributes to the (re)production of a particular, uneven socio-nature.

Chapter Seven concludes. In this chapter I attempt to review and weave together the findings of the empirical chapters to explore the complex webs of power and governance networks that shape urban socio-nature in West Bengal. In order to do so I return to the research aims identified above. First, I discuss why each embedded case study was chosen. I then examine the governance networks identified by focussing on the practice of the state, clubs, 'the party' and other non-institutional actors. As well I engage further with the cross-cutting dynamics identified above: issues of politics and power; place making as governance practice; and the formation of subject positions. I then summarise the contributions of this research to academic knowledge. Reflections on methods, researcher positionality, and the limitations and challenges of the study follow. Finally, a further research agenda is presented.

CHAPTER 2: CONTEXT

The following chapter describes the state led governance structure and the politics of West Bengal. While neither the state[6] (and its bureaucracy) *per se* nor electoral politics are objects of this research, understanding the state structure and the political history of the State of West Bengal informed the research design and objectives. An understanding of decentralisation in India and the attendant bureaucratic structure informed the selection of field sites, the choice of embedded cases and allowed for a narrowing of research questions in the field. An understanding of the unique politics of West Bengal informed the research in the same ways. However, as neither the state nor electoral politics are the central objects of this study, the information provided here is intended only as an overview.

2.1 Decentralisation in India

India has ostentatiously become one of the "most decentralised economies in the world" (Purfield 2004, 3). Under the Indian Constitution governance occurs at three tiers: Union (or national), State and local. The Union government is responsible for national infrastructure and outward facing functions. The State governments are primarily responsible for intra-state functions, such as law and order and public health. There is also a list of concurrent responsibilities, which are the function of both the state and Union governments. This list is quite broad, ranging from family law, to the transfer of non-agricultural land, to economic and social planning. Decentralisation to the local third tier of government occurred relatively recently, following the passing of *The Constitution (Seventy-Third Amendment) Act, 1992*, for rural areas and *The Constitution (Seventy-Fourth Amendment) Act, 1992* for urban areas (hereinafter the 74th Amendment).

The 74th Amendment mandated the creation of a multi-tiered system of urban governance. At the lowest level are ward committees. At the middle level (and most widely present in practice) are the Urban Local Bodies (ULBs), who are to act as "institutions of self-government"(Government of India 1992a). The terminology for

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[6] In order to distinguish between the state as an idea and States as constituent units (and their governments) of a nation with a federal form of government, I capitalise the later use of the word State through out. Therefore State acts as a pronoun for the "State of West Bengal".

ULBs varies by settlement size, *Nagar Panchayats*—covering areas transitioning from rural to urban; Municipal Councils—for small urban areas; and Municipal Corporations—for large urban areas. Bhagat (2005, 71) suggests that while ULBs are not hierarchical, Municipal Corporations have a greater degree of autonomy from the state and are able to deal directly with state authorities. At the upper most level are District and/or Metropolitan Planning Committees (DPC/ MPC).[7]

The responsibilities of ULBs, as established by the 74th Amendment, are listed within the *Twelfth Schedule of the Constitution*. These responsibilities include urban planning, regulating land use, local infrastructure and social and economic development and support. Additionally, and particularly relevant to this thesis, ULBs are responsible for many environmental governance functions including: water, sanitation, solid waste management, urban forestry, the protection of the environment, and the provision of urban amenities including parks and garden. There is significant variance among states in how the 74th Amendment has been instituted. Further, as Vidyarthi (2004) has highlighted, the language of the Amendment itself is of suggestion not dictate: it reads that states "may" implement and not "shall" implement. Thus, there is exploitable ambiguity. The following section addresses urban decentralisation in West Bengal specifically.

2.1.1 Urban Decentralisation in West Bengal

Urban decentralisation, following the 74th Amendment was institutionalised in West Bengal through *The West Bengal Municipal Act, 1993* (hereinafter 'the act'). The act largely follows the structure of decentralised governance mandated by the amendment, with the exception of ward committees. While the amendment mandates them only in municipalities of over 300,000 and allows for one committee to represent more than one

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[7] It is perhaps telling about the reality of decentralization that to my knowledge no DPCs exist in either district where this research was conducted. However, in each municipality a para-statal development authority is constituted. Though the Burdwan Development Authority is able to realize a limited number of projects, the Kharagpur – Midnapore Development Authority is essentially non-functional. Vidyarthi (2004) has pointed out that the very presence of the para-statal Kolkata Metropolitan Development Authority (KMDA) largely contravenes the ideals of decentralised planning and people's participation. Of course, the same can be said of all of the Development Authorities.

ward, in West Bengal ward committees are mandated for all municipalities and for each ward. The West Bengal act provides further direction regarding the structure of ULBs and the duties of key elected members.

According to respondents the ULB structure and the nature of decentralisation varies from that in other states in a few key ways. In particular the role of the Executive Officer (EO) in West Bengal is much more limited than elsewhere (i.e. Gujarat). The EO is generally drawn from the State cadre, however (s)he is often a retired and now redeployed, contractual member of this cadre. The EO has little influence and is largely responsible for ensuring the rules are followed. However, an EO stated that he has no power to actually enforce the rules, but rather is limited to advising the council about rule violations. Secondly, interviews with a District Magistrate[8] (DM) and two Assistant DMs reveal that their role in urban governance is much more limited in West Bengal than elsewhere. They are able to consult, offer suggestions and act as mediators between different parties and the municipality but they assert that they "cannot and [do] not interfere with the municipality".

The obligatory functions of ULBs in West Bengal are quite extensive. Broadly speaking the municipalities have an obligation to provide and maintain basic public infrastructure, such as water and sanitation, solid waste management, public health services, town planning and administration, and transportation infrastructure (i.e. streets, bridges, lighting, etcetera). They are also charged with a number of development activities including the improvement of slums. In addition to the obligatory functions, a large number of discretionary functions are specified. These functions include disaster relief, provision of public spaces and leisure facilities, social infrastructure including orphanages, homes for the destitute, hospitals and crèches. Amongst the discretionary functions are key environmental governance functions, in particular the provision of sewage treatment, the abatement of smoke nuisances (air pollution) and the reclamation of wastelands through social forestry.

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[8] The District Magistrate is a chief administrative and revenue officer of the district. (S)he is a member of the Indian Administrative Service.

The primary tier of decentralisation is, at least on paper, well entrenched in West Bengal with ward committees constituted in 93% of wards (Department of Municipal Affairs n.d.). The composition and function of the Ward Committees in West Bengal is established by *The West Bengal Municipal (Ward Committee) Rules, 2001.* These rules establish the ward committee as a nominated board, wherein both the councillor and municipality nominate members. Under the rules, the committees are largely intended to "supervise and monitor" the delivery of public services, detect unlawful activity, prevent misuse of public goods and participate in planning exercises, amongst other highly varied functions (Government of West Bengal 2001.6). Mathur (2007, 17) points out that the restricted membership of ward committees in West Bengal contrasts with that of other highly decentralised states, including Kerala and Karnataka where there is a greater degree of involvement with civil society.

2.1.2 Evaluating decentralisation in West Bengal

In order to begin to identify potential environmental governance actors in the field, it was important to get a grasp on the nature of urban decentralisation in West Bengal. However, there is very little literature exploring or critically evaluating this. This stands in contrast to the more extensive literature on rural decentralisation via the *Panchayati Raj* (Crook and Sverrisson 2001, Webster 1992, Chakrabarty 2011, Véron et al. 2006, Bardhan et al. 2008). As this literature provides context and potential parallels with the urban situation, it is briefly reviewed here.

Rural decentralisation was institutionalised early in West Bengal, with the *West Bengal Panchayat Act, 1957,* though the current form emerged only in 1973. Unlike in other states both rural and urban elections are open to party politics (Webster 1992, Government of West Bengal Development and Planning Department 2004). It is well accepted within the literature that the early and thorough adoption of the *Panchayati Raj* was the result of both ideological and pragmatic considerations by the Left Front. Rural decentralisation allowed the government to build a strong base of support and create spaces for influence at the grassroots (Chakrabarty 2011, Crook and Sverrisson 2001, Webster 1992). However, a degree of clientelism became institutionalised (Bardhan et al.

2008, Chakrabarty 2011).[9] While Chakrabarty (2011) insists that corruption is strife, the quantitative studies of Bardhan *et al* (2008) and Bardhan and Mookherjee (2006) suggest that there is little systematic bias or elite capture. A more nuanced dynamic, based on qualitative research emerges in Véron *et al* (2006, 1923 - 1924) who suggest a decentralisation of corruption, wherein new "political entrepreneurs" have developed and are able to capture the decentralised state for private gain through local networks of corruption.

Further, critical studies have suggested that decentralisation via the *Panchayati Raj* in West Bengal has been limited in terms of fiscal and administrative autonomy. *Panchayats* (unlike ULBs) have almost no fiscal autonomy to raise or allocated funds (Bardhan and Mookherjee 2006). This lack of rural fiscal autonomy is reflective of broader patterns seen across India (Government of West Bengal Development and Planning Department 2004, 3). Administrative autonomy of *Panchayats* is also found to be limited largely to choosing the location and beneficiaries of state and district sponsored schemes (Government of West Bengal Development and Planning Department 2004, Bardhan and Mookherjee 2006).

In contrast, the literature on the nature of urban decentralisation in West Bengal is limited. Jacob (2011) has suggested that across India urban decentralisation has done little to improve living conditions or service delivery, calling into question the effectiveness of these reforms. While Coelha *et al* (2011, 15) see the 74th Amendment largely as a neoliberal project to "rescale governance by casting cities as economically viable entities". Mathur (2007, 12 - 13) suggests that the fiscal autonomy of ULBs (as with *panchayats*) in West Bengal remains limited in practice.

Chattopadhyay (2015) has recently stated that it is questionable if ward committees have improved local government reflexivity. He suggests that annual general meetings, intended to connect citizens to elected representatives, are often not held, or people are not aware of them so attendance is low. Further, the system of nominated ward committees has led to the politicisation of what he asserts was

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[9] Bardhan et al (2014) suggest that in traditionally Left Front dominated areas; clientism became less effective in 2011, compared to in 2004. This finding was based on a voters survey carried out with the same households (n=2402) in 2003-04 and 2011 (Bardhan et al, 2008 is based on the 2003-04 survey).

envisioned as a nonpartisan citizens' body. As a result the politicised committees largely just rationalise the decisions made by councillors and other political actors (see also Ghosh and Mitra 2008, and de Wit *et al* 2008). The situation on the ground in Bardhaman and Medinipur reflects these findings. Ward committees are constituted but I have little evidence to suggest that they function. Two exceptions are however notable, in Bardhaman one ward committee was found in the ward of scheduled caste councillor. In that case the councillor seems to be entirely a figurehead, recruited by the ward committee and selected at the state level for being an "entirely non-political person." In Medinipur meanwhile, as detailed in Chapter Six, a ward committee become responsible for the ward after the unexpected death of the councillor.

A number of elected representatives and state officials were questioned specifically about urban decentralisation. While one respondent asserted that the depth of decentralisation had increased in recent years, others were more critical. For example, a municipal official in Bardhaman, giving the example of a solid waste management project they were attempting to implement, stated that the municipality should be the third tier of government, but in reality everything depends on the decision of the State level government. When questioned, a State official asserted that this level of influence does not contravene the spirit of 74th Amendment because such projects involve government money and government land—thus requiring State permission is logical. This example is reflective of the findings of studies of both rural and urban decentralisation that suggest that both administrative and fiscal autonomy remain limited (Mathur 2007, Bardhan and Mookherjee 2006).

2.2 A brief note on politics in West Bengal

The selection of West Bengal as a state for research within the Small Cities project, and in turn the selection of the particular field sites within West Bengal was heavily influenced by the particular politics of the State. As such it is important to briefly discuss the particularities of the politics of West Bengal. These dynamics influence the case studies presented in Chapters Five and Six.

Political control of West Bengal was marked by relative stability for 34 years, with the Left Front government maintaining power from 1977 until 2011. At present the All India Trinamool Congress (TMC), headed by Mamata Banerjee, rules the state and the majority of urban local bodies including both Bardhaman and Medinipur (see city profiles). Given the influence of local politicians on the lives of urban dwellers and what some have characterised as the "hyperpoliticization" (Roy 2002, 120) of life in West Bengal it is beneficial to briefly sketch the state's political history (see also Webster 1992).

As stated previously, the Left Front coalition held power continuously from 1977 until 2011. The relative stability of the political order in West Bengal has been attributed to numerous factors. Chakrabarty (2011) asserts that the Left Front consolidated their power first with marginal sectors of the rural population through the populist 'Operation Barga', launched in 1978 and given legal sanction in 1979, which provided land rights for share croppers, tenancy reform, and land redistribution. The party then used the *Panchayati Raj* system to establish a patron-client relationship between the party and its supporters (see also Webster 1992, Crook and Sverrisson 2001). In doing so they established deeply loyal ties with the rural majority. However, the rural focus of the party's policies was ultimately a part of their downfall according to Chakrabarty (2011). The failure of the party to respond sufficiently to the urban economy, particularly *vis-à-vis* industrialisation or economic diversity weakened the economy. Inspite of a crash industrialisation policy in the first part of this century, this along with internal strife and controversy [10] resulted in a loss of confidence amongst the urban middle-class. Chakrabarty asserts that this allowed space for the opposition (the Left Front and the Indian National Congress) to gain favour. Simultaneous, the focus on urban growth and controversial land policies alienated the traditionally strong rural support base (Harriss and Tornquist 2015). The shift away from the Left Front and towards the TMC began in 2008 at the district level, continued in 2009 with the loss of approximately half of their Lok Sabha seats, and concluded with the a majority win in state elections in 2011.

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[10] Most notably surrounding the creation of the Special Economic Zones in Nandigram and Singur. The opposition to these zones led to clashes between the state (represented by the police) and protestors and resulted in 14 deaths (Chakrabarty 2011, 299).

In spite of the TMC being in power for four years, no peer-reviewed literature, without strong biases could be found exploring the politics of the party. However, it is clear that the hyper-politicised nature of life in West Bengal has until now, not changed. As Partha Chatterjee (2009, 43) has evocatively said, "In West Bengal, the key term is 'party'. It is indeed the elementary institution of rural life in the state—not family … but party. It is the institution that mediates every single sphere of social activity, with few exceptions, if any" (see also (Bhattacharyya 2009). Chatterjee's statement is perhaps a bit extreme, suggesting that 'the party' is a virtual puppet master, yet it is indicative of the extent to which political parties can or do permeate daily life in the State. Donner (2013) has further noted that the idea of 'the party' remains of the outmost importance in West Bengal and this has not changed with the TMC.

Indeed the importance of 'the party' and the politics within the studied small cities seems to resonate more with Dwaipayan Bhattacharyya's (2010, 2009) notion of "party society" than with the more well known concept of "political society" forwarded by Partha Chatterjee (2004). In brief, under Chatterjee's conceptualisation much of the population within postcolonial countries are excluded from civil society, and accesses the state not as citizens with enforceable rights, but rather as populations, constituted as particular strategic and contingent communities to demand entitlements from the state. Elements of political society were seen within this study (see for example Ch 4.2.6.2) but this was not the dominant political strategy observed. Rather, it was the role of "the party" that emerged more strongly within my research.

In contrast to political society, within Bhattacharyya's (2010, 2009) notion of the "party society" of rural West Bengal, people access the state and state resources not through moral communities, but through the party that dominates the socio-political sphere. Rather than cohesion as a community, party society is based on "a deep division between groups ('we' versus 'they')" (Bhattacharyya 2010, 53). The author identifies five conditions that mark party society: (1) political parties dominates the socio-political sphere; (2) parties do not pay special interest to class, ethnic or religious groups; (3) a single party may be dominant but opposition is not absent and nearly all forms of opposition (including familial and social) take on partisan forms; (4) parties actively

intervene in both public and private life; and (5) government institutions are intertwined with political parties (*ibid*, pp.52-53). My research was not particularly focussed on political discourse or party politics per se, thus it is difficult to speak with conviction about the second conditions of "party society" (parties not targeting particular class, ethnic or religious groups). However, in particular cases all of the other conditions were observed or remarked upon by respondents. For example, one respondent in Bardhaman characterised the situation as such: "the administration is the party and the party is the administration". Similarly, the dominance of "the party" and their influence in all spheres is addressed specifically in Chapter 5.2.8.4. Regardless, the point here is not to forward either the rubric of "party society" nor that of "political society" as meta-concepts into which existing political actions fit easily. Rather, I introduce both concepts here more as a framing device than an analytical concept in order to situate the reader as to the often contentious and pervasive nature of politics in West Bengal.

2.3 Locating the case studies

As indicated in the study design, field research occurred in the cities of Bardhaman and Medinipur. The next section develops profiles of each city and in particular their municipalities in order situate the research. Figure 1. Map of West Bengal

WEST BENGAL

INDIA

Indian Ocean

500 km

Indian border

District border

Bardhaman

Kolkata

100 km

Medinipur

Draft: N. Cornea
Cartography: P. Gomez
Source: Administrative areas (GADM) India, DIVA-GIS (n.d.)
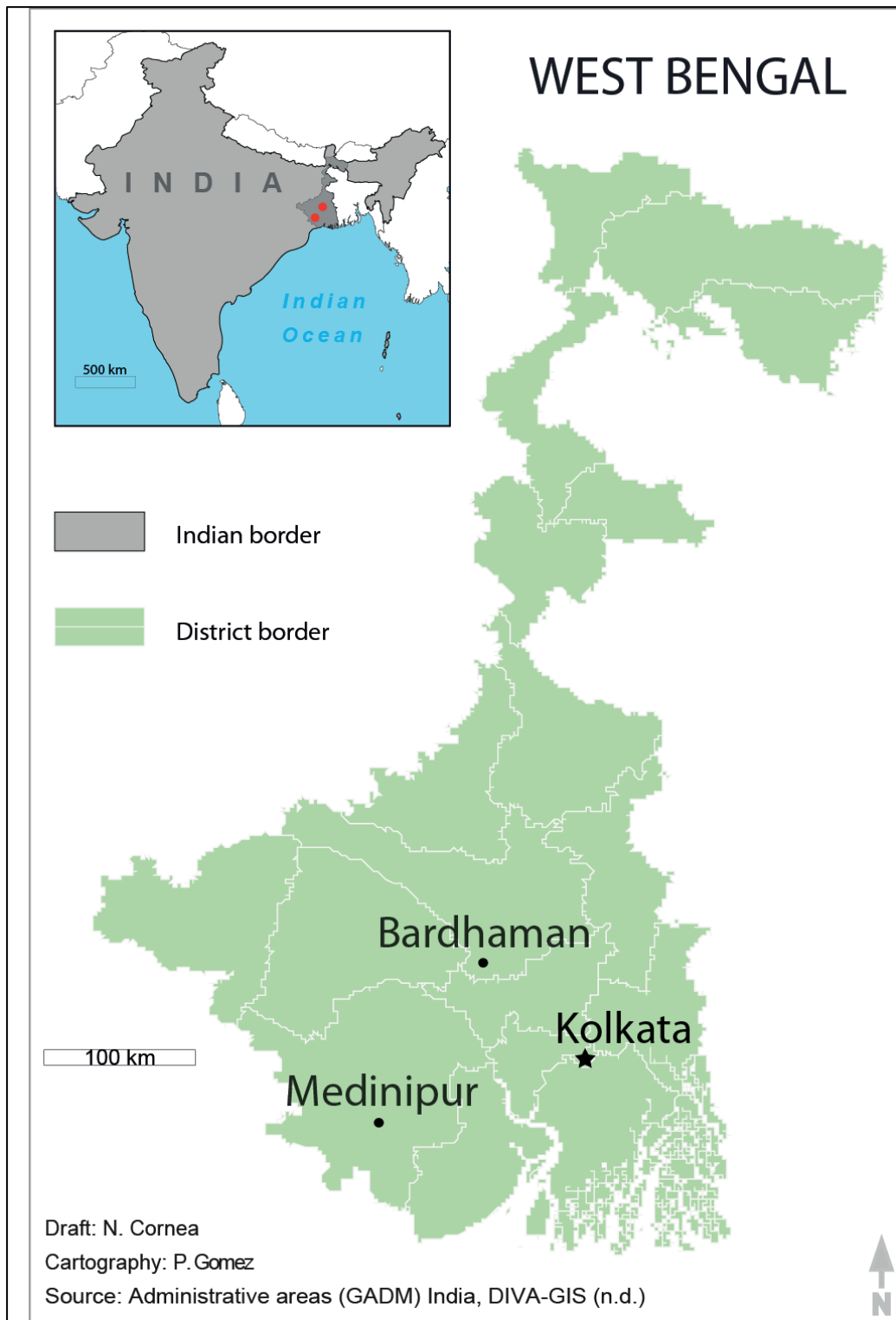
2.4 Bardhaman

Figure 2. Map of Bardhaman
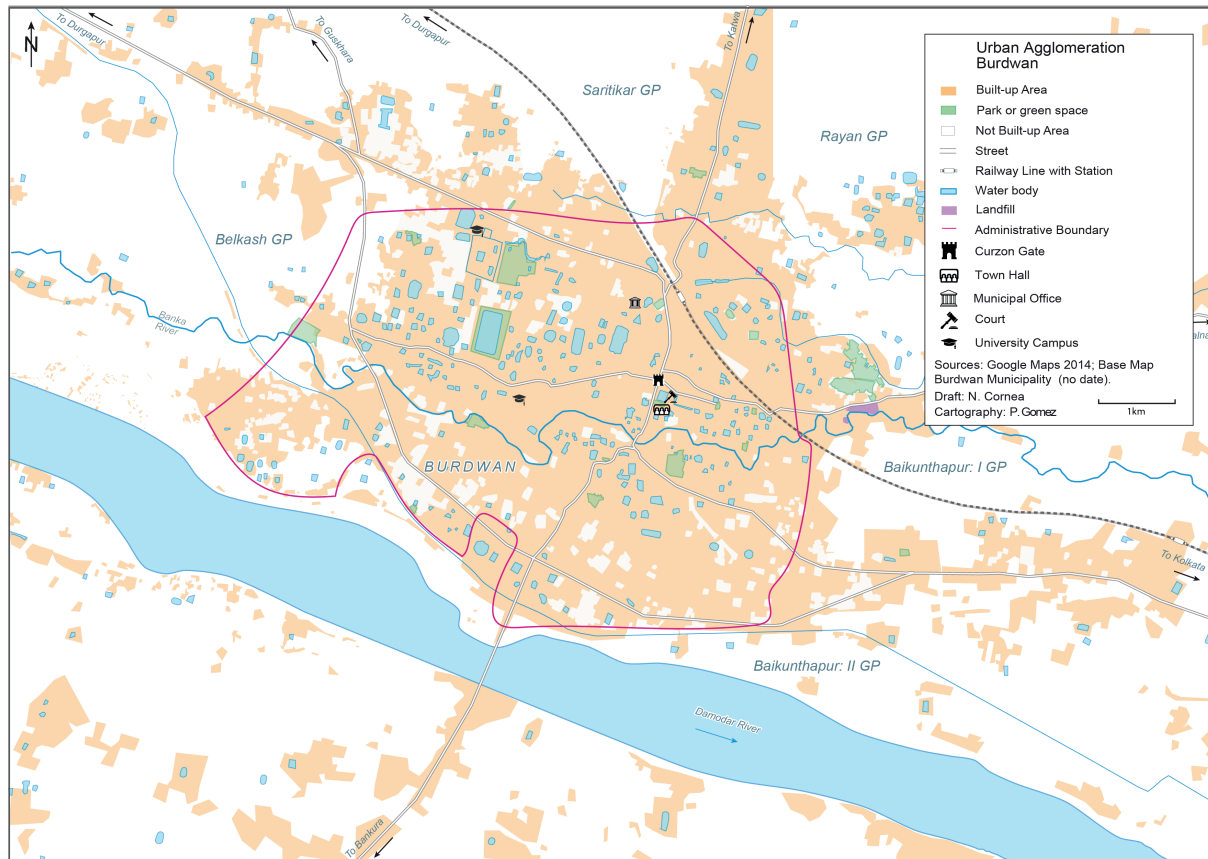
Bardhaman, the primary field-site is a medium sized city situated in West Bengal's so called 'rice bowl', an area of particularly fertile land. It is located approximately 100 kilometres north of Kolkata and is well connected by a major highway and by rail. While the settlement agglomeration is estimated to have a population of 370,907 (Moriconi-Ebard E-Geopolis database), the population inside of municipal boundaries (an area of 26.3 km²) is 314,265 (Census Commissioner of India, 2011). The municipality itself is quite densely settled with 11,949/km².[11]

As the district headquarters, Bardhaman is the home to most of the State government district level offices including the District Magistrate, the Court, the offices of *Sabhadhipati* of the *Zilla Parishod*,[12] and various district offices of State agencies such as the Forestry and Fisheries departments. It is also a significant place of commerce and

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[11] Author's own calculations

[12] The *Sabhadhipati* is the head of the *Zilla Parishod*. The *Zilla Parishod* is the upper most (district) level of rural decentralized governance.

tertiary services (particularly medical care) for people from the surrounding villages and towns. These characteristics contribute to the city experiencing a significant influx of people each day. Municipal officials estimate that 300,000 – 400,000 people commute to the city daily, adding significant pressure to municipal services. This is particularly the case for roads, solid waste management and to a lesser extent water.

There is no significant industrial presence in Bardhaman except for rice mills. Census data on municipal amenities further confirms the importance of primary commodity processing; listing the top three 'manufactured goods' to be fine rice, puffed rice and potato (Census Commissioner of India, 2011). There are some small-scale manufacturers of cutlery, kitchen pots, and etcetera, though to my knowledge there are no large manufacturing units. The economy is thus based largely on services and transport (Burdwan Municipality 2008).

2.4.1 Burdwan Municipality
2.4.1.1 The Urban Local Body
Prior to the elections in September 2013 Burdwan Municipality was considered to be a CPI-M stronghold. This was reflected both in the fact that the CPI-M held 30 of the 35 wards but also within the nature of the ULB. For example, the previous Chairman was referred to as the "King of Burdwan" by more than one of my contacts. This tradition of single party domination and strong control by the Chairman does not seem to have changed following the elections when the TMC secured all of the wards.

There seems to be a fair amount of involvement by the central committee of the TMC with the Board of Councillors that extends beyond the election. Beyond the selection of or endorsement of candidates that is expected when people run on party tickets, interviews conducted with municipal officers and elected representatives suggest that the party is quite involved with the function of the council. For example, both the Chairman and a member of the Municipal-Chairman-in-Council (MCIC) stated that the party assigned their positions—a similar situation was noted in Medinipur as well.

Observations within the municipal offices in particular made it clear that there is a hierarchy amongst councillors with the Chairman, Vice-Chairman and MCIC very much at the top. One elected official lamented that people expected them to do

everything, yet the councillors have only a small role, but the MCIC is more powerful. Others had highlighted the importance of having a good relationship with the MCIC and Chairman to get things done. These characteristics aptly demonstrate the networked, relational nature of governance (Keil 2006, Gupta 1995, Lindell 2008).

2.4.1.2 The Bureaucracy

The Burdwan Municipality employs approximately 870 persons on a permanent basis and approximately 600 temporary labourers (Burdwan Municipality, n.d.). The overall number of vacant positions is a matter of debate. According to municipal officials, the State had previously approved a staff level of 1221 positions, however in 1995 this was revised to 680. The Municipality rejected this revision and as of late 2013 no agreement between the State and the Municipality has been reached regarding permanent staffing levels. As a result, temporary labour is employed in all departments.

The Municipal budget for 2013–2014 is INR 1,211,069,499 (USD 18,530,200). This amounts to approximately INR 3854 per capita (USD 54). Funds generated by the municipality itself, referred to as 'own funds', account for 31% of total revenue receipts but only 12.5% of total receipts (capital + revenue) (Burdwan Municipality 2013).[13] The municipality has limited financial autonomy, confirming the observations of Mathur (2007). While a district level official characterised the Municipality of Burdwan as "better resourced" than most, municipal officials see their financial situation as limited. The Municipality has been able to increase own funds through various initiatives, including the development of two guesthouses and income from fees to erect hoardings (billboards). However, officials point out that their limited financial capacity reduces their scope to engage in non-priority work. For them the environment—beyond basic services, is largely not a priority.

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[13] Authors calculations

2.5 Medinipur

Figure 3. Map of Medinipur
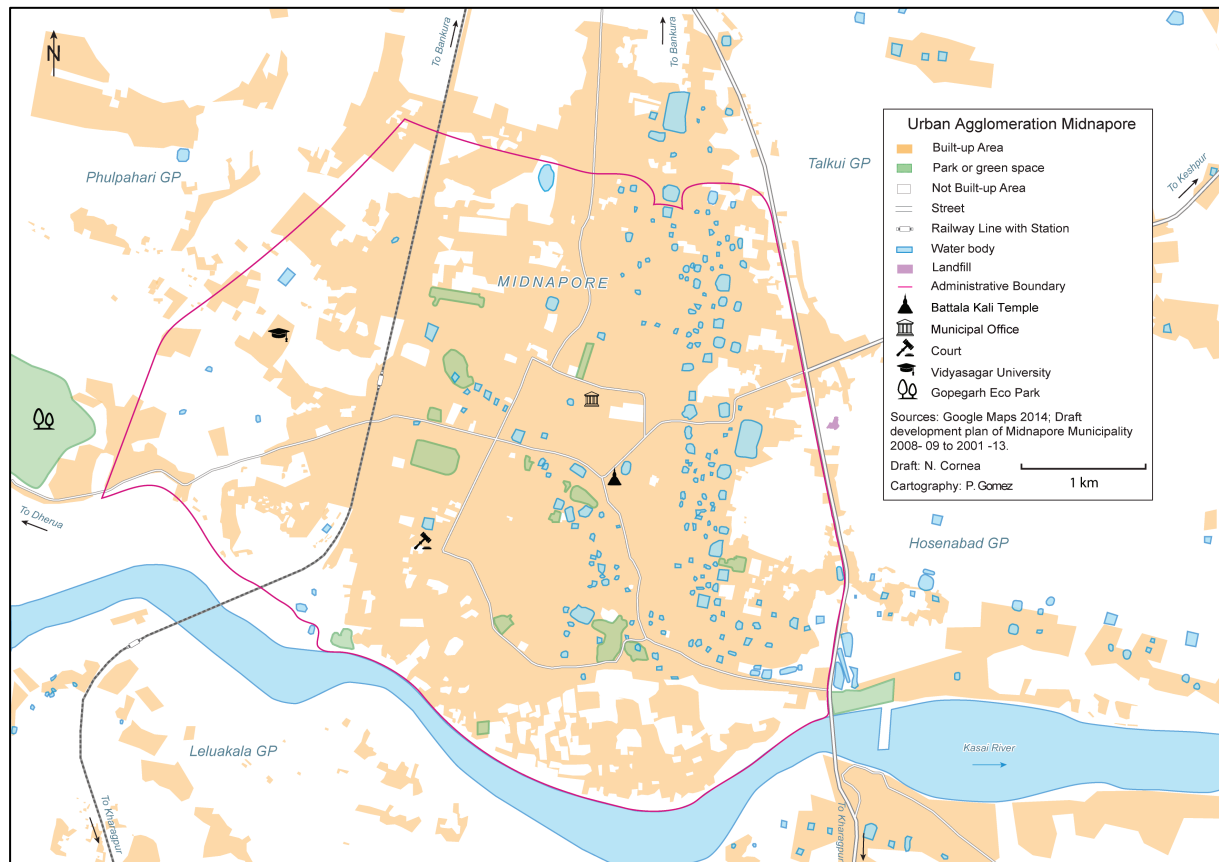
Medinipur, the second field-site, is a smaller city situated approximately 135 kilometres from Kolkata. The municipality covers an area of 18.36 km² with a population of 169,264 (Census Commissioner of India). The settlement agglomeration is not significantly larger than the municipal boundaries and is estimated to have a population of 195,488 (Moriconi-Ebard E-Geopolis database). With a population density of 9,219/km² it is less densely settled than the primary field site (versus 11,949/km² in Bardhaman).

As the District Headquarters of Paschim Midnapore it, like Bardhaman, is the site of many district level offices of the State government. However, as a service centre Medinipur is dwarfed by Kharagpur (pop: 293,719), a planned industrial town, which is also the location of an Indian Institute of Technology[14] is just 13 kilometres away. This is aptly evidenced by the lack of consumer services, for example there are only 10

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[14] The IIT(s) are a group of elite, centrally funded universities.

nationalised banks (versus 46 in Bardhaman and 16 in Kharagpur) (Census Commissioner of India, 2011), no national multi-brand store (such as Big Bazar) and only 1 cinema hall.[15] As in Bardhaman, the industrial presence in Medinipur is limited, the three primary manufacturing industries are spinning mills, rice mills and oil mills (Census Commissioner of India, 2011). Further, an "industrial downswing" has had an impact on the local economy (Midnapore Municipality 2014, 10). Overall Medinipur exemplifies Bell and Jayne's (2009) definition of a small city, it is small not just in terms of size, but also in influence and reach. The feel of the place itself is much more akin to an over-grown village or a town.

2.5.1 Midnapore Municipality

2.5.1.1 The Urban Local Body

Medinipur is now divided into 25 wards, following the creation of a new ward prior to the elections in November 2013. It is marked by a greater degree of political diversity than is found in Bardhaman. This was very apparent during the electoral campaigns during which a greater heterogeneity of party signs and symbols were observed in the city. As well, the detailed election results[16] demonstrate that in the majority wards at least 4 candidates were contesting the election. Following the elections the composition of the board is as follows (prior composition in brackets): 14 (9) TMC, 6 (5) Congress, 3(9) CPI-M, 2(1) independent (West Bengal State Election Commission).[17]

While there is greater political diversity, the TMC holds the majority, and thus similar patterns of heavy party involvement are seen here as well. For example, a respondent openly admitted that after the elections but prior to the elected councillors meeting for the first time to vote for the Chairman and in turn for the Chairman to appoint the MCIC, the Party organised a meeting where councillors were assigned their functions.

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[15] This is notable only due to the popularity of films as entertainment for people of all classes in India.
[16] Comparable detailed election results are not available for Bardhaman, the Election Commission website in fact provides no voter numbers for that election.
[17] Prior composition was not reported on the West Bengal Election Commission website. Those numbers are drawn from information given during interviews.

Being part of the majority party (TMC) and high within the elected representatives hierarchy is important for the ability of elected representatives to achieve things. in Medinipur. A respondent high within this hierarchy acknowledged that the municipal staff responds to the Chairman and Vice-Chairman's work orders more quickly than that of other councillors. Similarly, a long-standing (6 terms), non-affiliated councillor explained that as he is not affiliated with the ruling party he had to rely on his established, good relationships with staff members. This is particularly important as certain staff members who are strong TMC supporters are, in his words, "offended" by him and thus less willing to assist him. He also feels that compared to the wards held by TMC, councillors in his ward are under-funded and under-serviced.

2.5.1.2 Bureaucratic capacity – staffing and budget

As of November 2013, the Midnapore Municipality employed a total of 808 staff members: 346 on a permanent basis, 322 on a casual basis[18] and 140 on contract[19] (Midnapore Municipality 2013b). According to municipal officials the 194 vacant positions included a number of key roles such as a head clerk, an accountant, and a Sanitary Inspector.

According to a municipal official the biggest problem facing Medinipur is a lack of revenue. In comparison to Burdwan Municipality, their financial capacity is very limited. The total municipal budget for 2013–2014 is INR 487,826,899 (USD 7,352,990). This amounts to approximately INR 2882 per capita (USD 43)(Midnapore Municipality 2013c). Thus the per capita financial capacity of Midnapore Municipality is approximately 75% of that of Burdwan Municipality. Own revenue accounts for 18% of total revenue and less than 10% of total receipts (capital + revenue + extra-ordinary) for Midnapore Municipality (Midnapore Municipality 2014, 29, 2013c).[20] Municipal officials further point out that the municipalities' ability to improve their financial situation is limited. As previously stated there is little industry in Medinipur, which reduces the

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[18] Paid by the day, but with a chance of having their position made permanent.
[19] Paid monthly, employed for a limited period of time and have no chance of position being made permanent.
[20] Author's own calculations

municipalities' potential tax base. Further, they state that there is pressure from the Chief Minister to not introduce new taxes or to impose a fee on water. Without these sources of funds revenue will continue to be a problem. However, the municipality is currently making efforts to improve their tax collection rates and to ensure scheme compliance so they receive all of the State funds pledged for various programs. In spite of their limited financial capacity, and staffing shortage seemingly innovative governance solutions are being pursued in Medinipur (see Ch. 6).

2.6 Conclusion

This chapter has explored thematically the context in which this study is situated. It began with the broader context that informed field site selection and research questions, namely decentralised urban governance and the politics of West Bengal. Understanding these two dynamics was crucial as well in the field as I attempted to map the networks of environmental governance in each city. For example, it led to questions about ward committees and decentralised planning and visits to party offices, which provided important 'pieces of the puzzle' only some of which is discussed within this thesis. This broader background allowed for a profile of each city to be developed, again providing important contextual information that informs the embedded case study selection.

In Chapter Three the conceptual framework will be developed. This is achieved in two parts. First, the reader is introduced to Urban Political Ecology as a conceptual approach. In a second part, the article *Everyday governance and urban environments: Towards a more interdisciplinary Urban Political Ecology* is presented. In the empirical articles that follow in Chapters Four, Five and Six a conceptual approach is defined and refined for each case study, though each has been influenced by the approach discussed in the following chapter.

CHAPTER 3: URBAN POLITICAL ECOLOGY AND GOVERNANCE – TOWARDS AN ANALYTICAL APPROACH

Within this chapter I develop an actor-oriented analytical approach that informs the remainder of this thesis. This is achieved in two steps. First, a brief overview of Urban Political Ecology (UPE) is provided. This is expanded upon later in this chapter, as well as in Chapters Five and Six as it relates to those specific case studies. In a second step, a co-authored journal article, *Everyday governance and urban environments: Towards a more interdisciplinary Urban Political Ecology*, is presented. This article argues that UPE as an approach could benefit from engagement with the everyday governance and everyday state literature in order to offer a more nuanced account of the role of state and non-state actors in the (re)production of urban socio-natures. An epilogue follows that article.

3.1 Urban Political Ecology – an overview of the approach

Urban Political Ecology as an approach emerged in the late 1990s, the neologism itself was first coined by Eric Swyngedouw (1996) in the midst of that decade.[21] Inspired by the work of Piers Blaikie (1985) and building upon the concept of the production of nature as developed by Neil Smith (1990) and David Harvey (1996), UPE forwards that the urban environment is constantly reshaped by social, economic and political processes. Thus early UPE authors (Heynen 2003, Heynen, Swyngedouw, and Kaika 2006, Kaika 2003, Swyngedouw 1997, Swyngedouw and Heynen 2003), many of whom are Marxist urban geographers, sought to explore the "socio-material basis of environmental problems" (Cook and Swyngedouw 2012, 1965). This work was particularly oriented towards exposing the ways that power shaped these processes (Heynen 2003, Robbins 2004).

There are a number of core ideas and concerns that inform UPE as an approach. The first, following Harvey (1996) is an assertion that there is **nothing inherently**

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[21] For further discussion of the emergence of UPE see: (Cook and Swyngedouw 2012, Heynen 2014, Zimmer 2010). For reviews of the field see: (Heynen 2014, Keil 2003, 2005, Zimmer 2010)

unnatural about the city (Heynen, Kaika, and Swyngedouw 2006, Loftus 2012). Through metaphors such as 'urban metabolism' (discussed in the following paragraph) UPE scholars have demonstrated that the city does not stand in opposition to nature. Thus, inspired initially by Latour (1993) (see Swyngedouw 1996) there was a desire to resist the "artificial ontological divide between nature and society" (Cook and Swyngedouw 2012, 1965). One of the key early contributions of UPE (for example Kaika, 2005) has been to examine the paradox of modern urbanisation processes wherein "to construct the city as a social space we must continually enrol nature but deny that we are doing so" (Braun 2005, 642). Thus, UPE scholars understand the production and reproduction of what some commonly refers to as 'society' and 'nature' to be mutually constitutive. All environments (and not just urban environments) are understood to not be 'natural' forms that are set apart from human actors. Rather, the form of an environment is determined by the society, which interprets, produces and reproduces it. To capture this, the terms **socionature** (or *socio-nature*) (Swyngedouw 1996), or *socio-natural assemblag*e are employed (Cook and Swyngedouw 2012).

From many UPE scholars, the metaphor of **urban metabolism** is employed to discuss the way in which biophysical matter is transformed into commodities (through the exploitation of labour) (Cook and Swyngedouw 2012, Swyngedouw 2006a). Stated differently, the metaphor of metabolism seeks to understand the ways socio-natures are circulated, transformed and exchanged within the processes of urbanisation. Within much UPE literature metabolism is inherent in understanding the "material and symbolic production of nature in cities" (Saguin 2014, 31). Other authors have engaged the metaphor to speak more broadly of flows and connectivities between socio-natures, capital, infrastructures and other elements (Gandy 2004). Metabolism is intimately tied to how power is understood by many UPE scholars who "assert that unequal power relations are inherently bound up in the metabolism of nature and, therefore, the urban environment is created by and embodies unequal power relations." (Cook and Swyngedouw 2012, 1966).

A concern with relationships or structures of **power** is also central to UPE analysis. As previously noted many of the early UPE scholars where Marxist

Geographers and the stream of UPE they developed reflected this theoretical orientation. As such, power is largely conceptualised from a class-based Marxist political-economic perspective (see:.Cook and Swyngedouw 2012, Swyngedouw and Heynen 2003). However, increasingly UPE scholars are engaging with other forms of social power, in particular gender (Elmhirst 2011, Loftus 2007, Truelove 2011), and race or caste (Desai, McFarlane, and Graham 2015, Heynen, Perkins, and Roy 2006, Finewood 2012, Leonard 2012, Zimmer, Cornea, and Veron forthcoming).

Finally, for some UPE scholars **scale** and the premise that particular processes 'jump scale' are important foundational ideas. The concern with scale centres on a core assertion that the metabolic processes with shape urban socio-natures in "geographically uneven and socially unequal" ways (Cook and Swyngedouw 2012, 1967) have a scalar nature (Heynen 2003, Swyngedouw and Heynen 2003). Often this is explored in terms of how local socio-natural conditions are shaped by processes and institutions operating at other scales (e.g. Robbins 2007, Swyngedouw 2005a, 2009). Likewise processes may jump scale in unexpected ways, for example Heynen (2003) points out that processes of environmental justice at one scale may produce environmental injustice at another.

3.1.1 Major themes within UPE research

Empirically driven UPE scholarship has largely been concentrated on resource domains and presented as case studies.[22] In this sub-section I will briefly outline some of the major themes within UPE literature.

As highlighted in Chapter Five, UPE scholarship began with an engagement with (piped) water and this theme continues to dominate the literature (Bakker 2003b, 2013, Crifasi 2002, Gandy 2004,2008, Ioris 2012b, Kaika 2003, , Loftus 2009, 2007, Swyngedouw 1997, 2005a, 2006b, 2009, Truelove 2011, Ranganathan 2014b, Rattu and Véron in press). As a body of work, these case studies have aptly demonstrated the manner in which social power shapes and is shaped by the provision of water (e.g. Gandy 2004, Lawhon, Ernstson, and Silver 2014). Other authors have explored how neoliberal process have shaped the provision of water and led to often contested attempts to privatise water (e.g.

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[22] Heynen (2014) notes that this is slowly changing.

Bakker 2003b, Ioris 2012b, Kaika 2003, Swyngedouw 2005a). Authors exploring cases within the global south in particular have highlighted how disparities in the provisioning of (public) water reflects power-differentials (e.g. Gandy 2008, Swyngedouw 1997), and how power shapes everyday practices of accessing these systems (e.g. Anand 2011, Ioris 2012a, Loftus and Lumsden 2008). In spite of this strong focus on commoditized and (piped) drinking water, UPE analysis has engaged much less with other sources of urban waters (.e.g. Campion and Owusu-Boateng 2013, Ernstson 2014, Finewood 2012, Mee et al. 2014), or with problematic water—such as flooding (Collins 2010), or waste water (Zimmer 2015b).

Food has also emerged as a thematic area within UPE (Agyeman and McEntee 2014, Alkon 2013, Parés, March, and Saurí 2013, Saguin 2014). Congruent literatures include UPE approaches to alcohol (Lawhon 2013) and food waste (Yates and Gutberlet 2011b). These authors have often utilised the concept of urban metabolism in innovative ways. For example, Kristian Saguin (2014) employs commodity biographies to follow a non-native fish species from the peri-urban into the city to explore the way in which metabolic processes make the lake fish amenable to consumption.

A number of UPE studies have explored the (re)production of urban green spaces in fruitful ways (Finewood 2012, Gandy 2002, Heynen 2003, Heynen, Perkins, and Roy 2006, Robbins 2007, Kitchen 2013, Zimmer, Cornea, and Veron forthcoming). The contribution of Kitchen (2013) is notable in that he uses UPE to explore urban forests beyond the narrow boundaries of cities. His work also challenges the implicit assumption within the UPE and EJ literature that environmental resources are inherently valued. By exploring community opposition to particular trees he highlights the spatially and temporally contextual nature of value.

As is highlighted in Chapter Six of this thesis, significantly less attention has been given to externalities, including waste and pollution. However, there are a small number of studies including Véron's (2006) engagement with air pollution in Delhi and a number of studies on waste (Baabereyir, Jewitt, and O'Hara 2012, Hartmann 2012, Lawhon 2012, Leonard 2012, Myers 2005, Njeru 2006, Pickren 2014, Parizeau 2015). These case studies have demonstrated the highly political nature of how such externalities are managed,

and the uneven burden that results (e.g. Baabereyir, Jewitt, and O'Hara 2012, Leonard 2012, Véron 2006). As well as the ways in which ideas of waste can act as a constitutive factor of city-making. For example, Véron (2006) highlights how perceptions of air quality have influenced the suburbanization of New Delhi and in turn this has resulted in new patterns for pollution.

3.1.2 Broadening UPE – critiques and new focuses

As the approach of UPE has developed, it has been utilised by a more diverse range of scholars. The result has been the emergence of a number of discussions and critiques within the literature aimed at broadening and/or deepening UPE analysis. This sub-section highlights a number of these discussions.

An important critique is that of Hilary Angelo and David Wachsmuth (2015, 16), who highlight the "methodological cityism" of UPE. Their core critique is:

> Though UPE understands the uneven production of urban environments –
> spatially, socionaturally, politically—as a global process, the uneven 'urban
> environments' that are produced continue to be understood as discrete,
> bounded cities (Angelo and Wachsmuth 2015, 21).

They suggest that UPE return to its Lefebvrian roots and in doing so view cities as "research object[s]" and not containers for research (ibid, 24-25). Similarly, Zimmer (2010), and Cook and Swynegdouw (2012) have pointed out the need for UPE to better elucidate what is uniquely urban in *Urban* Political Ecology. The benefit of avoiding the city 'trap' has been demonstrated by a small number of studies, including Kitchen (2013) and Saguin (2014).

A second set of conversations (Lawhon, Ernstson, and Silver 2014, Zimmer 2015a) have suggested that UPE has remained limited in its conceptual basis and could benefit with engagement with post-colonial literature and the emerging attempts at theory building from the South (e.g. Mbembé and Nuttall 2004, Robinson 2006, Roy 2009, Simone 2001). Early UPE work was dominated by European and American case studies, in sharp contrast to the Southern focus of Political Ecology (Zimmer 2010). While that has changed and numerous authors are exploring Southern case studies, most continue

to rely on theories developed in Northern contexts. Thus, this set of discussions seeks to "provincialize" or "situate" UPE (Lawhon, Ernstson, and Silver 2014).

An inter-connected discussion arises through calls for UPE to engage with everyday practices and local specificities (Desai, McFarlane, and Graham 2015, Lawhon, Ernstson, and Silver 2014, Saguin 2014), and with post-modern concerns of knowledge production and local identity (Gwyther and Possamai-Inesedy 2009, Lawhon, Ernstson, and Silver 2014, Loftus 2007, Rademacher and Sivaramakrishnan 2013). These calls seek to contextualise UPE analysis and take the multiple political-ecologies that characterise (Southern) cities into account. The case studies presented in Chapters Five and Six of this thesis are attempts to respond to these discussions.

Finally a number of authors have suggested that engagement with the theoretical perspectives other than (or in addition to) Marxism would useful to enriching UPE. This has included calls to engage with: Foucault (Rattu and Véron in press); Feminist theory (Loftus 2007, Truelove 2011); Actor-Network Theory (Ernstson 2012 , Brenner, Madden, and Wachsmuth 2011, Gareau 2005, Swyngedouw and Heynen 2003 but c.f. Holifield 2009); Gramscian perspectives (Ioris 2012a, Loftus 2012); and queer theory (Gandy 2012). All of these authors suggest potentially interesting new paths into the problems that UPE explores.

The following section of this chapter furthers these discussions about ways to enrich UPE by suggesting that engaging with the anthropological literature on everyday governance and the everyday state allows for the uncovering of the multiple state and non-state actors that influence the local environment and engage with their diverse rationalities, normative registers and cross-scalar relations.

3.2 Everyday governance and urban environments: Towards a more interdisciplinary Urban Political Ecology

3.2.1 Authorship Statement
This paper has been co-authored and represents equal, though different types of interventions by all three. The idea for the paper was conceived in 2013 and built on

prior reflections of Anna Zimmer. Initial discussions between all three authors gave it an original mandate. Both Anna Zimmer and myself contributed to a much earlier draft, in proportions that are no longer identifiable. This draft was then built-upon by myself and in the summer of 2015 René Véron took over the writing of paper. He drew from the prior drafts to give it direction and structure, as well as contributing content. It truly represents a collaborative work.

Submitted to: Geography Compass (GECO-0968) on September 17, 2015

3.2.2 Abstract

Urban Political Ecology (UPE) has mainly evolved within the discipline of geography to examine the power relations that produce uneven urban spaces (infrastructures and natures) and unequal access to resources in cities. Its increasingly poststructuralist orientation demands the questioning of received categories and concepts, including those of (neoliberal) governance, government and of the state. This paper attempts to open this black box by referring to the mostly anthropological literature on everyday governance and the everyday state. We argue that UPE could benefit from these concepts and ethnographic governance studies to unveil multiple state and non-state actors that influence the local environment, their diverse rationalities, normative registers and interactions across scales. This would also to enrich and nuance geographical UPE accounts of neoliberal environmental governance and potentially render the framework more policy relevant.

3.2.3 Keywords:
Urban Political Ecology, political ethnography, governance, norms

3.2.4 Introduction

The field of political ecology, an important framework in human geography to study human-environment relations, has become diversified in the past two decades in at least three dimensions: theoretically, topically and regionally. The classic neo-Marxian formulations of political ecology (PE) in the mid-1980s (Blaikie 1985, Blaikie and

Brookfield 1987) have been replaced or complemented by post-structuralist approaches (Walker 1998, Peet and Watts 1996, 2004); the focus on "land-based resources" (Blaikie and Brookfield 1987) has been broadened to include diverse topics ranging from water management, protected areas and value chains of particular commodities to ecosystem services (Kull, de Satre, and Castro-Larrañaga 2015, Ernstson 2013), air pollution (Véron 2006, Buzzelli 2008) and climate change (Adger, Benjaminsen, and Svarstad 2001); and the attention to rural areas in the global South has been extended to include studies on urban processes both in the global South and the global North.

Particularly the latter has implied the emergence of a rather distinct new field, that of Urban Political Ecology (UPE), since the late 1990s (Swyngedouw 1997, Kaika 2003, Bakker 2003b). Inspired by urban geographers in particular (Harvey 1996, Smith 1990) UPE regards cities as a "second nature", as the dominant and arguably most "natural" form of human living under the present capitalist system. It recognizes that urbanization is always an interconnected social (political-economic) and an environmental (physical-material) process and that cities are socio-environmental hybrids (Swyngedouw 2006a). In sync with the normative orientation of political ecology, the general research agenda of UPE has been to uncover the political-economic and power relations that produce current forms of urbanization, uneven urban spaces and differentiated access to resources and services in cities.

While UPE largely developed from within the discipline of geography and within a Marxist framework, the field (like its rural counterpart before) has recently experienced a shift toward poststructuralist, particularly Latourian and Foucaldian, approaches to apprehend urban socio-environmental processes as well as the related politics and power relations (see the review articles of Gabriel 2014 and Heynen 2014, for example). Furthermore, recent (situated) UPE studies have paid more attention to micro-politics and everyday practices of city-making (Lawhon, Ernstson, and Silver 2014, Loftus 2012, Truelove 2011, Shillington 2012) instead of structural power and the elites.

This shift towards poststructuralist perspectives on UPE necessitates the opening of black boxes, including that of government or governance, which can no longer be attributed to a monolithic state driven by the interests of a capitalist elite. Gabriel (2014)

has therefore rightly identified governance as an issue to be better theorized and to be examined more closely in UPE, and he reviews the potential contributions of the largely geographical literature on urban governance, urban subject formation and self-governance (see also Monstadt 2009).

In this paper, by contrast, we attempt to go beyond this disciplinary focus (which has generally been more prevalent in UPE than its rural counterpart). In particular, we aim to show the usefulness of the mostly social-anthropological and ethnographic approaches of everyday governance and the everyday state for UPE.[23] These point to the plurality of governance actors, their practices, rationales, normative orientations, interests and imaginaries as well as their relative and contextual power that shape local (urban) spaces and environments as well as access to (urban) resources, amenities and services. Paying increased attention to the practices of actors other than elites (as in much of "first-generation" UPE studies) or ordinary city dwellers (as in more recent situated UPE research) may also render UPE more policy-relevant; everyday-governance actors, including street-level bureaucrats, municipal councillors, NGOs or neighbourhood leaders, are often the key implementers of urban environmental policies and partners in urban development projects.

In the following section, we describe the use of governance concepts in existing, mostly geographical, UPE studies. We then provide a more detailed explanation of the concepts of everyday governance and the everyday state and their application in empirical studies, particularly in sub-Saharan Africa and in India. In the subsequent section, we assess the potential benefit for UPE to engage with these concepts and to undertake ethnographic governance studies. In the conclusions, we highlight the advantages of an intensified interdisciplinary dialogue in the field of UPE and the use of a politically laden governance concept.

3.2.5 The concept of governance in existing UPE studies

(Urban) political ecologists have criticized the governance literature for being largely "apolitical" (if they have not ignored it altogether). The normative approach of

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[23] For a more general discussion of the benefit of integrating UPE and governance see Mondstadt (2009).

"good governance", for instance, is regarded as a homogenizing techno-managerial project that downplays conflicting interests and deep societal divisions as ostensible consent is created through formalistic forms of participation and accountability (Swyngedouw 2005b). Furthermore, the idea that new forms of governance that include state and non-state actors in partnerships would be less hierarchical and more inclusive than state-centered government is seen as naïve; decision-making can shift to non-state governance actors that are neither democratically accountable nor popularly seen as having legitimacy. The democratic content of governance thus needs to be questioned (Mayntz 2003, Chandhoke 2003, Swyngedouw 2006b, 2005b).

However, governance can also be used as an analytical concept and in a political way to examine how interdependent state and non-state actors negotiate policy goals, ways to reach them and attempt to steer society (e.g. Hust 2005, Kooiman 2003). In this sense, governance can be usefully employed in (U)PE. In rural PE, for instance, conflicting interests and agendas of different actors at different scales have been at the centre of analysis at least since the 1990s, often inspired by actor-oriented approaches to the study of development (Long 1990). In this literature, the politicized environment has been understood as an "arena of contested entitlements" (Bryant and Bailey 1997, 27) or as a proxy for fighting out underlying, often historical, socioeconomic conflicts (Kull 2002, Robbins 2004). Furthermore, the variety of political practices of different actors have been studied in relation to layered institutions, understood as "rules-in-use" (Watts and Peet 2004, 25). Apart from studying household- and community-level conflicts, negotiations and institutions, political ecological studies have early on paid primary attention to the role of the state as both protecting and destroying the rural environment as well as mediating between different environmental interests (Bryant and Bailey 1997, 39, Robbins 2008).

By contrast, UPE has rarely employed an equivalent analytical governance concept that looks at a large range of actors and their political practices shaping the urban socio-environment. Rather, the dominant Marxist-oriented UPE literature forwards macro- and meso-scale political-economic analyses that often present local urban socio-environments to be governed by actor-less, overwhelming top-down

processes. For example, Heynen (2006, 500) related changes in urban tree cover to deindustrialization and the concomitant change in employment and income in Indianapolis, concluding that "*[p]olitical economic processes … govern the distribution of urban trees within cities*" (Heynen 2006, 500, emphasis added). If an explicit reference to governance is made, it tends to be understood as a neoliberal system as, for example in the UPE literature on planning that sees governance as a new "regime" of public-private partnerships (Hagerman 2007, 285) or as entrepreneurial "strategies" (Quastel 2009, 719).

Another set of UPE studies, by contrast, engages with the role of a variety of (local) actors, yet without drawing explicitly on governance. For example, Njeru (2006) investigates the Nairobi City Council's efforts in formulating programmes to address to the plastic bag waste problem and the influence of business associations on their implementation. Bryne et al (2007) examine the creation of an inner-city park in Los Angeles and highlight the importance of a local history that weaves together real estate agents and oil companies with a wide coalition of elected officials and municipal institutions in the shaping of the urban environment. Finally Desfor and Vesalon (2008) focus on Toronto Harbour Commission's role in producing new urban land at Toronto's waterfront in the early 20th century, but recognize other actors, such as the media, business associations and local politicians, in producing political consensus around the creation of land through the infill of marsh and a shallow bay.

A further strand of UPE literature applies the analytical governance concept more explicitly in the examination of state-led urban service provisioning and environmental policy (Gandy 2004, Gopakumar 2014, Ioris 2012a, Kitchen 2013, Ranganathan 2014b, Véron 2006). These authors recognize and examine the relationships between the state and other actors, including community based organizations, NGOs and activists, in an era of governance reform and the neoliberalization of nature. For example, Véron (2006) shows how the judiciary and environmentalist NGOs determined state-level air pollution policies in Delhi and contributed to a more rigid demarcation of private and public environments. Gopakumar (2014) examines private-public partnerships and their provision of networked water in Bangalore that opened political space for a network of local residents, associations and activists. Furthermore, Kitchen (2013) highlights the

tensions between neoliberalism, capitalist production and consumption, on the one hand, and the stated ideals of community empowerment, on the other, in the new governance of urban forests in Wales. These studies thus begin to respond to the call that "[t]he role of the state … needs to be placed more centrally within [urban political ecology and environmental justice] literatures with increased linkages to the expansive and emerging work on neoliberalisations" (Cook and Swynegdouw 2012, 1970).

While these are useful attempts toward a more actor-oriented UPE, the concept of governance is explored only little and rarely explicitly defined. More thoroughgoing actor- and practice-oriented concepts of governance have been developed outside of (U)PE, particularly in the anthropological literatures on everyday governance and the everyday state.

3.2.6 Everyday governance, practice and the state

Since the early 2000s, a wide range of authors have engaged with the everyday practices of governance as the object of their studies (see for example Eggen 2011, Hausermann 2012, Bjerkli 2013, Schindler 2014, Le Meur and Lund 2001, Blundo and Le Meur 2009a). Concurrently, other bodies of literature have engaged with contiguous topics, for example the 'everyday state' (Anjaria 2011, Coelha 2006, Corbridge et al. 2005, Fuller and Benei 2000,). These approaches have in common to see governance as something that occurs within and beyond the state sphere and that needs to be examined through the practices of involved actors and not only through an analysis of policies and discourses.

3.2.6.1 Everyday governance

A cohesive body of literature on everyday governance has emerged from the writings of anthropologists who study the state in mostly francophone West Africa (Le Meur and Lund 2001, Blundo and Le Meur 2009a, Olivier de Sardan 2011, 2014, Bierschenk and Olivier de Sardan 2014a, Myers 2010, Eggen 2011). These authors explore the provisioning of public goods and services through a multiplicity of power centres and the related actual governance practices (Blundo 2002, Le Meur and Lund 2001).

These ethnographical studies focus on the "banal everyday" workings of the local state (Bierschenk and Olivier de Sardan 2014b, 3) and the practices of various state and non-state governance actors through which political and institutional articulations become visible (Blundo 2002). Especially in postcolonial societies, these governing practices must be captured thorough fieldwork and in their "complexity, variety, ambiguity and modernity" in order to avoid any preconceptions regarding patterns of behaviour and modes of decision-making (Olivier de Sardan 2008, 1).

The definition of governance is deliberately kept large and non-normative. Le Meur and Lund (2001, 2) in an early writing define everyday governance broadly to be "the actual practices of how interests are pursued and countered, authority exercised and challenged, and power institutionalised and undermined." In a more extensive exploration of the concept, Blundo and Le Meur (2009b, 7) offer a definition of governance as "a set of interactions … resulting in more or less stabilised regulations, producing order and/or disorder … and defining a social field, the boundaries and participants of which are not predefined".

These definitions imply that governance actors are in a position to negotiate, adapt, hybridize or create norms, rules and regulations; they are not externally imposed on them (Blundo and Le Meur 2009b, Olivier de Sardan 2008). The question thus arises how "the rules (…) are produced, debated, transformed and controlled" (Blundo and Le Meur 2009b, 2) and by whom. These processes reproduce a plurality of norms, implying that negotiations between actors are not only about means and ends but also about the set of norms, or normative register, to apply in a given situation. According to Blundo & Le Meur (2009b), the plurality of norms tends to favour those actors who are endowed with multiple forms of capital and are thus able to set the object and the rules of the game (Blundo and Le Meur 2009a). At the same time a subtle economy of favours creates a "web of indebtedness" (Anders 2009, 128) amongst actors who help each other in (or ignore someone's) circumventing formal regulations. Others might be excluded from the these networks; inclusion in and exclusion from the arenas of governance are hotly contested (Blundo and Le Meur 2009b).

A point of contention may be the definition of the "field" of governance itself; that is, the decision about which subjects, activities or environments should be addressed by (whose) governance efforts. Governing is an activity in which a certain state of affairs, space or conduct is constructed as problematic (Blundo and Le Meur 2009b, Fuchs 2005). Everyday governance approaches, therefore, examine which actors and groups try to problematize particular situations or spaces or activities.

As a consequence, the on-the-ground reality of everyday governing at the local level is marked by variation in time and space while the theoretic goal of governance is homogenising – the steering of society towards some pre-defined condition. The heterogeneity of everyday governance is produced by continuous and contingent negotiations between a plurality of actors referring to different normative registers and engaging in shifting alliances.

In reviews of the literature on everyday governance, Olivier de Sardan (2011, 2014) provides a typology of modes of local governance in West Africa, involving both state and non-state actors who provide public or collective goods and services. He identifies four broadly 'public' and omnipresent modes: bureaucratic (state); municipal (resulting from decentralization); development project based; and associational (cooperatives, farmers' groups). Also present are four more disparate, individualized modes: chiefly (traditional chefferie); sponsorship based (sponsors or big men); merchant based (private operators delivering public services); and a religious mode. Despite their distinctiveness, each of these modes of governance operates from a specific source of legitimacy and authority, each is regulated by norms and each is accountable to others through particular mechanisms. While Olivier de Sardan's typology is specific to West Africa, it can usefully inspire research in other regions to explore the multiplicity of groups intervening in local governance and their source(s) of legitimacy and authority.

3.2.6.2 Anthropologies of the state

Olivier de Sardan's summary of the modes of governance in West Africa resonates with the literature on the Indian 'everyday state' (e.g. Corbridge et al. 2005, Fuller and Benei 2000, Gupta 2012) or the 'anthropology of the state' in India (Sharma & Gupta, 2006). This literature has also largely been produced by anthropologists using

ethnographic methods and studying the state and governance in a non-normative manner. Research on the everyday state employs a diverse range of thematic entry points, including the delivery of public goods and services or slum clearance (see Fuller and Benei (2000), the implementation of anti-poverty schemes or the provision of primary education (Corbridge et al. 2005), corruption or immigration practices (Sharma and Gupta 2006).

These studies recast the state as a heterogeneous assembly of actors, institutions, practices and representations that needs to be constantly reproduced through effects of power as well as through deliberate performance (Corbridge et al. 2005, Fuller and Benei 2000, Hansen and Stepputat 2001). These processes, through which the state asserts its relative authority, are often built on intimate, personal relationships between state and non-state actors (Sharma and Gupta 2006). The examination of state-society relationships thus becomes crucial for an anthropological understanding of the (local) state. Gupta (1995), for example, explores the unclear boundary between state and society through the practices of state actors. Conversely, Corbridge et al. (2005) study the practices of people accessing and using the state, often through political intermediaries. While state activity may appear as a "messy and ever-contingent reality (Herbert 2000, 555), the realm of the state has logics and rules that are, however, not a singular or fixed, but constantly (re-)negotiated as all concerned actors navigate plurality (Berenschot 2010, Osella and Osella 2000a).

3.2.6.3 Informality and power

These bodies of literature on 'everyday governance' and the 'everyday state' have aptly shown the value of examining practices in governance studies, and two major insights can be drawn. First, in paying attention to governance practices by state actors, the 'informality' that occurs within formal structures must be recognized. That is to say that even within structures led by written rules, guidelines, regulations and laws, there is often disparity between the official model and actual behaviour on the ground (c.f. Bierschenk and Olivier de Sardan 2014a, Corbridge et al. 2005, Olivier de Sardan 2014, Roy 2002, Tarlo 2000). However, this informality is not without a normative register of

its own (or 'practical norms' in the words Olivier de Sardan (2014)) that underpins the practices of officials. Secondly, this literature has usefully demonstrated the multiple, complex relationships that shape governance practices by both state and non-state actors across and between the 'blurred boundaries' (Gupta, 1995) between the state and society.

Furthermore, the reviewed literature explicitly engages with questions of power, very often using Foucaldian notions of dispersed power and the concept of governmentality as starting points. Blundo and Le Meur (2009b, 11), for example, suggest that "the heuristic strength of governmentality lies in its ability to weave domination and subjectivation into a common framework while paying attention to the knowledgeability and capability … of all actors involved." Lindell (2008, 1881) furthermore, suggests that "even if power is diffuse, it is still to some extent concentrated in social institutions, it has 'centres'" and that "relationships of power are mediated by a variety of actors and agencies". Rather than identifying where power lies, however, it is necessary to recognize that various modes of power co-exist and to examine how it is exercised.

3.2.7 Potential benefits of ethnographies of governance for UPE

Approaches of everyday governance have so far been rarely used to study urban environmental issues, with the partial exceptions of some research on water (Alou 2009, Ranganathan and Balazs 2015, Truelove 2011); waste water and sanitation (Desai, McFarlane, and Graham 2015, van der Geest and Obirih-Opareh 2009, Zimmer and Sakdapolrak 2012, Zimmer 2012); solid waste (Bjerkli 2013, Bulkeley, Watson, and Hudson 2007); and land (Nauta 2009). However, we suggest that UPE would benefit from integrating approaches of everyday governance for various reasons.

First, ethnographies of governance and the state facilitate an empirically rich account of interactions and negotiations that have an immediate effect on the local socio-environment. They unveil the local agents of policy implementation, their rationalities and interactions with city dwellers, thus going beyond the analysis of formal policies and policy discourse to examine how these are put into practice on the ground. This

implies increased attention to street-level bureaucrats, local councillors, neighbourhood leaders and other political intermediaries hitherto neglected in UPE analyses.

Second, studies informed by the concept of the everyday state would therefore also respond to the general critique of the literature on neoliberal governance and urban change to overlook the local state in its heterogeneity and ostensible disorderliness (Blanco, Griggs, and Sullivan 2014). They would help identifying and explaining the "local distortions" of environmental projects and plans, or more generally the project of environmental governance to steer society and the environment (in one direction).

Thirdly, everyday governance is highly relevant for an increasingly poststructuralist UPE, which aims, among other things, to uncover relationships of micro-power that contribute to the (re-) production of uneven urban spaces and unequal access to urban environmental resources in an often incremental way. In addition to uncovering (innocuous and conflictual) socio-environmental relations between different social classes, ethnic groups, genders and identities, ethnographic governance studies could uncover complex relationships and networks across scales and sites; that is, how social groups and individuals are 'linking up' to particular state and non-state governance actors to support, reshape or subvert environmental policies and projects. Such an analysis (together with that of the everyday state itself) would go beyond the account of "social resistance" found in the geographical UPE literature on neoliberal governance to allow a more nuanced mapping of uneven spaces of governance (Harriss 2007) and resulting unequal urban infrastructures and natures.

3.2.8 Conclusions

Parallel to its diversification into poststructuralist perspectives, the framework of UPE would benefit from an intensified dialogue across disciplinary boundaries, particularly between geographers and anthropologists. In this article, we pointed to the potential benefits for (largely geographical) UPE to engage with (largely anthropological) concepts of everyday governance and the everyday state in order to produce a richer account of the practices of multiple governance actors and their uneven impact on the local environment. However, we do not want to suggest favoring micro-

level analyses over the macro-level assessments of political-economic processes usually attempted in (Marxist-oriented) UPE studies. The focus on the local state is in part due to the methodological difficulties to undertake critical ethnographic studies at 'higher' levels of government that have rarely been overcome (for an exception, see Mosse 2005). The influence of global discourses and of international and national policies and investments on local environments is undeniable, though indirect and filtered through a variety of local institutions and actors. Apart from examining such multi-scalar intersections, UPE may do well in exploring the non-hierarchical networks of power extending beyond city and national boundaries (e.g., business networks, international clubs with local chapters, city partnerships, transnational NGOs) that may affect local government and urban socio-natures.

Furthermore, the anthropological literature on everyday governance can also benefit from UPE and geography (and not only the other way around). Research on how everyday practices produce local urban socio-natures (Desai, McFarlane, and Graham 2015, Loftus 2012, Shillington 2012, Truelove 2011) demonstrates that the entry point of the environment can serve as a lens through which to examine subtle power relationships, including those of class, ethnicity or gender, as well as governance relationships more generally. The political use of environmental discourses, resources and infrastructures remains largely under-examined in ethnographic studies on everyday governance and the everyday state. Geographers have also started to point to the spatiality of practices of everyday governance and issues of scale (Bulkeley, Watson, and Hudson 2007, Hausermann 2012, Schindler 2014,).

This paper also attempted to show that governance can (and should) be used as an analytical and politically laden concept. We have already pointed to the references to the Foucaldian concept of governmentality in the literature on everyday governance and the everyday state. In recent UPE studies, furthermore, scholars indicate that the concept of governance could be theorized through other approaches, including Gramsci's counter-hegemony (Loftus 2012), Bourdieu's social field theory (Zimmer and Sakdapolrak 2012) or feminist theory (Truelove 2011). This implies that governance can be used as more than just a term to describe a depoliticized form of governing in the

current neoliberal era, as it is often done in UPE studies. Indeed, everyday governance points to the divergences between an imaginary (neoliberal) governance project, or steering of society and the environment in a particular direction, and the heterogeneous on-the-ground realities of policy implementation and resource use. Through their attention to a multiplicity of state and non-state governance actors, their practices and often contradicting normative registers, ethnographies of governance somehow even 'radicalize' the view of path-dependent "actually existing neoliberalisms" (Brenner and Theodore 2002) that are believed to be influenced by inherited institutions and geographically contextualized histories of political struggle.

Finally, using the concept of everyday governance may also render UPE, which arguably has so far had little material impact on urban policies or socio-natures, more policy relevant or 'political' in a practical sense (Walker 2007) through its attention to local governance actors, including street-level bureaucrats or NGO leaders, who often play key roles in the implementation of urban projects and policies. Furthermore, the concepts of everyday governance and micro-politics imply "reformist [and] pragmatic" (Corbridge et al. 2005, 272) positions and incremental policy changes   (see also Lawhon, Ernstson, and Silver 2014), which may be more acceptable by policymakers (but also more at risk of cooptation) than the more systemic changes called for by the radical critique of neoliberal governance, often characteristic of UPE studies.

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CHAPTER 4: PARA CLUBS AS GOVERNANCE ACTORS

Photo 2. club building of para club © N.Cornea

4.1 Preface

This chapter presents the first empirical paper that forms part of this thesis. It identifies and explores the practices of an unexpected governance actor, the neighbourhood club. In doing so it begins to provide an incomplete answer to the second and third research objectives (see section 6.4), which seek to identify key actors and their relationships and to explore their actual governance practices.   The approach to everyday governance presented in this chapter informed that presented previously in *Everyday governance and urban environments: Towards a more interdisciplinary Urban Political Ecology*.

4.2 Authority and the local urban environment: Neighbourhood clubs as governance actors in West Bengal

Cornea, Natasha

4.2.1 Abstract

Who governs the urban environment and how? Increasingly urban governance studies are exploring the everyday governance practices of a broad range of actors. Drawing upon extended qualitative research, this paper explores the practices through which neighbourhood clubs in urban West Bengal govern the urban environment. On the surface these clubs, which often have the stated purpose of sporting and recreation, do not seem to be governance actors. Equally, most assert a non-political identity. However, as is demonstrated within this paper, the everyday environmental governance practices of clubs are deeply political processes that serve to coproduce particular subject positions and a particular governance regime.

4.2.2 Key Words:
everyday governance, environmental governance, clubs, India

4.2.3 (Introduction)

If you move in the evening through the residential areas of West Bengal's cities you will regularly encounter groups of men playing cards or chatting outside of a building. These buildings proudly display signs reading "New Friends Sporting Society established 1962", or "Bijay Chanda Sangha, registration no. S127890, ESTD 1995".[24] In middle-class neighbourhoods the building might be quite large and situated at the back of a plot of land, in poorer areas it is more likely to be a small structure built on the side

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[24] In keeping with the assurances of anonymity provided to participants, all names are pseudonyms.

of the road or over a ditch. These are the *para*[25]-based clubs (hereinafter 'clubs') around which social life is centred in many urban neighbourhoods in West Bengal, India. So ubiquitous are clubs that they are noted on the government run West Bengal tourism website, "Paras in Kolkata signify a neighbourhood with a strong sense of community, and are usually sharply defined on the basis of loyalties …Typically every para has its own community club, with a club room …and often a playing field"(Department of Tourism). Visits to Bardhaman and Medinipur, two small cities, revealed that in smaller urban centres too clubs have a strong presence.

What is less apparent is that these clubs also play a role as important local institutional governance actors. In my fieldwork clubs were found to perform a variety of governance functions ranging from mediating domestic disputes, to resolving disagreements between *para* members and 'outsiders', to settling inheritance disputes. Within this paper, however, I will focus on the everyday practices through which clubs shaped access to, use of, or control over, environmental resources in small cities in West Bengal. The study of environmental governance provides a lens to examine practices of negotiated relationships across scales and that include and affect both club and non-club members. Unlike the manner in which clubs are involved in governing social or economic processes, non-members are less able to 'opt-out' of the effects of the clubs' environmental governance practices. Moreover, the practices explored within this paper were not openly contested and were in many ways unexceptional within the field sites. As such focussing on these environmental governance practices serves as a way to understand the pervasive and at times diffuse ways in which clubs, as situated governance actors, are enmeshed within the micropolitics of how the urban milieu is governed in the everyday.

The paper proceeds by situating the notion of everyday environmental governance within the literature and providing an explicit working concept that centres upon the exploration of actual practices. The work of Michel de Certeau (1984) acts as a

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[25] The Bengali term *para* is most often translated as neighbourhood. However, the connotation of the term is much richer and indicates a spatialized moral community to which members are loyal (Chatterjee 2004, Department of Tourism). *Para's* do not align with administrative boundaries or other external factors and can vary in size significantly.

lens through which to understand these practices as political. A brief section follows to contextualise the role of clubs in urban West Bengal and to discuss the methods applied in this study. The empirical portion of the paper explores the environmental governance practices of three clubs and examines how these practices co-produce subject positions and a particular system of local governance, wherein clubs are a key institution. The conclusion seeks to discuss how these practices: are political and inherently relational; shape the local environment in uneven ways; and act to create particular positions of power that are relatively stable. This discussion demonstrates the need to examine the multiplicity of institutional everyday governance actors beyond the state and other 'expected' players, such as political parties and NGOs.

4.2.4 Conceptualising Everyday Environmental Governance

The term governance is regularly deployed in the social sciences. However, until now there is "no commonly agreed definition" (Bjerkli 2013, 1274). Within this paper governance is employed as a non-normative analytical term that is centrally concerned with the actual processes through which societies are steered toward particular goals and on-going negotiations within these processes. Governance is understood to occur in multiple spheres and not just through formal negotiations by the state (Keil 2006, Zimmer 2012).

Over the last 15 years a wide range of authors have made the everyday practices of local governance actors the object of their studies (Bjerkli 2013, Blundo and Le Meur 2009a, Eggen 2011, Gabriel 2014, Hausermann 2012, Le Meur and Lund 2001, Schindler 2014). Other bodies of literature have engaged with contiguous topics, for example the 'everyday state' (Corbridge et al. 2005, Fuller and Benei 2000) and a focus on how everyday practices produce particular urban social-natural conditions (Desai, McFarlane, and Graham 2015, Loftus 2012, Shillington 2012, Truelove 2011).

A significant number of anthropologists working in Africa and India have sought to explore the governance practices of state actors, particularly lower level bureaucrats (Bierschenk and Olivier de Sardan 2014b, Blundo and Le Meur 2009b, Eggen 2011, Le Meur and Lund 2001, Mosse 2000, Olivier de Sardan 2011, Osella and Osella 2000b, Ruud

2000, Tarlo 2000). These cases studies have demonstrated that even within formal structures led by clear rules, regulations, and laws, informality occurs in the regular disparity between the official model and actual behaviour (Bierschenk and Olivier de Sardan 2014b, Corbridge et al. 2005, Olivier de Sardan 2014, Tarlo 2000). Further, this literature has aptly demonstrated the multiple, complex relationships that shape governance practices by both state and non-state actors. These relationships are built upon the multiple identities and other affiliations of governance actors that in turn render the boundary between state and society unclear and porous (Gupta 1995, Mosse 2000, Osella and Osella 2000b). Moreover, this work orients researchers to explore the multiplicity of groups that intervene in and shape governance, and in particular to consider their source(s) of legitimacy and authority (Olivier de Sardan 2011, 2014).

Geographers have also employed the notion of everyday governance in empirical studies in different settings (Bjerkli 2013, Bulkeley, Watson, and Hudson 2007, Corbridge et al. 2005, Hausermann 2012, Lindell 2008, Schindler 2014, Zimmer 2012). Where the perspectives of geographers make a unique contribution is through an orientation towards the spatiality of practices of everyday governance and issues of scale. For example, Lindell (2008, 1880) argues that urban governance must be "understood as encompassing the multiple *sites* where practices of governance are exercised and contested, a variety of *actors*, various layers of *relations* and a broad range of *practices* of governance that may involve various *modes of power*, as well as different *scales*" (emphases in the original). This particular focus on interconnections between multiple scales and sites analytically translates into a more explicit focus on networks and webs of governance.

4.2.4.1 Towards a theorization of the 'everyday' in everyday governance

Perhaps surprisingly while these approaches all employ the term "everyday", they largely fail to engage explicitly or in-depth with theorizations of everyday practices or the political nature of the everyday. One way to address this is through the work of Michel de Certeau (1984). His work orients one towards the analysis not only of practices themselves (the *what*), but also of the *how* and *why* of these practices. For de Certeau, the

everyday is something different from the official and he seeks to show the value of everyday life that occurs within the "gaps of larger power structures" (During 1999, 126). He does so through the investigation of the practices of everyday life, or what Bourdieu has referred to as *habitus*. These are the practices that are produced by an internalization of particular situated structures, ways of knowing and acting (Ward 2000).

De Certeau (1984) provides two analytics, which are particularly useful. The first is a dialectical approach[26] to consumption and production. This involves the study not just of a social phenomenon and the time spent consuming it but also how the consumer of that phenomenon uses it to produce something else. The way in which an individual produces something from their experience within a social phenomenon is dependent on the individual's personal attributes, their access to information, their place and function with the social system and the power relations inherent within the situation. Through the synthesis of the study of these consumptions and productions one is able to examine the political dimension of everyday practices.

An interconnected insight is de Certeau's analytical focus on the 'enunciative function' of practice. One can identify four such functions. Firstly, practices operate within a system and in doing so announce it. Secondly, the performance allows a process of (re)appropriation of the system. In doing so space is created within the field for the actor to use it to their advantage. Thirdly, a practice enunciates a particular spatial or temporal present. Fourthly, practices establish a "pragmatic contract" with interlocutors (de Certeau 1984, 98).

In order to build upon these analytical tools for the study of governance it is useful to understand governance practices to be expressions of policy. In this, policy is broadly conceptualised as the range of both formalised and non-formalised, not necessarily stable, regulations that shape said practices. Doing so allows us to consider how subjects of policy are consumers and thus co-producers of this policy and the institutions that enact them (Blundo and Le Meur 2009b). Moreover, this allows us to analyse how the coproduction of governance processes via relational practices, navigates

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[26] De Certeau does not refer to his analytical method as dialectical, though as I understand it, it is (see Buchanan 2000)

the systems and the multiple subjectivities of the actors within it. This recognises that governance in "[t]he everyday has not been reduced to a rigid set of regimes" (Buchanan 2000, 100) and necessitates a more thorough interrogation of the logics which underpin practices.

4.2.4.2 Everyday Environmental Governance

Until now, the literature employing everyday approaches has not extensively addressed issues of environmental governance. The exception to this has been research on water (Alou 2009, Mosse 2000, Truelove 2011); waste water and sanitation (Desai, McFarlane, and Graham 2015, van der Geest and Obirih-Opareh 2009, Zimmer 2012, Zimmer and Sakdapolrak 2012); solid waste (Bjerkli 2013, Bulkeley, Watson, and Hudson 2007); and land (Nauta 2009). These works have demonstrated that exploring governance practices through the entry point of the environment provides scope to explore the micro-politics of both the seemingly uncontested and the conflictual in the everyday. It may further serve as an entry point to understand how everyday governance practices contribute to subject formation (Gabriel 2014, 42).

Everyday environmental governance is understood here as: the broad range of actual practices through which environmental resource use and access is steered through power infused processes that occur at and across multiple sites and scales, through layers of relations negotiated by various actors. Building upon the insights of the literature hereto reviewed, these processes are seen through the practices of the actors involved. Practices are understood to be enunciative: through practices the actor both announces and (re)appropriates a particular governance regime. Moreover, practices are understood to establish a pragmatic contract between actors. Governance occurs within these contracts that are negotiated by actors who may have different power positions. Recognising that governance occurs through a multiplicity of relationships built upon multiple rationalities, it is seen to occur not within exclusive spheres, but rather through webs or networks. Finally, governance practices are understood to establish particular spatial and temporal moments that display varying levels of (im)permanence.

After a brief description of the context and the scope of the study in the following section, the environmental governance practices of three *para* based clubs in a small city in West Bengal are examined in detail. I focus here on governance practices by non-state actors operating at a local level that are not openly conflictual. In doing so I seek to illuminate the complex micropolitics of access to and the use of environmental resources. This highlights the role of situated governance actors in producing particular urban environments. While clubs have a stated purpose of sporting or recreation, the case studies here highlight their key role as everyday environmental governance actors.

4.2.5. Context and scope of the empirical study
4.2.5.1 Para based clubs in urban West Bengal

According to Debarati Sen (2011), *para* based clubs have their roots in the exclusive clubs established during colonial rule. Many of those clubs, such as the Tollygunge Club, are still active in Kolkata. However, as Sen (2011, 525) highlights, non-elite clubs have emerged as a "vibrant part of middle and lower-middle class social life". While elite local clubs and international associations (such as the Rotary Club) form part of the associational life in Bardhaman and Medinipur, *para* clubs are influential across class groups and in daily life.

Club members are almost exclusively adult men. Membership is typically contingent on residing inside of or having a connection to the *para* and being able to pay monthly or yearly dues. Members nominate or elect a club board (president, secretary and other members) that governs the club internally and serves as representatives to non-members. Some clubs are recognised by the state via registration under the *West Bengal Registration Act, 1961*. Being a registered club is a criterion for access to government funding (see case study), or incorporation into social protection schemes (i.e. the receipt of funds from the state for use of their club building as preschools (*anganwadi)* or for vaccination programmes).

In the studied small cities of Bardhaman and Medinipur, clubs are involved in a diverse range of activities. The clubroom is a place of leisure for members who come to play games, gossip or participate in sports. Clubs often organise local religious festivals and other celebrations that help to (re)create the *para* as a moral community (see also

Chatterjee 2004). Further, most engage in "social work". Such activities include: organising health or blood-donations camps for local people; distributing clothes or school supplies to local poor households; assisting with unexpected medical expenses and/or other life event costs (i.e.: marriage costs). Finally, club board members serve as a local deliberative authority and are often called upon to solve disputes. For example disputes over water access, inheritance and land division, or those involving personal and/or marital problems. While no comprehensive list of clubs is available for either city, I estimate that there over 150 clubs in Bardhaman and over 100 in Medinipur.

In spite of their ubiquity, *para* based clubs have received relatively little attention within the literature and as such their role in local governance was an unexpected finding during field research. While some authors have mentioned these clubs as part of local civil society within villages (Bhattacharyya 2009, Dasgupta 2009), to my knowledge only Harrison (2012) and Roy (2002) have recently engaged with clubs as an object of empirical research. Both authors situate clubs as part of the political grassroots and highlight how the clubs within their study areas operate within the, at times murky, space between state and society in an attempt to provide benefits to their members. It should be noted that the clubs within my study largely asserted that they were non-political institutions, though some acknowledged the possibility of members having a personal political identity. Roy (2002) and Chatterjee (2004) have further highlighted the role of clubs as local disciplinary authorities.

4.2.5.2 Methods
Empirical data from this paper is drawn from approximately 40 unstructured interviews with: club members representing 21 clubs (10 poor, 11 middle-class), local women, and elected councillors in Bardhaman and Medinipur, West Bengal, India. Engagement with clubs occurred in the context of a broader research project on environmental governance and politics in these cities. As the role of clubs as governance actors emerged from particular cases, interviews with other clubs were elicited via purposeful sampling. While it was possible to speak with club members directly about their governance practices, it was often difficult or impossible to speak to community

members who were not club members about the local club due to their own reluctance or the intrusion of club members. This limited my ability to explore how ordinary community members felt about the environmental governance practices of specific clubs. I further draw from ethnographic observation and casual conversations that occurred while I lived in one of the studied cities and frequently visited the other over two periods in 2013-2014 totalling 9.5 months.

Three case studies are presented here. In each one clubs utilise their control over environmental resources within practices of place making. Moreover, each case demonstrates how a particular subject-position is coproduced within these practices. However, each involves different registers of involvement with the state, different class groups and the use of different resources. The particular cases presented here are chosen to demonstrate the diversity of everyday environmental governance practices by *para* clubs.

4.2.6 Case Studies
4.2.6.1 Netaji Club – governance through the protection of ponds and temples
Contact with members of the middle-class Netaji Club while exploring urban aqua-culture practices provided me with the first empirical evidence of the role of clubs as governance actors (Cornea, Véron, and Zimmer forthcoming). Their involvement with a number of local ponds and the creation of communal places are illustrative of the multiple enunciative practices that clubs engage in as everyday governance actors.

The Netaji Club is one of various clubs who earn funds for their services as guardians and brokers of local ponds. Pond owners pay these clubs a yearly fee to guard the pond and prevent people from angling illegally in them. Some clubs also reported that they guard against the risk of people poisoning the water in response to disputes with pond owners or others. The Netaji Club, in particular, also acts as broker over local ponds. Absentee pond owners assign them with the task of finding someone to lease the pond (to use for small scale aquaculture) and ensuring that person maintains the pond.

The guarding practices by Netaji Club members are not physical, but rather depend on a discursive assertion of protection. After being asked by the pond owner to guard the pond, the club members make it known to everyone in the *para* that they are

looking after it. People living adjacent to the pond are asked to inform club members if they see anyone angling. While not their primary activity, members are also observant of the ponds as they move through the *para*. Respondents state that these practices are enough to control access to the pond and that there is no illegal fishing. In this case the environmental governance practice is literally enunciative, the club proclaims a system of control in order to establish patterns of access it regards as acceptable. In demanding both members and non-members to not only restrain from fishing but also to report contravening behaviour to them, the Netaji Club is inscribing local people as participants within a system of governance steered by the club. The practice of both the club as institution and of compliant *para* residents serves to (re)produce these residents as governable subjects. Similarly, the fact that pond owners pay the club for brokering and guarding services re-confirms the position of the latter as authority. As is demonstrated elsewhere (Cornea, Véron, and Zimmer forthcoming), compliance with official interdictions against angling in other urban ponds is not assured, particularly when asserted by a 'ordinary' pond licensee rather than by an institutional voice, such as a club. At least within this field, governance by 'informal' actors and policy may be far more effective than that pursued through formal institutions and policies such as the law.

While the Netaji Club is able to rely on discursive practices to guard a pond and control access, they have used more active and material practices to govern the use of urban land. In an early interview club representatives proudly highlighted the recent renovation of a small temple on the bank of a local, privately owned pond as an example of the way they benefit the community. This temple, dedicated to the Hindu god Shiva, is complete with a *ghat* (stairs) to allow access to the pond. It is the only plot on the pond edge that is not developed with multi-storied housing and it is the property of the pond owner, who lives in the adjoining *para*. According to the club secretary, previously the temple had been allowed to fall into disrepair. While the club originally asked the municipality to renovate the temple, this request was denied, as the temple is not a deemed heritage building. Eventually, the club restored the temple, compound and *ghat* with materials donated by local residents.

The club members' rationale for repairing the temple centres on it's historical status as a common good that was under threat. According to club members the original owner of the land and temple intended it for the common good, and had indicated this also in writing. However, they believe that his descendants allowed the temple to fall into disrepair so that it would no longer be used, and thus would *de facto* lose its function as a common good. At that point they claim the owner would have felt free to sell the plot or to develop the land into a multi-storied building. However, by renovating the temple the club successfully avoided this attempt. Conversely, the landowner denies that he was purposefully neglecting the temple. He explained that the temple was on ancestral land that had been in his family for five generations and as such he needed to ensure that all of his relatives were prepared to see it renovated. He does however acknowledge the role of the club and local people restoring it.

The (re)creation of the temple as a public good acts in multiple ways to govern the use of that piece of (valuable) urban land. Firstly, there is the spatiality of the (re)creation of the temple land as a place of moral obligation.[27] The renovation of the temple reframed that space from one of neglect that could be sold or redeveloped, to an inviolable community place, subject to an ethno-religious normative register. Secondly, by soliciting the local community members to donate materials for the renovation, the club literally produced a structure of control to which parties have ascribed their consent through participation. At once the act of asking for donations and the practice of donating creates a relationship between the club as social institution and the community as supporters. More than simply working to control access to that space, these practices also serve to (re)confirm the position of the club as local institution and authority and the subject position of *para* members. The use of a temple does so in a manner that the creation of a secular place might not. As Gooptu (2001, 314) highlights, within the political contestation for space in India "the sacred and the profane intermingle". In

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[27] Here my use of the terms space and place vary from those in the translated work of de Certeau (1984). Herein, I understand space to be the product and medium of place making, space becomes meaningful in places (Shields 2004, 212). While in the French original de Certau (1984, 117) uses the terms 'espace' and 'lieu', the English translation asserts that "space is a practiced place". In order to avoid confusion I opt to use the terms in the way they are more commonly understood in Anglophone scholarship.

West Bengal, the connection between clubs as producers of the *para* as a spatialised moral community (Chatterjee 2004, 171-172) may further the manner in which a sacred space can be mobilised in non-communal[28] but still deeply political ways. The (re)creation of the temple acts in a third way to create subtle governance practices through local everyday practice. The ordinary practices of *para* residents in visiting this place, both for worship and to access the pond for other purposes, serves to repeatedly enunciate the system of control, and establish a pragmatic contract with the land owner, one which would prevent him from exercising his legal right to sell or redevelop the land. Repeatedly and daily, local actors announce through their visits that this space is a public, communal and inviolable place.

4.2.6.2 The Mahtab Sangha—governance through pond filling and public toilets

The manner in which clubs mobilise relationships with other actors, including the local state, to perform environmental governance functions is well illustrated by the activities of the Mahtab Sangha—[29] a club based in a small poor *para*. Unlike most clubs in poor *paras*, Mahtab Sangha's clubroom is situated on a sizable open ground (approximately 1100 m²). Club members gather there to socialise, children play in the yard and women gather on benches to talk. Huts at the edge of the yard are rented to local business people for use as warehouses, thus making the yard an economic space in addition to a space of conviviality. The ground is also the site of the communal toilet and bathroom complex used by the women of the *para*.

The Mahtab Sangha ground was developed after the club purchased a pond and the surrounding "jungle" (overgrown land) that local women used for open defecation. Following this, and because they "were not idle", the club members reported that they were able to transform the pond into a ground. They did so by slowly and purposefully dumping non-biodegradable waste into the pond. While it is illegal to fill large ponds in

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[28] I employ the Indian sense of communal to refer to religious groups. In this case the re-creation of the temple is political, but this action has nothing to do with opposition to members of another faith community and religion per se is not mobilized in the explanation of the actions.

[29] A *sangha* is an association.

West Bengal[30], the respondents saw no problem with their actions. They assert that as the owners of the plot it was their prerogative to do so. Moreover, according to club members the lack of open space and the presence of a pond presented a risk from drowning or being hurt while playing on the road. After the ground was developed, the club approached the municipality and requested that a toilet and bathing complex be developed there for the *para* women. The municipality funded the building while the club provided the electricity and water connections. The presence of this complex contrasts the sanitation situation in the two neighbouring slums, where the availability of public toilets is limited. Those residents also seem to be excluded from accessing this sanitation complex.

The Mahtab Sangha was able to alter the local environment and socio-natural relationships through a set of deliberate place making practices, that is, the transformation of the pond from presenting physical and health risks into a place of conviviality, economic exchange and improved sanitation for local women. In order to achieve this, the club both engaged with and avoided the state. In filling the pond in (potential) contravention to the law, the club was dependent on keeping the state at bay. The creation of a new resource (land from pond), an act of place making allowed the club to announce themselves as governance actors. Further, the practice of filling the pond established the dominance of the club over that particular space. Once the land was developed as club territory, a relationship with the local state allowed the club to further enter the role of an environmental service provider through the development of the toilet and washroom complex. By providing an essential service, the club serves to entrench its position within the *para*, one that is continually reconfirmed by local women as they use the complex.

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[30] The *West Bengal Inland Fisheries Act of 1982, amended in 1993* (IIIA:17a) prohibits the filling or division of any water body exceeding 350 square metres and retaining water for more than six months a year. The inability to access historic records prevents a definitive statement on the legality of filling this particular pond.

4.2.6.3 The Govinda Club—governance through land acquisition and (unstable) state patronage

While Mahtab Sangha is able to mobilise relationships with the local state, these relationships and the networks of governance they create are marked by impermanence, as is aptly demonstrated by the experiences of the middle-class Govinda Club. The Govinda Club is well known beyond the *para* boundaries and is notably one of only 12 clubs whose location is specified on the municipal map. The club owns or controls at least four parcels of land in the immediate vicinity of their club building, which is situated on a key thoroughfare in a more recently settled, middle and upper-middle class area. This land includes an unusually large open field (approximately 3300 m^2) that is controlled by the club and used for sports and hosting *melas* (fairs) and *pujas* (religious festivals) that generate income for the club via advertisement sales and booth rentals.

Struck by the size of the open field within a built-up area where property values are assumed to be high, I inquired about its ownership status. Club members reported that until a few years ago the field was just "supervised" by them. Now, the club owns the land by virtue of a transfer from the municipality. When the former ruling party (Communist Party of India – Marxist (CPI-M))[31] controlled the municipality the club board submitted a petition requesting that the municipality grant them ownership of the plot. The club asserts that the municipality agreed to their request because the land had no owner and they used the land to do "good work".[32] However, the very act of receipt speaks to the club's position of favour at that time position of the favour that the club was then in. This contrasts with the current situation of the club. Club members reported that when the state government launched a scheme to provide individual clubs with INR 200,000 (USD 3,200) to develop multi-gyms (a space with weight training and other fitness equipment), their application was unsuccessful.[33] While the club members I

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[31] The CPI(M), led a coalition government that held power at the state level in West Bengal for 34 years, until 2011. In that year the All India Trinamool Congress (TMC) took power. Until 2013 the CPI-M controlled this municipality as well.

[32] Currently, the TMC controls the municipality and former councillors are largely unwilling to speak. This limited my ability to investigate the motive for this gift of land.

[33] The presence of this scheme is controversial and many view it as an instrument of patronage politics. A brief analysis of news items on the AITMC website (aitcoffical.org) reveals that announcements of club funding began five months after the current chief minister took power and

spoke with knew of no official reason for the decision, they stated bluntly that such decision are always "political".[34]

The processes through which Govinda Sporting Club has shaped the use of urban land as essentially a club good,[35] highlights a number of dynamics of everyday environmental governance. The club is the key creator of a site within the *para* where relations of conviviality and ethno-religious performance occur. Community *pujas* are key events within *para* life. They represent a time and space in which all *para* members can intermingle freely (Ghosal 2006). Moreover, in the case of Durga or Kali *Puja* displays, they are also a chance for the *para* to present itself to outsiders, for example by participating in contests for the best display. Thus, the Govinda Clubs's field serves as a space in which the *para* as place and as an entity is reproduced for both *para* members and outsiders. In order to secure their access to this plot of valuable urban land, the Govinda Sporting Club successfully mobilized a preferential relationship with the state and the dominant political party. Using this relationship and the petition as a tool, the club was able to gain ownership of the land and thus control over how this environmental resource is used. The fact that the club as an institution was able to petition the state further legitimises their role and position of authority. However, this is a position that must be continually (re)produced and is inherently unstable, as demonstrated by the club's loss of their preferential relationship with the state. The club has been unable to negotiate the layers of relations needed in order to access a state scheme controlled by a party with whom they do not have a relationship of patronage.

The attempts by the club to navigate the multiple sites and scales of patronage relationships (both successfully and unsuccessfully) were highlighted by a number of clubs. While dominantly asserting that the club as an institution was politically neutral,

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increased significantly in 2013 and 2014. Funding is largely targeted to particular areas of the state and/or made on ministerial visits, particularly to politically fragile parts of the state. There is insufficient space within this paper to engage with the manner in which clubs are incorporated in the politics of patronage and how this shapes their role as governance actors but the dynamic is worth noting.

[34] See Roy (2002, 107 - 111) for her findings of the involvement of clubs in informal settlements in Kolkata in the politics of patronage under the CPI-M.

[35] Understood in the economic sense to mean a good that is jointly consumed and excludable. Club goods are a hybrid between public and private goods (Manzi and Smith-Bowers 2005, 347).

respondents simultaneously acknowledged that they take the help of individual members who mobilize their personal political identities to enable the club to access particular schemes or resources. This instrumental use of political patronage is reflective of similar dynamics demonstrated by Ruud (2000) who suggests that in West Bengal people often actively distance themselves from politics while simultaneously finding it necessary to participate in it.

4.2.7 Discussion and conclusion

By exploring the everyday environmental governance practices of three clubs I have attempted to demonstrate the micropolitics of environmental governance at the local level that shapes how ordinary citizens access, use and control environmental resources. Focusing on the actions of situated clubs, which are normally not recognised as institutional governance actors, highlights the need to examine how multiple actors shape the local environment through their practices and interaction at and between multiple scales. Through the discussion of how these everyday practices shape a particular subject position, this paper further explored the way practices serve to reinforce clubs as legitimate authorities.

Applying de Certeau's (1984) dialectic approach to consumption and production and the analytic of practices as enunciative allows us to consider not just the practices themselves but also the political dimension of these everyday practices. That the Netaji Club is charged to guard a pond and is able to do so simply by declaring that they guard it, or that the Govinda Club is able to request land from the state, are perhaps less important than the manner in which these practices serve to enunciate a particular governance system and coproduce particular subjectivities. In each case, the actual practices of the clubs must be understood as part of the manner in which a particular balance of power is stabilised within a temporal moment. However, as is demonstrated by the experience of the Govinda Club, these positions of power are marked by impermanence and reproduction is not assured.

Each case study represents the inherently relational and networked nature of everyday governance. The Netaji Club governed through a largely intra-scale, local

network that included *para* members who were not always part of the club, as well as members of adjoining *para*s. Their practices involved no interaction with the state. Conversely, both the Govinda Club and Mahtab Sangha mobilised through networks that extended beyond the local and to different levels of the State. The relationships of patronage that the Govinda Club was able to mobilise in order to secure formal rights over a valuable environmental resource is perhaps the most overt example of the networked nature of everyday environmental governance. However, this is also clear within the Mahtab Sangha's at times ambivalent relationship with the state. Only after the club had created the yard as a club good did they negotiate with the state in order to become an environmental service provider. Interactions with the state may be strategic processes through which power is both exercised and gained. The state is not a neutral actor and in cases of devolved governance it can choose who to support and who to undermine or exclude (Lindell 2008, 1883). Equally, the choice to not engage with the state may also be part of a strategy to protect a position of power.

Intra-scale relational webs between clubs and local residents are often built upon mutual if intangible benefits. The relationships established through the practices of both the club and the *para* members provides both direct services, such as the sanitation provided by the Mahtab Sangha or sacred *para* place created by the Netaji club, but also the intangible yet valued benefit of the reproduction of the *para* as a moral community through practices by all actors that announce the club as authority. Given the loyalty of people to the *para* as a social form and the importance of clubs in creating the *para* (Chatterjee 2004, 171-172) acquiescence to this particular system of governance can be seen as rational behaviour that seeks to maintain social stability. This acquiescence is both built upon and reproduces the subject position of people as *para* members.

As demonstrated, clubs are further embedded within inter-scale relational governance webs through which they engage in complex ways with the state at varying levels. Clubs do not govern in the everyday in direct opposition to or in isolation from state governance practices. Similarly, the positionality of people as both *para* subjects, and as state subjects is not contradictory. Indeed the willingness of the state at both municipal and State level to interact with and support clubs, at least to the degree that it

serves their purposes, may serve to enable, legitimate or reinforce the role clubs as governance actors. The "complex, multiple and contradictory" nature of subjects and governing bodies (Huxley 2008, 1639) are readily apparent within the practices of clubs.

Finally, it is essential to acknowledge that the everyday governance practices of clubs, like all political practices, do not have equal or equitable outcomes. They serve to reinforce the power of some actors to access or use a resource while disempowering other actors. The Netaji Club's action to govern space through the creation of the temple area as a sacred, inviolable place is a clear example. While on one hand they secured an environmental resource for local residents, this came at the cost of the autonomy of the temple owner who has a legal right to do as he pleases with the land. Similarly, the Mahtab Sangha negotiated with the state in order to create itself as an environmental service provider via the sanitation complex on club property. However, this complex is a 'club good' in the economic sense—a public good that is excludable, in this case to women from neighbouring *paras*. Thus, while the environmental governance practices of the clubs presented here were not openly contested they were not innocuous either.

In addition to the particularities of the empirical case studies, this paper has highlighted three concerns for broader governance studies. Firstly, it has demonstrated the usefulness of taking the urban environment as a lens to examine broader dynamics of governance and issues of subject formation (see also de Bercegol and Gowda 2013, Gabriel 2014, Truelove 2011). Secondly, it has highlighted the need for governance studies to consider a wide range of actors and institutions, including some who may declare themselves as "not political" (see also Lindell 2008, Olivier de Sardan 2011, Bierschenk and Olivier de Sardan 2014a, Roy 2002, Schindler 2014). Finally, I suggest that the study of urban governance in regions of the Global North and South would benefit from a sustained coordinated agenda of research in line with that which has occurred under the rubric of "everyday governance" in West Africa. Olivier de Sardan (2011, 2014) has drawn on that research to identify a typology of the eight situated modes of governance. This typology highlights the diversity of co-existing governance actors. Sustained, coordinated research in other regions may result in the identification of similar place/region-specific typologies—which would include clubs in West Bengal.

Doing so would significantly deepen our collective knowledge of the actual practices of urban governance.

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4.2.10 Works cited

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CHAPTER 5: GOVERNING THE POND SCAPE

Photo 3. Large pukur in Bardhaman © N.Cornea

Photo 4. Labourers employed to draw the fishing nets © N.Cornea

5.1 Preface

Chapter Five presents the paper "Ponds, power and institutions: the everyday governance of accessing urban water bodies in a small Bengali town". During the initial scoping visit to West Bengal the abundance of ponds was immediately notable feature. Their cultural importance and their value as a livelihood resource and for domestic use became apparent during fieldwork. These initial observations are supported by the results from the household survey that indicates that the vast majority of people in Bardhaman and Medinipur have a pond in their neighbourhood (89% and 90% respectively). The paper presented in this chapter focuses specifically on Bardhaman

where 59% of those who have a local pond use it for some purpose, most commonly religious uses and clothes washing.

The condition of urban water bodies is unique in that it is both a green and brown agenda issue. On the one hand water pollution and pond filling is very much a brown agenda issue arising from the limited provision of municipal services and the pressures of urbanisation. However, on the other hand they are also a green agenda issue, clean and sanitised water bodies are part of a certain imaginary of the urban environment (D'Souza and Nagendra 2011, Sundaresan 2011, Baviskar 2011, Arabindoo 2011, Follmann 2015, Diwadkar 2013). This paper, employing a UPE approach focuses specifically on the manner in which ponds in Bardhaman are governed in the everyday. In approach it connects to the paper presented in Chapter Three, while further developing the empirical analysis of the role of clubs as governance actors presented in Chapter Four.

5.2 Ponds, power and institutions: the everyday governance of accessing urban water bodies in a small Bengali town

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5.2.1 Statement of authorship:
Natasha Cornea conducted the fieldwork, conceptualised and wrote this article. Anna Zimmer and René Véron contributed substantive comments that assisted in clarifying arguments, improving analysis or engaging with relevant concepts and literature. Each also contributed editorial assistance.

5.2.2 Abstract
While the growing field of urban political ecology has given significant attention to the fragmented hydroscape that characterises access to drinking

water in the global South, so far the (re)production of other urban waters and its related power relations have been underexplored. This paper seeks to contribute to filling this gap by exploring the everyday negotiations over access to urban water bodies, in particular ponds. These are understood as a composite resource that is at the same time water, land and public space. This analysis draws upon a case study from a small city in West Bengal, India, and primarily upon data from open interviews with different actors having a stake in urban ponds. The paper demonstrates that in a context of ambiguity of the statutory governance regime and fragmented control the (re)production of the pondscape is embedded within complex relationships of power where social marginalisation can be offset at least momentarily by local institutions such as neighbourhood clubs and political parties.

5.2.3 Key Words:
urban water bodies, urban political ecology, everyday governance, India

5.2.4 Introduction

Ponds, known as *pukur* in Bengali, dot the landscape of cities in the southern portion of West Bengal. These water bodies are primarily artificial and serve a wide variety of economic and social purposes. Amongst the middle classes, ponds are primarily utilized for cultural and religious practices[36], and often also as a supplemental livelihood resource for small-scale urban aquaculture. For the poor however, they serve a much greater role. In addition to the already mentioned uses, those who do not have access to in-home piped water rely on ponds for: domestic purposes (such as washing of clothes and utensils); bathing; the care and maintenance of animals[37]; completion of livelihood tasks (such as washing cars or providing paid laundry services); fishing (angling) and collecting edible water plants to supplement diets. Thus, they are used for

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[36] Pond water is important for ceremonial bathing, both after attending cremations but prior to entering one's home and for ceremonially bathing brides prior to marriage.

[37] Very small scale urban animal husbandry is common amongst the poor. Most commonly households may keep 1 or 2 goats or ducks, much more rarely they may also have a cow or water buffalo.

most water needs; except drinking water, which most residents collect from standpipes, wells or tankers. Furthermore, the banks of, or *ghats* (steps) on a local pond may serve as social meeting space, particularly for women and children (for their role in livelihoods see: Gordon et al. 2000, Gregory and Mattingly 2009).

The diverse uses of these urban water bodies as more than just a source of water leads us to conceptualize ponds as a composite resource. Within urban West Bengal, ponds are more than 'bodies' or 'containers' of an eco-system for aquaculture; they are also a source of water, urban land and public space. These characteristics are threatened as increasing urbanisation results in significant incentive to fill or alter these ponds in order to use them as urban real estate. Shortages of land and settlement density, amongst other factors also create incentive to use ponds as a place for garbage disposal, often with little regard for the ecological ill-effects. As water bodies, they are a component within livelihood strategies. As a source of water they supplement the piped-water system for a significant portion of the population, and form part of the complex, intersecting hydroscapes that characterise cities of the global south (Bakker 2003a). The edge of the pond moreover serves as social space. In order to capture the composite nature of this resource as both a site of social relations and a biophysical resource herein we refer to the urban pondscape.

This paper investigates the urban pondscape in the small city of Bardhaman, West Bengal, as a site of power and as part of an urban socio-nature. As a resource and space, ponds are subject to complex arrangements of everyday governance that are shaped by, and embedded within, complex webs of power that, in turn, shape the ponds themselves. We seek to develop a situated approach to urban political ecology by focussing on questions of everyday access as an entry point for understanding the processes and geometries of power (Swyngedouw 2009, 57) that (re)produce the pondscape. In particular, the paper explores how the pondscape operates as a resource and space in everyday life for the urban populace differentiated by caste, class, gender and other factors. Taking the view that "ability is akin to power"(Ribot and Peluso 2003, 155) it examines who has the ability to access the pondscape, how, where and under what conditions.

5.2.5 Urban Political Ecology of Water

This paper seeks to engage with the insights of Urban Political Ecology (UPE) as a conceptual approach. UPE has emerged in recent decades from the broader school of political ecology and initially within the work of Marxist urban geographers who engaged with the concept of the production of nature as developed by Neil Smith (1990) and David Harvey (1996) to examine the (re)production of the urban environment (Zimmer 2010). UPE scholars reject the false divide between nature and society, arguing that there is nothing inherently unnatural about cities and that what is often referred to as 'nature' and 'society' are mutually constitutive, resulting in socio-natures (Cook and Swyngedouw 2012). Thus UPE studies seek to explore the economic, political and social processes that continually reshape urban socio-natures in often uneven and unequal ways (Heynen 2014, Swyngedouw and Heynen 2003).

The metaphor of urban metabolism emerged within early studies as an entry point to examine the way in which biophysical matter is circulated, transformed and exchanged (as commodities) within processes of urbanisation (Heynen 2014, Swyngedouw 2006a). Early UPE discussions along these lines engaged in innovative ways with the "contestation of water to show the uneven socionatural production of urban hydroscapes" (Heynen 2014, 599). Studies on water, and in particular (piped) drinking water, have continued to dominate the field. To contextualize how these urban hydroscapes have evolved, Gandy (2004) offers an economic-political history of what he terms the 'bacteriological city', a socio-spatial arrangement that emerged in 19th century industrial cities of the global north. The author demonstrates how large infrastructure projects such as sewers and piped water, re-shaped the physical city and resulted in a change in the relations between nature and society, producing a 'metropolitan nature'— a new, modern city.

Investigating this uneven infrastructural hydroscape, UPE analyses have demonstrated the ways in which social power shapes and is shaped by the provision of water (Gandy 2004, Lawhon, Ernstson, and Silver 2014). In doing so, one stream of literature highlights the winners and losers of particular (neoliberal) water policies, in

particular the often-contested attempts to privatize and commercialize the provision of water (Bakker 2003b, Ioris 2012b, Kaika 2003, Swyngedouw 2005a).

Of particular interest within this paper is the work of a second set of authors, working on primarily Southern case studies through a UPE lens or engaging in similar questions. Their work has explored the fractured nature of (drinking) water provision in Southern cities and the ways that this reflects current and historic power-differentials amongst the local populations (Anand 2011, Bakker 2003a, Gandy 2008, Ioris 2012b, Loftus and Lumsden 2008, Ranganathan 2014b, Swyngedouw 1997). Bakker (2003a, 337) employs the metaphor of "archipelagos" to capture the "complex layering of use-values and modes of production" that characterise hydroscapes in the global South. This body of work has also usefully highlighted that the fragmented nature of the hydroscape in post-colonial cities may not be new but "rather a pervasive, persistent rationality of rule" (Kooy and Bakker 2008, 1846); onto which current politics are inscribed in ways that may increase their inequitable and uneven nature (Gandy 2008). These scholars have also demonstrated how exploring the multiplicity of water provisions and everyday practices can bring to fore broader and more complex questions. For example Ranganathan (2014a) explores the practices of water "mafias" in Bangalore and in doing so raises challenging questions about the role of public authorities and the reproduction of the post-colonial state. In doing so this work offers a complex understandings of the politics of the production of socio-natures in post-colonial cities.

While UPE studies of water have offered valuable insight, they have largely focussed on circulated, and/or commoditized drinking water. The preoccupation with infrastructures and drinking water may be reflective on the one hand of the field's early engagements with how neoliberal processes shape cities and on the other hand with concerns for the way that fragmented drinking water access effects peoples' lives.

However, as highlighted by Truelove (2011, 145) the focus on the politics of control within city-wide structures may "sideline additional dimensions, scapes and spaces of water-related inequality". While a limited number of studies have engaged with other urban waters, they have focussed on the water and property (value) nexus (Finewood 2012, Mee et al. 2014) and urban wetlands (Campion and Owusu-Boateng

2013, Ernstson 2014). To our knowledge the role of urban pondscape as unique part of the fractured hydroscape in the global south has not yet received attention. This paper argues that there is a need to explore the micropolitics of accessing urban ponds as a composite resource in order to more thoroughly interrogate the way that power shapes urban socio-natures.

5.2.6 Toward a situated Urban Political Ecology of pondscapes

In order to develop an understanding of pondscapes, this article integrates insights from emerging literature on urban water bodies and rivers in India into a situated urban political ecology of complex waterscapes. This literature highlights the composite nature of urban water bodies as resources beyond that of just water. It does so by exploring the changing use value and accessibility of these spaces in the face of a multitude of factors such as: urbanisation, the imposition of middle-class aesthetics and use values, and/or notions connected to re-imagining cities as 'world class' (Arabindoo 2011, Baviskar 2011, D'Souza and Nagendra 2011, Diwadkar 2013, Follmann 2015, Sundaresan 2011). In Bangalore, for example, D'Souza & Nagendra (2011, 841) examine the manner in which Agara Lake has been transformed from "a common ecological resource, to a recreational space". In the process traditional users of the water body have been alienated from using it for livelihood, domestic, and non-elite social uses. Similarly, a number of authors have examined the development of waterfronts (Arabindoo 2011, Baviskar 2011, Mathur 2012), demonstrating how these waterscapes have been transformed from commons to exclusionary spaces. This literature points to the complex processes that extend beyond political economic realms to encompass shifting social imaginaries that contribute to the transformation of urban waterscape.

Herein, we focus on the urban pondscape as part of a complex, fragmented urban hydroscape and an important resource bundle for particular groups of urban society. We recognize that cities of the global south (though not only those cities) are especially marked by the "parallel existence of different cityscapes … a plurality of Urban Political Ecolog*ies*" (Zimmer 2010). In order to engage with this pluralism, in this paper we focus not on the historical-material nature of the pondscape as part of the broader uneven

hydroscape, but rather on the way various ponds are governed in very different ways (see also Gabriel 2014, Monstadt 2009). Our case study offers insights especially into the hydroscape of a small Indian city which permits to complement and enrich empirical evidence from the much more frequently researched large metropolises. Taking Lawhon et al.'s (2013) call to take the everyday dimension of UPE more seriously as a starting point, and integrating Zimmer's (2010) suggestion to build a more actor-oriented UPE, we seek to develop an approach informed by an actor-oriented analysis of 'everyday governance'. Here everyday governance is understood to be "the *actual practices* of how interests are pursued and countered, authority exercised and challenged and power institutionalised and undermined" (Le Meur and Lund 2001, 2). We argue that a focus on the everyday governance practices of state and non-state actors allows for a nuanced analysis of how socio-natural relationships shape the everyday micro-politics of the (re)production of the urban environment (Loftus 2007, Truelove 2011, Zimmer 2010).

In order to conceptualize and operationalize questions of power and practices that shape access to the pondscape for our field study, we utilise the Theory of Access as offered by Ribot and Peluso (2003). This theory was developed in order to facilitate the grounded analysis of the dynamic processes and relationships that facilitate or impede access to natural resources. This theory examines and maps the various continued social actions, referred to as "mechanisms", by which individuals and institutions are able to gain, control and maintain access to a particular resource. It is through these mechanisms that those who *control* access are also able to mediate the access of others, who in turn gain or *maintain* their access by expending resources and/or powers. These processes are inherently dynamic and fragmented. However, focussing on demonstrated ability to access a resource, rather than rights, orients analysis towards questions of power that are "embodied in and exercised through" these mechanisms of access (Ribot and Peluso 2003, 154). Heuristically, the authors suggest that one can examine these varied mechanisms as strands within a "web of access". This web of access is shaped by the bundles of power (material, cultural and political power) possessed by the individual actors within a particular access relationship. It turn, these access relationships are understood to be dynamic and shaped by the particular political-economic

circumstances. However, Ribot and Peluso (2003, 159) forward that: "Because of the fragmented nature of control and maintenance and the webs and bundles of powers that constitute them, people cannot be divided neatly into classes, as in a traditional Marxist frame."

To operationalize their theory, Ribot and Peluso (2003) suggest two non-exhaustive subcategories of access mechanisms: (1) rights-based mechanisms and (2) structural and relational access mechanisms. Rights-based access is understood as the control of access through a direct claim on a resource wherein the claim is enforced through the community, state or government. This may result from law-based recognition of a claim or from custom or convention. Mediating and operating in parallel to rights-based mechanisms of access are an array of structural and relational mechanisms that shape "how benefits are gained, controlled, and maintained" (Ribot and Peluso 2003, 162). These mechanisms operate within the "constraints established by particular political-economic and cultural frames" (Ribot and Peluso 2003, 164). The non-exhaustive list of structural and relational mechanisms of access proposed by the Ribot and Peluso (2003) includes access to: technology; capital; markets; labour and labour opportunities; knowledge; and authority. Further, access through: social identity and the negotiation of other social relations are also considered within this subcategory of structural and relational access mechanisms. These mechanisms of access of mobilised within access relationships in order to gain, control or maintain access to resources that are the subject of right-based mechanisms. For example they may be mobilised by those with 'rights' to a resource in order to maintain their access, while those who wish to access the same resource may mobilise other mechanisms in order to establish a relationship of access to a resource that they have no formal claim over. Identifying and mapping such mechanisms as part of on-going negotiation for access occurring within the everyday is the core task of access analysis.

Within this paper with we adopt a broadly Foulcadian understanding of power as diffuse and relational. Following Foucault (1982, 788) we understand that "Power exists only when it is put into action". Thus power is understood to be emergent from and not attached to people (Ribot and Peluso 2003, 156). Adopting such a understanding of

power displaces the State from the centre of analysis and instead relies on exploring the "dispersed practices and knowledges that constitute everyday forms of rule" (Ekers and Loftus 2008) see also (Kooy and Bakker 2008, Rattu and Véron in press).

5.2.7 Methods

Empirical data presented in this paper emerges from seven months of primary, qualitative fieldwork from August 2013 to February 2014 in Bardhaman, West Bengal. During this period approximately 35 open interviews, most of them conducted with the assistance of Bengali speaking research assistant(s), were concerned with urban water bodies. Respondents included a wide range of actors including elected officials, bureaucrats, landowners, members of local civil society, as well as pond users and other city dwellers. In keeping with the anonymity offered to participants, data from these interviews is not individually cited here and all names are pseudonyms. In addition data is drawn from a small household survey and from ethnographic observation conducted while the first author lived in Bardhaman, as well as secondary data sources such as policy documents also contributes to analysis.

5.2.8 Urban ponds in West Bengal

Bardhaman is a small city located approximately 100 km north-west of Kolkata, with a population of about 350,000 people. The hydroscape of the city is fragmented. A colonial era waterworks that supplied filtered, piped water to the old part of the city is no longer operational. Thus, for drinking water residents rely on municipal deep tube wells, as well as shallow, private wells. Seventy percent of respondent households in our survey reported getting their water from community standpipes, while only 14 % had in home water. The are 74 primarily artificial water bodies (Burdwan Municipality 2008); 89% of the population surveyed live near a pond and 53% use a pond for some purpose. Three of these ponds are profiled in order to explore the diversity of everyday governance of Bardhaman's pondscape. The multiplicity of mechanisms through which actors access and control this composite urban resource, highlights the complex, overlapping, interrelated, and at times contradictory, power relations that shape the urban environment.

5.2.8.1 Regulatory landscape

Both publically and privately owned water bodies are covered by the *West Bengal Inland Fisheries Act of 1982, amended in 1993*. Amongst other provisions, this act prohibits the pollution of any water area with industrial waste, sewage or other contaminating substances (II:6) and bans the filling or division of any water body exceeding as little as 350 square metres and retaining water for more than six months a year (IIIA:17a). The latter provision in particular seems open to interpretation, as many ponds are artificial and recharged yearly by monsoon rains. Thus, following a bad monsoon the lack of water can be mobilized in order to justify the filling of the pond.

While it is generally accepted that water bodies are both encroached upon and often filled-in (to reclaim the land), a local official at the West Bengal Department of Fisheries claimed that no complaints were brought to them in recent years. However, he reported that due to the urbanisation processes and the desire to 'reclaim' valuable land, there is often significant political pressure and at times even threats made against staff of the department to turn a blind eye and allow illegal filling to occur. The ambiguity that surrounds the responsibility for these water bodies and the interpretability and adaptability of the rules opens up spaces for people or groups to claim access to these ponds as urban land.

Ponds on municipally owned land come under the purview of the Municipality, which has the right to lease water access rights. Yet, municipal officials disagree amongst themselves about how such administrative authority is devolved. Moreover, officials from the municipality and from the State Department of Fisheries see their responsibility to be solely in terms of responding to complaints of pond filling.

Of the 74 water bodies within the municipality it is unclear how many are publically owned. In spite of following numerous avenues of inquiry, a consolidated list of publically owned water bodies (or plots registered as water bodies in the lands records) could not be obtained. Approximately 5,346 plots are recorded as water bodies

(whether they still contain water in reality or have been filled) within the 22 *mouzas*[38] that are wholly or partially within municipal boundaries.

The lack of accurate maps or consolidated current data about landforms and ownership structures is not uncommon in India. Roy (2002) has pointed out there is a politics of mapping, power can be exercised in unique ways within the ambiguity of unmapped space. These ambiguities and the attendant opacity of both political and bureaucratic knowledge about land feed into a particular regulatory logic, wherein rules and responsibilities are fundamentally negotiable. The lack of clarity in the sphere of regulatory governance is mirrored in the complexity of the patterns of everyday governance which shape control over and access to these ponds, as is detailed within the following case studies.

5.2.8.2 The pond that is not seen

In the east of the city, in a middle to upper-middle class neighbourhood a small unnamed pond (approximately 600 m²)[39] sits beside a large plot of open ground. The pond is separated from a much larger pond by a small strip of earth, which has been artificially widened by the homeowners who live on one side of it in order to allow access to their homes from both the street side and the side of the open ground. However, a screened pipe has been buried to allow water to circulate between the ponds while preventing fish from moving between the two. As is common, the pond has been encroached upon on two sides: residents, identified by local respondents as "refugees"[40], have used sand bags and other materials to extend a narrow strip of land between the pond and the road to build their shops and small houses. While the pond is reportedly

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[38] The administrative term mouza denotes a particular administrative district containing one or more settlements. Previously this term corresponded to revenue collection units.

[39] Area of each pond profiled is approximate and provided for illustrative and comparative purposes only. They have been calculated using google earth images (dated 3/30/2014) due to the inability to access official records.

[40] In West Bengal, the term 'refugees' is colloquially applied to Hindu Bengalis who have left what is now Bangladesh at various periods since the partition. However, respondents have told the author that current refugees are as likely to be economic migrants as people who feel persecuted for their minority beliefs. The Government of West Bengal only officially considers someone a refugee if they have migrated from the erstwhile East Pakistan (now Bangladesh) prior to the 1971 war. (Chattaraj 2003). Many areas that were locally identified as 'refugee' areas were well established and (lower) middle class, thus the term should not necessarily be equated with poor.

municipally owned, for a number of years the local *para*-based Tagore club has earned a nominal amount by "leasing" it to a local person to engage in small-scale aquaculture. What is notable about this arrangement is not that the pond is leased –such leases are common – but rather that an institution that has no formal property rights over it leases it to a third party. When asked about how the club manages to do this, respondents indicated that while it is a municipal pond, the city "does not see it". As such, the club is able to control by whom and how the pond as water body is accessed. However, doing so does not prevent the "refugees" from employing other mechanisms to access the pondscape as urban land.

The club clearly benefits from the municipality's tenuous control over this pond. The club has negotiated control over the resource by capitalising on the ambiguity of bureaucratic knowledge, thus employing structural/relational mechanisms of knowledge to mediate (and in practice negate) the legal access mechanism of property rights, as held by the municipality. It is unknown if the municipality 'seeing' this pond, would change anything. [41]

The social identity of the encroachers as refugees represents another relational mechanism is employed to control access to the resource (land). Within urban West Bengal, particularly in Kolkata, the refugee vote is broadly regarded as a key source of power for the left leaning parties, particularly the Communist Party of India (Marxist) (CPI-M), who incidentally also controlled the municipality of Bardhaman until September of 2013 (Chatterjee 1997, Roy and Banerjee 2006). Thus, while their ability to access the pond edge and transform it into land relies on the ambiguity of bureaucratic knowledge, there would be (or at least there was) political disincentive to displacing this particular group of actors or stopping them from building up the pond edge.

As an "unseen" resource this pond was open for anyone to claim. Access analysis brings to the fore questions of how the club was particularly well placed to claim control

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[41] While analysis of this case would have benefited from discussing this particular pond with the municipality, doing so raised an ethical issue. The respondents agreed to speak with the researcher on the basis of their anonymity. Exposing this unseen resource to the municipality carried with it the inherent risk of enabling the municipality to alter the current access arrangement to the detriment of those involved. Acting from a perspective of doing no harm to respondents it was decided that the issue could not be raised with municipal officials.

of this pond and in turn what mechanisms are mobilized to control and maintain the flow of benefits from this composite resource. In order to explain this the inter-relationship between *para* clubs and the *para* itself need to be explored. While *para* is often translated as 'neighbourhood', this translation is imperfect. In West Bengal, the *para* refers to a more complex spatialized expression of moral communities, wherein the residents (may) share particular caste, class, religion, language or place of origin affiliations (Chatterjee 2004). At its essence, the *para* is a particular place or locale: "a bounded region which concentrates action and brings together in social life the unique and particular as well as the general and nomothetic" (Soja 1989, 148). It is thus a socio-spatial entity. Traditionally the *para* has been a social structure to which residents were loyal, a sentiment summed up by one respondent who explained to me that in West Bengal it is family and *para* first.

In turn *para* based clubs are a common form of organised civil society in both middle class and poor areas alike. Their membership is dominantly male and largely restricted to those who live in the *para* or are otherwise affiliated with it. The ubiquity of club membership among local men varies by *para*, but in general poor *para's* have a greater proportion of households as members (often near ubiquitous). Clubs are heavily involved in the social life of a *para*. The club's ability to exert authority is clearly demonstrated in the manner in which inter- and intra-familial disputes, as well as some disputes with representatives of the state, are brought to the club board to be solved. Similarly, the clubs often play a role in mediating the morality of neighbourhood residents, for example by ensuring that local girls are not too friendly with boys from outside the *para* (see for example Chatterjee 2004). Such social practices and cognitive frames of morality, authority and identity serve to embed local residents (including the refugees who 'encroach' the pond) within a social space as members of the *para* and in turn to be subject to the unwritten rules, norms and obligations that are inherent with that status—that is to say, they are institutionally embedded (Etzold et al. 2012). In contrast to the club profiled by Roy (2002) in Kolkata, clubs in Bardhaman largely self-identified as non-political and not party affiliated (see also Harrison 2012).

While (re-)producing the sociality of the locality, clubs as institutions also act to produce and reproduce the materiality of the *para.* This material nature is not the end result of the production of locality, rather it is a continual processes through which locality is produced and maintained (Appadurai 1995, 206). Thus the (re)production of the socio-nature of the *para* can in part be understood to be a component of the spatial practice of the clubs as institutions in place making. It is through their positionality that clubs, as embedded institutions that (re)produce the *para,* are uniquely situated to claim the materiality of their territory—in this case, through the control of the pond. Through the control and assertion of territoriality as a practice of (re)producing the *para*, the club itself is reproduced and legitimated as a powerful institution with authority over the *para*. In the production of the *para* as, amongst other things, a particular socio-nature, clubs must be understood as actors within the production of the situated political ecologies of Bardhaman.

Interpreted through Ribot and Peluso's (2003) framework, the club mobilizes various structural and relational mechanisms of access in order to gain, control and maintain the flow of benefits from this pond. Knowledge of structural opacity is employed to claim authority over an "unseen" resource. Simultaneously, this process secured the social identity of the club as a legitimate actor and local authority, which were mobilized to derive benefit from this environmental resource. The composite nature of ponds as a resource is well highlighted through this case: the ability of the refugees to claim benefit from the pond as 'urban land' does not exclude the club from controlling access to the pond as a water body which can be leased for aqua-culture.

5.2.8.3 Kaju Pukur – ponds as infrastructure and the spectre of trouble

In stark contrast to the unseen pond, the privately owned *Kaju Pukur* is seen and discursively claimed by the municipality as public 'infrastructure', while simultaneously a particular public who mobilises an undefined but present threat of 'trouble' has claimed access to it in practice. *Kaju Pukur* is a medium sized pond (approximately 3900 m²) in the eastern part of Bardhaman. It is surrounded on all sides by roads faced with middle-class houses. However, it is located within a ward with a large slum population,

and at least three slum *paras* are located within 200 metres. One of the middle class buildings facing the pond houses the extended family of the pond's owner, who resides in Kolkata and is present in the area just once per week. He is highly educated, upper-middle class, and offers professional services out of a small courtyard office.

The surrounding slums have a limited number of community taps, through which water flows for only a few hours daily and in limited quantity, resulting in regular disputes over access practices. Thus, residents of all three nearby slums use the pond extensively for washing, bathing and religious purposes. During each site visit women were observed gathering along the pond's edge, chatting while they did their washing. Similarly, a group of men gathered on a makeshift covered platform at one end of the pond and children played in or at the edge of the pond. These observations speak to the nature of the pond as social space within the community. The conviviality observed during the day-to-day accessing of pond water contrasts with disputes that occur around the piped water infrastructure, which at times requires the intervention of senior local club members.

It is perhaps this shortage of piped water infrastructure that has led *Kaju Pukur* to be considered as slum infrastructure within the Municipality's previous Draft Development Plan (2008/09-2012/13). Within the aforementioned plan, Rs 9,57,200, (USD 15,380) was budgeted for improving the infrastructure in the slum, including development of the pond (Burdwan Municipality 2008). Particularly compelling here is that private property was represented as urban infrastructure within policy discourse, thus making it a *de facto* public good and an acceptable target for public investment. While there are legal means for the state to appropriate private land in the name of the public good, via the process of 'vesting', there is no evidence to suggest that this was the intention for this property. However, there is a degree of ambiguity as to how this policy decision arose. When questioned, the municipal officer responsible for the preparation of the plan was unable to provide an explanation, eventually declaring that it was probably upon the suggestion of the prior councillor. Moreover, when discussing the history and nature of access relationships over the pond with its private owner, he did not mention any prior involvement with the municipality, again suggesting that it is unlikely that any

known plan to vest the pond was in place. In any case, this point is somewhat moot, as public improvements of *Kaju Pukur* never occurred.

In the absence of any material intervention of the municipality, a local club[42] composed of all of the resident male heads of household (approximately 140) of one of the adjoining slum areas has stepped in to maintain this pond. Unlike the unclear relations between the municipality and the owner, clear rules of access govern this pond in the everyday. According to members of the All India club, the owner of *Kaju Pukur* leases them the pond in exchange for the cost of the taxes on the same. This arrangement has been in place since 2007; the club pays approximately Rs 4,000 (USD $ 65) per year for the taxes and earns Rs 15,000 – 20,000 (USD $245 – 325) from aquaculture. In September 2013, the club used their own funds to hire daily labourers and a lorry to clear the overgrowth of water hyacinths. By doing so the quality of the water improved: as indicated by local residents, it is cleaner and the bad smell disappeared. Regular maintenance is performed by "voluntary" work crews, to which each household must contribute one day per year. Control by the club over the benefit from the fish in the pond seems to be uncontested; no one was seen angling for recreation during numerous site visits, nor were problems reported. This contrasts strongly with conflict surrounding control of access to *Jodha Pukur*, which is profiled later in this article.

In conversations with area residents, the pond owner is described a "good man" who would not sell the property (and thus threaten their access), and who allowed the club to lease the pond for the nominal cost of the taxes. This access relationship is discursively framed in terms of benevolent social relations: it is the innate quality of the owner as 'good' and acting in a moral way upon which the residents claim that they, as represented by the club, have gained and maintained differentiated access. However, the owner of *Kaju Pukur* characterizes this relationship quite differently. While he had previously leased the pond out at market rates, when the lessee decided to give up the lease, the club approached him and requested to take over the pond, offering to pay him the taxes only. He reports that while it was not advantageous for him economically, he

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[42] While it is not always the case that all households are members of a *para* club, in this case all of the households in this *para* are members, except 2 or 3 households that are headed by women. This club does not allow outside members as they feel it may create problems.

accepted the offer because he is "not a political person" and the club may have "made trouble" for him otherwise. The respondent would not elaborate on the nature of this "trouble", though it was clearly something he felt threatened by. He stated further though, that there are many "social problems" (again not elaborated) within this neighbourhood that could become a problem for him if he alienated the club, which he would do if he denied them the lease or involved the police or municipality. For these reasons the current access agreement was accepted. The pond owner of the pond has given up any attempt to control how his property is maintained, stating that he does not "concern himself" with what they do.

Access to *Kaju Pukur* is controlled through the intersection of two mechanisms: the spectre of "trouble" allowed the club to gain and control access to the pond while their positionality as an institution and source of authority maintains their unchallenged access to benefit from the fish. The clubs power here is first enacted discursively when they approach the pond owner and offer to pay him what they know to be below market rates. They do not approach the pond owner as (poor) men, but rather as a club – a socially powerful institution. Conversely, the pond owner's fear of trouble and specifically social problems seems to speak to the manner in which the poor, their activities and their homes are discursively framed as unscrupulous (Bhan 2009) or menacing (Fernandes 2004) within the Indian middle-class social imaginary.

At the same time, this arrangement still allows for broad access to the water by area residents (both club members and members of other clubs/*paras*). The practice and acceptance of non-*para* residents accessing the pond for domestic uses complicates but does not contradict the prior discussion of the source of club power. It does, however, highlight that territorial delimitation is not absolute and that the rules in use are differentiated: actors are subject to different rules, governing different actions and resulting in different benefits. In this case, club members as a group benefit indirectly from the club's access to the fish in the pond, which are sold to generate funds for "social work" by the club. These are activities that benefit the *para* as a whole, but also serve to reproduce the role of the club within the *para*. However, club members as individuals are forbidden to access the fish as a resource. Similarly, residents of the club's *para* and of

adjoining *para*s have equal ability to access the water in the pond for domestic uses. Yet, residents of other *paras* are excluded from accessing benefits from the aquaculture either directly or indirectly. Further, they do not use the pond's edge as a social space in practice (though they are not actively excluded from it); rather, most gather in spaces attached to their own clubs. Recognising how the rules in use differentiate space is important as it highlights the political nature of space. That is the way that places "reflect, disguise or reinforce relations of power and the politics of difference" (Donner and De Neve 2006, 10) The pond is both open to and closed from the broader public, with particular benefits flowing to particular groups. Moreover, the complexity and temporal nature of power is highlighted in this case.

Finally, the case of *Kaju Pukur* demonstrates quite well the manner in which access analysis highlights the fragmented nature of control. What would normally be considered sources of power, namely: economic wealth, education, high-class status and property, as held individually by the upper middle-class pond owner, are subjugated within this particular access relationship. The club is able to exercise power as an institution, in spite of individual members positions as minimally educated, poor members of the minority community. The complexities of power relations that can be mobilized to obtain or control access are highlighted in more detail in the final case study.

5.2.8.4 Ponds and 'party boys' – Jhodha Pukur

Jhodha Pukur is a large pond (approximately 35,700 m²) owned by the Eastern Railway, a public enterprise. It is proximate to a small, long-established slum inhabited by people who work casually for the railways and elsewhere. For the last 15 to 20 years, the water body has been formally licensed to private actors for small-scale aquaculture.

The current licensee has held the license since early 2012. While the license is held in his name only, he fishes the pond in conjunction with an ad-hoc partnership of six other people. The terms of his license give him full legal right to control the use of the pond, its water, flora and fauna, so long as his activities do not contaminate the water

and make it unfit for drinking. The railways also reserve the right remove or add water to the pond for any purpose.

However, the reality of access and control of this pond differs from the formal arrangements. In spite of the formal licensing of the pond, local people—in particular those who dwell in a proximate slum—have retained access to the waters for domestic purposes. The supply of piped water available to these residents is limited and as such, they rely on the water of the pond for most of their non-drinking needs. The licensee relates that he knows that slum residents depend on this water and as such, he cannot exclude them from accessing it. A relational mechanism of access is employed by the slum residents in order to facilitate this access arrangement: slum residents rely on their social identity as 'poor' within a social context that still largely demands benevolence on the part of the middle-class towards the basic needs of the poor (Etzold et al. 2012). Even if at the same time, the poor are often framed in negative terms, this moral obligation continues.

However, access by local 'poor' populations is not unconditional, the licensee asserts his legal right, enshrined through the rights-based mechanism of the license, to limit people from accessing the pond to fish. In practice, however, members of the public are challenging his attempt to enforce his legal rights. On our initial visit to the site, we encountered a number of young men angling in the pond. Upon questioning them, they claimed that they mostly angled for recreational purposes and not for livelihood. When questioned directly about their access relationships they asserted that "it is railways' pond and it is open so … there is no heavy pressure …very little pressure from authorities" to ban fishing. They also did not believe that the pond was currently leased. They explained that it was for these reasons they were able to angle. In describing their activities to the researchers, the young men were discursively trying to maintain their access to the resource (in this case the fish) by employing rights-based mechanisms (as understood through Ribot and Peluso (2003)). They asserted that (a) the pond is belonging to the railways and is not leased (ergo a public resource to which they have a conventional claim), and (b) that their activity has not been opposed (at least in a "heavy" manner) thus implying the legitimacy of their actions.

The licensee, a middle-class man, relates a different access story. He states that he faces an on-going and significant problem with 'boys' who fish illegally. He estimates that 80 to 100 people angle in the pond each day. Due to their activities and the pollution caused by local residents throwing garbage in the pond, his profits have been reduced by over 60%. Yet he sees no real possibility of stopping this effectively, asking fatalistically "what can we do?" Still, he does make efforts to stop illegal fishing. To that end, he has employed guards who are supposed to catch people who fish and impose a fine on them. He is reluctant to involve the police, as he does not want "trouble". This fear of trouble remains undefined, yet throughout our research, when people spoke about attempts to oppose certain groups, in particular groups of the poor (as discussed above), the concern of "trouble" is raised. According to him these 'boys' are mostly scheduled caste and scheduled tribe[43] people who were afraid of the prior ruling party (CPI-M) and are now able to take advantage of their affiliation with the current party in power (All India Trinamool Congress). In identifying these boys as scheduled caste and scheduled tribe (poor) and affiliated to the party, the pond owner is both speaking to the previously discussed framing of the poor as dangerous but also a particular, situated dynamic *vis-à-vis* the party in West Bengal, discussed below. It is important to point out that the pond owner acknowledges that no senior member of the party encourages them to fish illegally, this impunity arises from their identity as party affiliates and so they act without fear.

In order to understand the source of this power, one must consider the nature of party politics in West Bengal and the manner in which this shapes everyday life. The influence of political parties in rural West Bengal is well explored in the literature (Corbridge et al. 2005, Chakrabarty 2011, Chatterjee 2009, Webster 1992, Williams 2001), which stands in stark contrast to the void of literature on urban West Bengal. While there are differences between rural and urban politics, we argue that, at least within this small city similarities in political life exist. Perhaps the most dominant commonality and yet source of distinction is the extent to which 'the party' permeates and politicizes everyday

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[43] Scheduled caste and scheduled tribe are administrative terms in India to refer to specific population groups marginalized within or who are outside of the Hindu caste hierarchy.

life in the studied urban centre (Bhattacharyya 2009).[44] Referring to rural areas, Partha Chatterjee (2009, 43) evocatively states: "In West Bengal, the key term is 'party'. It is indeed the elementary institution of rural life in the state – not family … but party. It is the institution that mediates every single sphere of social activity, with few exceptions, if any". This statement speaks well to the discursive ubiquity of the idea of 'the party'— rarely do respondents distinguish about which party they are speaking, rather it is referred to as an almost omnipresent force. 'The party' and it's influence takes on connotations that extend beyond electoral politics, it acts both as a social institution as well as a political one (Bhattacharyya 2009). However, within urban contexts there is a greater diversity of social institutions. It is insufficiently nuanced to equate the structure the party as a virtual puppet-master, as is perhaps suggested within Chatterjee's (2009) evocative quote. As was demonstrated earlier in this paper other important institutions, in particular the *para* club also mediates the social sphere.

The competing attempts to gain and control benefit flows from this pond *vis-à-vis* legal fishing rights points to the complexity of everyday environmental governance. The licensee attempts to secure his access to the fish in the pond through various mechanisms. By employing guards he employs authority as relational mechanism to control access. By authorising the guards to 'fine' people—a legalistic mechanism to which he has no statutory right—the discourse on the illegality of the young men's actions is cemented through the practices of governance. A mechanism of control, generally reserved for the state, is mimicked and enacted by a private actor in attempt to use capital disincentives to control access. For their part, the illegal anglers more successfully mobilize relational mechanisms of access (i.e. identity and authority) in order to benefit from the fish in the pond. They do so in a way that is largely performed through their persistent use of the pond for angling in the face of the licensees attempts to stop it, rather than through discursive and reasoned negotiations for access. Their identity as party affiliates and their (assumed) access to political authorities allows them to violate the licensee's legal right to control the benefit flow from this resource with

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[44] The literature on the role of the party is based upon research conducted during the CPI-M's 34 years of rule in West Bengal. However, similar dynamics continue under the All India Trinamool Congress (Donner, 2013).

impunity (Ribot and Peluso 2003). While these actors may or may not be officially connected to the party (i.e. they are very likely not formal card-holding party members), their status as informal party workers or party supporters gives them the upper hand in this relationship. Political identity as a relational mechanism of access is particularly complex as the actor may not need to actively or directly mobilize it in order to benefit from it. Within the enacted negotiations for access to the pond, the identity of the boys as party affiliates is a discursive form of power that exceeds their lack marginalised class/caste position within their relationship with the pond owner. While the licensee is a middle-class man who discursively distances himself from and disparages the offending persons through his identification of their caste status and assertions that they lack of family connections, these factors of social marginalisation do not offset the power which the illegal fisherman are able to mobilise through their relationship to the ruling party.

5.2.9 Conclusion

Within this paper we have engaged in exploring how power shapes the (re)production of the urban pondscape in a small Bengali city. For some residents of Bardhaman, everyday life is subject to a highly uneven hydroscape, which necessitate the use of un-piped water that forms part of their hydro-social cycle. All three studied ponds are understood to be part of a power-infused landscape wherein the pondscape, as land resource, water body and public space, is at times subject to contentious access relationships when competing actors attempt to secure their claims over the resource. Exploring the ways that access to the pondscape is governed through the lens of UPE has allowed us to engage with the micro-politics of the (re)production of urban socio-natures.

What has been presented here is a UPE narrative that is not "straightforward, smooth and dichotomised", but rather one that is situated, complex and dynamic (Zimmer, 2015). By exploring access relationships within the everyday, the complex mobilisations of power over and through the pondscape are exposed. Social and political identity, access to authority, knowledge, financial capital and gender, amongst other

factors, shape the access relationships to the pondscape and in turn shape the pondscape itself. We have attempted to expose "the power geometries and the social actors carrying them that ultimately decide who will have access to or control over, and who will be excluded from access to or control over, resources or other components of the environment" (Swyngedouw 2009, 57). As a composite resource the pondscape is subject to a multitude of access relationships that overlap and to differentiated rules in use for each component of the composite. This sets the pondscape apart especially from piped water networks and enriches the understanding of hydroscapes as spaces in which a multitude of claims operate in complex and dynamic ways.

Situating analysis in both the everyday and the actually existing cityscape has highlighted the multitude of contextually specific socio-natural relationships that produce particular urban political ecologies. The study of access to the pondscape has allowed us to expose the complex (constitutive) power relationships of this small city. In particular, we have highlighted through the case of both the unnamed pond and *Kaju Pukur* how particular urban political ecologies are produced through the relationship between the club (a contextual, embedded institution) and the *para* (a socio-material entity and context). Similarly, embedded within this particular context is the power relationship among those with ties to the 'party' as an omnipresent social institution and those members of the public who lack ties to the 'party', as was demonstrated in the case *Jhodha Pukur*. Exploring these relationships and the sources of power that underpin them has highlighted the complexity and diffuse nature of power relations exerted over and through urban socio-environment. Moreover, it demonstrates how urban socio-natures can become sites through which particular balances of power connected to factors beyond capital and labour are entrenched and reproduced. This has highlighted the importance of place in understanding urban experiences and thus of a situated UPE.

The particular case also highlights the importance of studying small cities, where it is not the conflictual transformation of hydroscape that calls the primary attention of the researchers, unlike in India's larger metropolises (D'Souza and Nagendra 2011). Instead, the multiplicity of uses and complex negotiations over access highlight the pervasive ways that power shapes the ordinary (re)production of urban socio-natures.

5.2.10 Acknowledgements

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CHAPTER 6: GOVERNING SOLID WASTE

Photo 5. Mobile garbage 'vat' in Medinipur © N.Cornea

6.1 Preface

The final empirical chapter of this thesis examines the politics of managing Solid Waste Management (SWM). Garbage is a highly visible environmental governance issue and one that equally informs both the domestic and international urban imaginaries. Upon hearing that I live in Switzerland, people in the studies cities but equally those in Mumbai and Kolkata inevitably comment on how Switzerland must be clean, with no garbage anywhere. In addition to its importance in the day-to-day life of all urban dwellers, examining SWM also allowed me to re-centre the state within analysis.

6.2 Clean city politics: an urban political ecology of solid waste in a small city in West Bengal, India

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6.2.1 Statement of authorship

Natasha Cornea conducted fieldwork, conceptualised and wrote this article. René Véron and Anna Zimmer contributed comments to clarify analytical arguments and writing.

6.2.2 Abstract:

In urban India solid waste management is often perceived as one of the most pressing brown agenda issues facing local governments. Seemingly a managerial problem, it is in many ways a highly political issue. While all levels of government are involved in setting policy agendas. At the local level garbage is also part of broader political strategies. Within this paper the politics of implementing a segregation-at-source solid waste management project in a small town of West Bengal are explored through the lens of urban political ecology. The case study, while demonstrating the politics around how waste is handled or not, and if and where it is present, allows transcending the issue of solid waste. Larger questions of governance, such as the complex political economy of decentralised governance in West Bengal; the ways and situated particularities in which electoral politics may shape policy choices; and the complexity of practice through which policy is implemented at the local level and how these practises shape particular subject positions become apparent.

6.2.3 Keywords

6.2.4 Introduction

Garbage is political. Its presence or lack thereof marks spaces and times in particular ways. Waste can also be the material of politics: how it is handled or not, if and where it is present or not, can be part of the strategies of politicians and other

political actors (Moore 2009). Throughout our fieldwork in small cities of West Bengal, the political nature of garbage was vividly marked. In one case, the day before municipal elections, we observed an official making a series of calls to his staff, giving each orders to clean particular areas of the city. Each conversation was punctuated with "a garbage free city", interjected forcefully in English amidst an otherwise Bengali dialogue. In another city, a municipal councillor detailed plans some months after his election to clean up particular main roads that are visible and the object of popular complaints. An increase in road clearing from one to two times a day would be made possible by shifting sweepers from other areas of the municipality. Both of these initiatives were about more than solid waste management (SWM) in a purely technical-organisational sense. Rather, one must see them as part of political strategies to build political capital and form an image of a proactive, effective political actor. Conversely, strategies to manage garbage and create a clean city can also be risky for those concerned with their political "popularity" when initiatives are not welcomes by the electorate.

This paper explores the political pressures and incentives related to the collection, removal, and treatment of garbage in the context of urban India. In particular, the paper examines the politics of the implementation of a segregation-at-source SWM project in Medinipur (aka Midnapore)[45], West Bengal, using an approach of urban political ecology (UPE) that focuses on the multiple embedded political strategies and relationships that shape the governance of waste. We explore the manner in which local political actors deploy multiple normative registers within their practices of securing household compliance. Finally, we highlight how particular situated intersectionalities between actors shape both the implementation and experience of solid waste governance. More generally, this case study on SWM serves as a lens through which we can begin to tease out the complexities of environmental governance and the (re)production of urban political ecologies in small cities in West Bengal.

6.2.5 The Politics of Waste

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[45] Both the more accurate Bengali transliteration of Medinipur and the colonial spelling of Midnapore are used to denote the city.

As a conceptual framework, UPE orients researchers to examine the social, economic and political processes that continually (re)shape the environment. This gives particular consideration to the relationships of power that shape these processes (Heynen 2003, Robbins 2004). Researchers utilising UPE approaches have dominantly focussed attention on the uneven consumption or provision of particular 'natural' resources or services, for example piped water (see e.g. Bakker 2013, Kaika 2003, Swyngedouw 2005a), green spaces (Heynen 2003, Heynen, Perkins, and Roy 2006) and food (Alkon 2013, Parés, March, and Saurí 2013). UPE studies have given significantly less attention to externalities, such as waste and pollution (Véron 2006).

Nevertheless a few studies employing UPE approaches on solid waste have emerged to explore the following: the governance of waste and its connection to the (capitalist) metabolism of resources (Lawhon 2012, Njeru 2006, Pickren 2014) and to neoliberalism (Myers 2005); environmental justice issues—largely related to landfills (Baabereyir, Jewitt, and O'Hara 2012, Leonard 2012); and issues of social justice, in particular as they concern the livelihoods of waste workers (Hartmann 2012, Parizeau 2015, Yates and Gutberlet 2011a). These studies have aptly demonstrated the need to understand the role of waste in producing, often uneven, political ecologies. Thereby waste is understood as a socio-natural hybrid, both an environmental artefact and a social relic (Parizeau 2015) that is the product of economic and social forces (Hartmann 2012). Waste is "imbued with cultural value" (Parizeau 2015, 68) and choices regarding where to place it, how to manage it and who should handle it are not politically neutral (Baabereyir, Jewitt, and O'Hara 2012, Leonard 2012).

Other, largely geographic literatures have further highlighted the politics of waste and waste work (Bjerkli 2013, Fahmi and Sutton 2006, Gill 2009, Moore 2009, Myers 2014, Shinoda 2005). For example, Moore (2009) has highlighted how both city officials and residents in Oaxaca, Mexico have used garbage as a political tool. On the one hand, city officials used the lack of visible waste in an attempt to create a particular imaginary of a 'modern' city, one that is rational and progressive. On the other hand, to protest the conditions around the dumping site, local (poor) residents engaged in blockades to prevent the dumping of waste. This made waste hyper visible to middle and upper class

residents of the city centre who responded through protests and forced the city to negotiate with the residents living near the dumping site. Other researchers have reflected on "the dirty politics of inclusion and exclusion associated with waste"(Myers 2014, 448), using waste as a lens into broader political and governance processes. In particular a number of authors have examined the effects of neoliberalism and (externally imposed) 'good governance' agendas in Africa through changes to the SWM system (Bjerkli 2013, Fahmi and Sutton 2006, Miraftab 2004, Myers 2005). In doing so they have effectively demonstrated that urban service delivery is embedded within multiple structures of power, is subject to multi-scalar forces and can be used by particular power holders to re-enforce their positions.

While these literatures taken together clearly demonstrate that the governance of waste is not politically neutral, they have largely examined the exceptional. Focus has been on particular types of waste, such as e-waste (Lawhon 2012, Pickren 2014), plastic bags (Njeru 2006) or cases of gross injustices and/or protest (Baabereyir, Jewitt, and O'Hara 2012, Gill 2009, Hartmann 2012, Leonard 2012, Parizeau 2015). While these cases are undoubtedly important, such approaches risk paying insufficient attention to pervasive ways through which power shapes the production of particular socio-natural conditions. We argue UPE should pay more attention to the politics of everyday, ordinary and not openly contested socio-natures (see e.g. Rattu and Véron in press, Robbins 2007). In particular, we suggest that the politics of ordinary waste before it reaches the landfill has remained under-explored (a notable exception being Yates and Gutberlet 2011b). Moreover, and an inter-related concern is the need for UPE to pay more attention to the politics of policy (Blaikie and Muldavin 1994). Here, we echo the call by Bryant (1992) for a more thorough examination of how policies are interpreted and implemented by local officials. If, as Heynen *et al* (2006, 2) assert, we must address "who produces what kind of socio-ecological configurations for whom" then we must necessarily examine *how* these socio-ecological configurations are created. Policy, and in particular policy implementation, is a key part of addressing this 'how' question. By paying attention to governance processes in everyday and ordinary situations one can

contribute to a more complete understanding of the complex dynamics of the production of particular political ecologies.

6.2.6 Methods

Empirical data for this paper is primarily drawn from 16 unstructured interviews, mostly with small groups. These interviews were primarily conducted in Bengali and translated by an assistant. A broad range of actors where interviewed including: municipal employees from various departments, elected officials, former ward committee members, union representatives and local residents. A total of 9.5 months of fieldwork during 2013-2014 were conducted by the first author in two small cities in West Bengal as part of larger research project on everyday environmental governance and politics. Ethnographic observations from this period inform our understanding of the politics of waste. In order to provide contextual and comparative information empirical data collected via interviews and observations in a second field site is also drawn upon. Further, a small household survey contributes illustrative quantitative data. A review of secondary documents related to state led planning and policy further informs analysis. Direct quotes presented within the text have been translated from Bengali unless otherwise indicated.

6.2.7 Solid Waste Management in India

While the day-to-day practices of SWM are the responsibility of urban local bodies (ULBs) in India, a number of central policies and agencies guide these actions. The most salient is the *Municipal Solid Waste Management and Handling Rules, 2000*, notified by the Ministry of Environment and Forests. The Ministry of Urban Development's *Manual on Municipal Solid Waste Management and Handling* (2000) further guides the implementation of these rules. These two documents amongst other features mandate the collection of waste from all areas, including slums and squatter areas, segregation at source of waste and the treatment of organic waste through bio-degradation (Ministry of Environment and Forests Government of India 2000, Ministry of Urban Development Government of India 2000). Enforcement of the centrally

mandated policies and rules is the responsibility of the state-level Pollution Control Boards.

In addition to the legislated rules, a number of central funding schemes are also concerned with SWM. In particular, the Jawaharlal Nehru National Urban Renewal Mission (JnNURM) is a major urban development scheme. Its sub-scheme for small and medium towns, the Urban Infrastructure Development Scheme for Small & Medium Towns (UIDSSMT) launched in 2005,[46] included components and funding for improved SWM. This occurred both as particular projects as well as a component of the Integrated Housing and Slum Development Programme (IHSDP) sub-scheme. However, as of March 2014 SWM projects only accounted for 6% of all UIDSSMT sanctioned projects across the country and less than 2% of the total approved costs. UIDSSMT projects have largely targeted water supply, roads and drainage (Ministry of Urban Development Government of India 2014).

In West Bengal, as elsewhere, SWM falls under the purview of a range of state-level line agencies including the West Bengal Pollution Control Board, the Department of Municipal Affairs, the State Urban Development Agency (SUDA) and the Directorate of Municipal Engineering. In addition to the central schemes detailed in the prior paragraph, state level schemes are also concerned with SWM. For example, the Solid Waste Management Mission was established by the Municipal Affairs Department, under the Kolkata Urban Services for the Poor scheme (funded by the United Kingdom's Department for International Development until 2011). The mission was intended to coordinate a programme of improved SWM in all ULBs. However, according to state officials it has failed to function in a meaningful way, in part due to the limited financial and technical capacity of ULBs. As well, the state-sponsored "West Bengal Urban Employment Scheme" allows ULBs to provide day-labour employment ULB for the creation or maintenance of civic infrastructure including SWM activities (Department of Municipal Affairs 2010). In addition to policies and schemes, it is common for other state actors to make recommendations. For example, the 3rd State Finance Commission

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[46] JnNURM concluded in 2014, however as of June 2015 projects were ongoing, funded as part of a transition phase prior to the launch of a new scheme.

recommended that door-to-door garbage collection and the imposition of appropriate fees for the same be implemented by all ULBs (Government of West Bengal Third State Finance Commission 2009, 67). According to a state official given the vaguely defined jurisdictions of such bodies there is incentive to comment on everything.

A significant portion of ULBs' budgets are devoted to municipal SWM, which is funded through tax and non-tax revenue as well as grants (Gupta and Gupta 2015). Estimates of average total cost of SWM vary widely, ranging from INR 500 – 1,500 (USD 7.50 – 22.50) per tonne. Approximately 60-70% of this is spent on collection, 20-30% on transportation and less than 5% on treatment and disposal (Joseph et al. 2012, Sharholy et al. 2008). Per capita, per day estimates of municipal solid waste generation also vary significantly across the country. In West Bengal, they were estimated at 321 grams, versus 383 in Kolkata itself, 475 in Delhi and an all India average of 376 grams in 2000(Sharholy et al. 2008). The state-wide average MSW collection efficiency is estimated at 74% (Sharholy et al. 2008, 462)

6.2.8 Solid Waste Management in the Medinipur

The primary field site is the small city of Medinipur in West Bengal and has a population of approximately 169,000. More than 350 people are employed in some manner by the municipality for conservancy work, a term which broadly refers to all tasks related to waste including but not limited to garbage and human waste. This includes sanitary inspectors, supervisors, sweepers and other staff. In 2013-2014 the budget estimate for conservancy services was 22% of total revenue expenditure (Midnapore Municipality 2013c, 8 - 10). According to municipal estimates, municipal waste production is approximately 250 grams per day, per capita. However, city wide collection efficiency varies from 60% to 90% in different wards (Midnapore Municipality 2008, 113, 2014). Our own survey largely verifies these estimates, with 36% of respondents reporting that their waste is not put in a community bin or collected door-to-door by the municipality;[47] these respondents said to throw it "somewhere else".

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[47] Our survey excluded the ward where the segregation-at-source pilot project is running.

Municipal workers do waste collection throughout most of the city. They collect household waste that has been deposited at the roadside or in community vats. In some areas the worker blows a whistle while moving through the streets so households can directly deposit their garbage in his tricycle cart. However, this type of door-to-door removal is a class-biased service: 42% of middle-class respondents versus only 18% of poor respondents reported the same.

Collected waste is deposited centrally into community bins that are emptied periodically. These bins are often covered and on wheels, unlike in our other field site where uncovered land vats are ubiquitous. The waste is then transported in open vehicles to an unmanaged dumping ground outside of the municipal boundary. In one ward a pilot project of segregation at source and door-to-door collection has been implemented and is discussed in more detail below. The city has also introduced a system of mandatory covered bins at the town's 34 'lodges' (marriage and event halls) in order to control the waste that is normally strewn on the roadside after a large event and presents a cleanliness issue. These bins are mandatory and lodges not using one are fined INR 1200 (USD 18.00) per day. While one councillor described the system of SWM in English as being "not so hi-fi", it does show elements of innovation beyond what was observed elsewhere.

At the household level, the city's segregation at source system involves two plastic buckets, provided by the municipality: a red one for organic waste and a blue bucket for non-organic waste. Garbage collection occurs in the morning when a worker comes with a handcart fitted with two barrels – one for organic and one for non-organic waste. These are emptied separately into covered bins on wheels and later brought to the landfill to be emptied. Local residents are required to pay for this door-to-door collection a monthly fee of INR 10 (USD 0.15) in the case of poor and below poverty line households, and INR 20 (USD 0.30) in the case of other houses. The segregated organic waste was originally used in a vermiculture pilot project developed as a public-private partnership, but this project was eventually abandoned due to economic and technical problems. In spite of this, the municipality still encourages the practice of segregation at source, however both types of waste are dumped together at the landfill. The

municipality plans to implement the same system in other wards in the future. Local respondents and the authors' own observations suggest that this project has in some areas led to an increased level of cleanliness.

In the context of: a general resistance in India to segregation-at-source (Colon and Fawcett 2006, Gupta and Gupta 2015); a failed attempt of the ULB in our second field site to implement a similar project; and an earlier failed public-private partnership for household solid waste collection in this city (see below), the 'success' of this pilot project is particularly notable. Examining the processes through which this policy experiment was initiated and implemented serves to illuminate the power negotiations that shape the political economy of environmental governance in West Bengal.

6.2.8.1 From state mandate to local (political) risk

Interviews with civil servants and members of the former ward committee[48] (who held their posts until 2013) about the implementation of this pilot project revealed the complexity of power dynamics and the multiplicity of relationships. While municipal solid waste management is the responsibility of ULBs, the initiative for this scheme was in response to pressure from state officials. A respondent related that municipal officers had attended a monitoring meeting in Kolkata with SUDA. At this meeting SUDA officials came to know that no SWM scheme had been implemented in Medinipur. The municipal civil servants were warned that they risked having funds under JnNURM (IHSDP) cut off if they did not begin to implement SWM scheme. Thus the municipal officers returned to Medinipur motivated to implement a SWM project.

This event illuminates two important elements of the political economy of governance in West Bengal. First, state officials hold a relatively big scope of influence

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[48] Under the system of decentralized governance in West Bengal, which was mandated by the 74th constitutional amendment, all electoral wards have a municipal councilor, who appoints a non-remunerated ward committee, whose size is determined by the population of the ward. The ward committee if functioning, acts as a consultative body. The ward committee rules encourage councilors to appoint members who are representative of all sections of the local population, in particular that "proper representation of engineers, physicians, educationists, social workers, cultural activists, sports-persons, women, persons from economically backward section of society" be made (Government of West Bengal, 2001). Respondent further indicated that normally councilors appoint at least one state government employee. The acting councilor in this ward served for a period of over a year, until a new councilor was elected in the municipal elections in November 2013.

over local government officers. The state-level bureaucrats were able to use the threat of sanctioning funds for other projects in order to motivate compliance with SWM policy objectives. Secondly, it demonstrates the limited autonomy of ULBs in West Bengal. While SWM is the responsibility of ULBs, in practice it is at the level of the state that policy choices are made. Discussions with a state level bureaucrat confirmed this observation. According to him it is most often the Pollution Control Board and not the ULB who identifies projects.

At the time of the SUDA meeting in 2013, one ward in the city was represented by Debasish Roy,[49] a member of the ward committee, who stepped in as acting councillor following the death of the elected councillor. It is this ward that the municipal officers identified for the pilot project. They approached Mr Roy and convinced him to implement the scheme. When approached, Mr Roy thought: "I am a [state] government employee, so I have no risk to decrease my popularity, I have no fear". Thus, even though he suspected that the user fees associated with the scheme would be unpopular, he was willing to try implementing it. He perceived no risk to his position or livelihood in introducing a potentially unpopular scheme. We interpret two reasons for this willingness. First, while he was a long-term member of the ward committee (five terms), he was not elected and had no political-electoral ambitions. Rather, he said that when he was selected he was "eager" to do social work and so accepted the position. Thus, he did not need to ensure future votes and so he was unconcerned with "popularity" or more accurately with populism. Secondly, as a long-term government employee he would not have been concerned about losing the stipend associated with being a councillor, in any case this amount is low.

Mr Roy also asserted, and municipal employees concurred, that concerns about populism were a significant reason that the elected councillors were reluctant to introduce the scheme previously or in other wards since. These concerns speak to the nature of electoral politics and the reality that at times good policy can have bad electoral outcomes if it proves unpopular. Post et al(2003, 844) note that in Hyderabad no cost-recovery was pursued for SWM or even openly discussed as the political cost was

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[49] Debasish Roy is a pseudonym

deemed to be too high. User fees are a contentious issue for all classes of people (see also Colon and Fawcett 2006). This concern for popularity may also explain why the councillor elected in November 2013 has actively distanced himself from the scheme by making the new ward committee responsible for supervising workers and handling any complaints.

6.2.8.2 Achieving 'buy-in' – labour relations

Implementing the scheme required 'buy-in' from other actors, most notably the labour union, who represents municipal conservancy workers, and from local households. A previous attempt to outsource door-to-door garbage collection to an NGO and impose user fees in another ward of Medinipur had resulted in a two-week strike by the union in 2011. The union had opposed that plan on a number of fronts. First, the NGO had proposed that they would provide labour themselves, bypassing the unionized workers. Secondly, predicted income for workers was very low. It was set at 25% of fees collected, estimated to be INR 40-50 (USD 0.60 -0.70) per day. The union saw this amount as "inhumane" and requested at least INR 100 (USD 1.50) per day, the running wage rate for unskilled labour under the Urban Wage Employment scheme at the time (Department of Municipal Affairs 2010). Further, the private actor involved in the prior scheme proposed that the workers themselves would be responsible for collecting fees. The union felt this bound the mostly low-class and low-caste workers to a difficult system of being responsible to force people to pay. The union rejected this neoliberal proposal and instead proposed that separate people be assigned to collect funds. With these demands, the union went on strike.

In West Bengal (as elsewhere in India), strikes led by (often politically affiliated)[50] unions are a common tactic and thus represent a well-trodden path to assert demands, particularly for members of lower-class and castes. Labour unions in other parts of India have similarly opposed plans to privatise municipal services (Post, Broekema, and Obirih-Opareh 2003, 843). While statistics on labour disputes—particularly those

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[50] We were unable to verify the political affiliation of the union involved in this strike.

regarding state employees[51]—should be viewed with caution, it is illustrative that in 2011 (as in many years), West Bengal had the largest number of labour disputes (153) of all the states in India (Ministry of Labour and Employment Government of India 2014). In Medinpur, the strike was successful and the privatisation scheme was called off. Moore (2009) has suggested that, in part, the reason that garbage strikes are politically effective is through the politics of manifestation that render waste hyper-visible and offensive to upper and middle-class sensibilities. By doing so, marginalised waste workers are able to (at least temporarily) garner their support for political demands (see also Hartmann, (2012)).

Keeping this history of SWM in mind, the new pilot project largely incorporated the strike demands of the union. The labourers selected for this project are hired by the ward committee, but become members of the union when they begin to work. The project employs six labourers and three or four local women to supervise and collect fees, which are managed by the councillor. All of the workers are paid INR 2500 – 3000 (USD 37.50 – 45) per month, get Sundays off and 11 or 12 days of holidays in the year. While the union still finds the wages low, they have accepted that low pay is better than no employment for those who benefit from the newly created jobs. Municipal sweepers are still responsible for cleaning the streets in the ward and no displacement of labour was reported.

6.2.8.3 *Building community support: moral duties and hygienic citizens*
In order to raise awareness and build community support, the bureaucrats and ward committee began by convening a ward level meeting. The former ward committee members reported that this meeting focussed on the way a clean environment positively effects people's health and how this in turn would save people's money on medicines. Further, the performativity of public meetings, both on the part of those hosting them, and those attending and witnessing others consenting to the system creates social

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[51] There is clear political motive for the state (at all scales) to avoid reporting strikes by its own workers. This is particularly relevant with the All India Trinamool Congress, the current ruling party. Mamata Banerjee, the Chief Minister has taken a strong position against the so called '*bandh* culture' or 'strike culture' in West Bengal.

pressure for people to act in a particular way. Read through a Foucauldian governmentality perspective, such meetings can be understood as an exercise of power via the construction of subject positions in order to indirectly shape conduct (Wan 2015, 5). This public meeting largely built upon messages presented in a Bengali pamphlet that was distributed to all households.

The pamphlet employed multiple normative registers to request resident's co-operation in making the city "clean and free from garbage". One set of messages focussed on the bio-physical environment, asserting that garbage is the biggest environmental challenge because it causes "dangerous pollution" when it falls into rivers and ponds and air pollution when it is burnt. A second set of messages focussed on moral responsibility to the poor. These highlight the health risks of unsegregated waste on "poor labourers" who collect recyclables in the street and at waste grounds and point out that user fees help poor families by providing income (Midnapore Municipality 2013a). Within these messages one can see clear parallels with Foucault's (1980, 171-176) work on the creation of hygienic subjects as a programme of social control in 17th and 18th century Europe. He points to the way in which the technique of health assumed a place within the machinery of power. A concern with condition of the labour force led to the body being seen differently: the concern was no longer with numbers but utility and people become responsible for both their own health and that of others. This informed a regime of hygiene that entailed certain authoritarian interventions that re-shaped urban space itself and behaviour within it to support the health of the population. In addition to the creation of hygienic subjects, these messages aim to form subjects concerned with the environment, a regime of power that Agrawal (2005) has referred to as "environmentality". Hygienic subjects and environmental subjects are intertwined with concern for the bio-physical entity of the environment vis-à-vis "dangerous pollution" and the moral responsibility of households for the health of "poor labourers". The nature of this particular project is amiable to the use of morality as a technique of power as behaviour that contravened was distinguishable and even open to stigmatization (Rattu 2015, 81 - 83).

Within a third set of messages in the pamphlet the responsibilities of households as citizens and partners are evoked through assertions that the municipality is obligated to follow the Government of India scheme and "solve the problem of garbage". The pamphlet notes that the municipality will assume the responsibility "to give good service" and for the infrastructure, however "small funds" are needed from every household to assist with paying for the labour. The pamphlet further notes that people will also benefit from the improved cleanliness of the ward (Midnapore Municipality 2013a). While the meeting focussed largely on individual benefits, the pamphlet communicates notions of responsibility and obligation as moral citizens.

The ward committee reports that these first awareness raising activities were not enough to convince all households. So as a secondary tactic the acting councillor and the ward committee secretary visited reluctant households individually and tried to convince them directly. After this stage, they say that around 5% of households remained uncooperative and stronger incentives were needed. Thus, Mr Roy reported that he used his "power": when non-compliant households came to him needing assistance he would "create pressure" and tell them "you didn't do our work, or follow our instructions of SWM project, so, why should we solve your [problem]". The ward committee members also again evoked ideas of charitable obligation by pointing out that monthly fees assisted eight or more families to live. Mr Roy and a second committee member however quickly acknowledged that this might not have been ethical, before going on to insist that they felt it was necessary to ensure the success of the scheme. In acknowledging this ethical question, the councillor both acknowledged a particular normative register—one that suggests that state representatives should treat all people equally regardless, while also evoking a second normative register, what Olivier de Sardan (2014) characterised as a "practical norm", (the 'greater good') to justify his behaviour. This situated rationality, enacted through highly personalised relationships highlight the complexity of power relationships that shape governance (Mosse 2000, Osella and Osella 2000b). Mr Roy was particularly well situated to use these personalised relationships on one hand and his "power" on the other by the fact that he was (a) a long term resident and known to people, (b) vested with the formal power to

acknowledge people and thus make them visible to the state and other institutions via his signature[52] and (c) his positionality as one who was not worried about "popularity" and had less motive to compromise in order to garner votes.

6.2.8.4 Experiencing segregation at source: the role of social pressures, waste imaginaries and class difference in shaping household participation

In February 2014 three groups of local women were questioned about their perceptions of the scheme and their willingness to participate. While some mostly middle-class respondents stated their support for it from the beginning, others acknowledged that they were initially reluctant. For one respondent it was social pressure from her neighbours that motivated her to begin to segregate. These respondents largely agreed that when the system worked and labourers collected the garbage daily it was an improvement over the old system. However, as they needed to keep the pails in the house so that animals did not scatter the garbage, they were unwilling to store organic waste for more than one day, as it made their houses dirty. Thus, when no workers come, as has occurred in one lane for the prior three months, they prefer to dump the waste on the street.

In a different, poorer part of the ward, the respondents further stated that while the workers insisted on segregation at the beginning of the project, they rarely did now and as such they did not participate. Conversely to the middle class experiences, these women suggested that they saw little differences in the condition of the local environment with the system and they had little motive to continue with it.

The assessments by local households highlight three significant issues: the effect of social pressure on practice, the role of cultural conceptions of waste and class-differentiated experiences of service delivery. As previously highlighted, social pressure has been a significant tactic in ensuring that people participate in the project. This pressure arises both from other residents but also from those who represent state authority —the waste collectors who "protest" or "insist" on compliance. These processes are further indicative of the manner in which policy implementation has relied

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[52] The councillor's signature to verify identity or provide a character referral is needed for broad range of administrative tasks in India ranging from establishing a bank account to applying to the army.

on the construction of a particular subject positions to shape local conduct (Wan 2015, 5). Compliance is ensured through a combination of different governmentalities: moral, neoliberal and disciplinary.

The construction of a hygienic governable subject position occurs within a context of broader cultural conceptions of waste and ideas about cleanliness. Conceptions of cleanliness and bodily pollution are significant within Hinduism and caste based societies. Most pertinent to the women's comments is the cultural and moral distinction between outside and inside versus western conceptions of private versus public. Traditionally, *inside*, understood as one's home, is a space of morality, purity and safety. Conversely the *outside*, which in the case of urban areas is outside of the house walls, is a space that caries fears of offence and ritual pollution. Thus, the street has no moral obligation attached to it. Waste that is thrown outside of the house walls is "thrown over a conceptual boundary" (Kaviraj 1997, 98, Chakrabarty 1991). Gupta (2000, cited in Mawdsley 2003, 89) suggests further that for members of the middle class, the disregard for civic cleanliness has a parallel in "caste practices, whereby the lower castes are ritually forced to absorb the 'pollution' of upper castes". Thus while these women profess a desire for a clean local environment, what takes priority is a clean house, one which is not sullied by the smell of organic waste that has begun to decompose. Women in our second field site pointed out that the fish-heavy diet in West Bengal was less conducive to storing waste for segregated collection due to the smell. In Brazil, Yates and Gutberlet (2011b) highlight a similar resistance to storing food waste, which was conceived as a risk to health and/or having negative social connotations. As with our findings, inconsistent collection of this waste was highlighted as a reason for non-participation

Finally, the class-differentiated nature of service experiences deserve notice. Our survey results, drawn from other areas of the city, suggest that 31% of middle-class and 40% of lower-class residents throw their waste on irregular dumping grounds. Of those whose solid waste is collected by the municipality, 42% of middle-class respondents versus only 18% of poor respondents have some form of door-to-door collection of their waste. Unequal class-biased service delivery, regardless of private versus public

responsibility, is consistent with the findings in the SWM literature (see for example Baabereyir, Jewitt, and O'Hara 2012, Colon and Fawcett 2006, Hazra and Goel 2009, Post, Broekema, and Obirih-Opareh 2003). In the case of the pilot project area particular dynamics may exacerbate both the tendency towards unequal delivery and the increased reluctance of poor versus middle-class women to participate. While speculative, the differentiated user fees may serve as a disincentive to both the labourers and those who collect the fees, who may act in an economically rational way by prioritising higher fee paying households. Additionally, lower-class residents face larger space and time constraints vis-à-vis segregation and the storage of waste in the face of inconsistent service.

6.2.9 Discussion and conclusion

This paper began with the assertion that garbage is political material and the material of politics. Garbage, or more specifically the politics of the implementation of a segregation-at-source policy, was employed as an entry point through which we were able to examine the complexities of environmental governance and the (re)production of a particular urban political ecology. This case study has highlighted the specificities of waste as a socio-natural hybrid within political strategies. Concurrently, examining waste as a socio-natural hybrid has served as a lens to illuminate broader inter-related political-economic processes that shape the urban socio-environment.

This first broad finding is in regards to the political economy of decentralisation in West Bengal. In spite of a long history of political decentralisation, in line with the broader literature this case study has confirmed that small ULBs have limited autonomy vis-à-vis policy implementation (Bhagat 2005, Denis, Mukhopadhyay, and Zérah 2012, Vidyarthi 2004). Moreover, we have shown that State level officials retain significant power over municipal actors to determine what policies get implemented. This power is yielded in complex ways: both through formal procedures but also through informal relational mechanisms, such as the threat of the SUDA officers to cut funding.

Secondly, the intersection between electoral politics and policy choice is a key finding. The two anecdotes presented at the beginning of the paper highlight the manner

in which garbage can be mobilised in populist ways, both directly as in the case of the councillor who planned increased services or indirectly as with the goal of a "garbage free city" the day before an election. In the latter case these demands were likely reflective of the municipal officers explicit or implicit desire to maintain the favour of the numerous councillors who were seeking re-election. As highlighted by Moore (2009), areas that are free of (visible) garbage can be used as a tool to construct the city and those who govern it as modern and progressive. However, attempts to manage the same material at the household level may come at significant political cost, as highlighted in our primary case study by the comments of Mr Roy and others about the risk to a councillor's "popularity". Within a context wherein elected political actors may serve unlimited terms in office and where being "in politics" in-spite of the nominal remuneration[53] is seen by some as a desired path, there is significant incentive to avoid implementing policy that may result in lost voter support.

However, to simply interpret this finding as an example of the importance of political will and/or of the right political incentives for policy implementation would be incomplete. What this case study highlights is the relational and temporal nature of governance interventions. Examinations of successful policy implementation or policy failure (and the case herein may still fail) must be cognisant of more than just the policy as written, and the ascribed responsibility of the political and bureaucratic actors to implement the policy. It is essential to consider not just how policy effects, but also how it is effected by what Heynen et al (2006, 8) have described as the "inter-woven knots of social processes, material metabolisms and spatial forms that go into the formation of contemporary urban socionatural landscapes". In Medinipur issues of: political costs; labour union politics; embedded hierarchies and relationships of power and cultural conceptions of waste have shaped the manner in which an environmental policy is (or is not) implemented. Moreover, the implementation of this policy was shaped by particular

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[53] There is insufficient space within this paper to address issues of political culture or the rent-seeking behavior of elected officials in West Bengal. Moreover, and it is crucial to emphasize our research was not concerned with corruption and we do not have empirical data to suggest or refute the presence of such behavior. For discussions of the political culture of West Bengal and corruption in India more broadly see for example: Véron et al. (2006); Williams (2001); and Berenschot (2010)

temporal conditions: the incentive to implement the policy following the SUDA meeting in Kolkata and the time-bound condition of having a cooperative acting-councillor who had no electoral ambitions. It remains to be seen if this initiative will continue in this ward or if the municipality will be able to implement it elsewhere.

Thirdly, and interrelated to the prior two findings, is the complex nature of the actual practices of implementing policy at the local level. Two important dynamics arise: firstly the personalised and situated nature of the relationships of power that shape governance at the local level in West Bengal and secondly the manner in which local governance practices may contribute to the formation of particular subject positions. We have demonstrated here the complex ways in which power is mobilised within these at times highly personalised practices. Building compliance with the segregation-at-source scheme did not rely primarily on repressive tactics but rather on practices that sought to create hygienic and environmental subjects, largely through moralistic discourse that would voluntarily adjust their behaviour. However, waste is "imbued with cultural value" (Parizeau 2015, 68) and particular caste-based conceptions of waste (Chakrabarty 1991, Kaviraj 1997, Mawdsley 2003) intersect to shape household practices. More direct practices were also employed to shape compliance, in particular the withholding of services by the acting councillor from non-compliant households. This practice, predicated on an idea of reciprocity between those who govern and local households is different than the patronage politics often explored in the urban governance literature (see for example Ahmed and Ali 2004, Anand 2011, Berenschot 2010, Yates and Gutberlet 2011b). Here it was not an exchange of municipal services for votes as the political actor was unelected, but rather akin to an agreement that the acting councillor will do his duty if the households do theirs.

These political economic dynamics act to produce a particular uneven socio-environment within the ward where this policy has been implemented. As interviews with local households demonstrated participation in scheme and experiences of service delivery have been class biased in ways that privilege the middle class. Moreover, by pursuing a neoliberal strategy, improved waste collection is dependent on user fees and precariously employed labour service delivery is inconsistent and redress is no longer a

matter of people's rights to municipal service but rather must be demanded from a private actor, mobilised through a non-elected ward committee. However, these processes have not in any broadly meaningful way changed anything ecologically. While the waste may be segregated at the household level, both the biodegradable waste and the other garbage is dumped together at the landfill. Thus it has had no impact on either the municipal waste burden or availability of organic fertiliser. Yet, the municipality continues to insist on the practices that reproduce environmental subjects.

In conclusion this case has demonstrated that employing UPE to examine policies for managing household waste can expose the pervasive ways that power, exercised at multiple scales and through multiple relationships shape the (re)production of particular urban conditions. Multiple actors mobilised different sources of power in order to implement the SWM policy. State level bureaucrats employed formal and informal strategies to ensure that local bureaucratic actors would comply with policy directives. In turn, these actors took advantage a particular situated configuration of power, the lack of an elected representative, in order to facilitate policy implementation with the support of the non-elected ward representative. Household compliance was gained both through the highly personalised relationships of power between Mr Roy and households and through the more diffuse processes that sought to construct hygienic, environmental subjects. Focussing on these processes of policy implementation, even in the absence of overt conflict, gross injustice or substantive environmental change has demonstrated the potential of such 'ordinary' cases in deepening our understanding of how particular socio-ecological conditions are produced.

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CHAPTER 7: SYNTHESIS AND CONCLUSION

7.1 Introduction

Overall this thesis demonstrates the complexity of everyday environmental governance. These processes involve continually renegotiated relationships among multiple actors with multiple subjectivities, acting at different sites and scales while employing different practices in attempts to control access to, use of, or the management of particular environmental resources. Stating that the world is complex may not be ground breaking, but a significant part of the mandate of qualitative social science and urban studies is to engage with complexity. To tease out and begin to illuminate the "inter-woven knots of social processes, material metabolisms and spatial forms" that shape cities (Heynen, Kaika, and Swyngedouw 2006, 8). Following Bell and Jayne (2009) this thesis has attempted to demonstrate that engaging in nuanced analysis of small cities illuminates the complexities of the urban condition (see also Robinson 2006, Veron, 2006). It is only through the recognition of complexity that we can hope to begin to account for and engage with it in practice, in policy and in other spheres.

This thesis explored everyday environmental governance in two small cities in West Bengal. The first chapter provided the reader within an overview of the structures of state led governance in West Bengal and a sense of the nature of politics there. In the second chapter, methodology and methods were described and my positionality as a researcher reflected upon. Chapter Three situated the work within the conceptual approach of urban political ecology. This was achieved in two steps, first by providing an overview of UPE as an approach and then by arguing for the usefulness of taking governance more seriously within UPE. The three chapters that followed presented empirical case studies to illustrate: the complexity of environmental governance networks within small cities; the manner in which multiple intersectionalities, including class, caste and access to political and social authority, shape everyday governance practices and the (re)production of particular socio-natural conditions, often in unexpected ways; and the way in which such practices shape subject positions. In this concluding chapter I begin by returning to the research objectives presented in Chapter

2.2. Following this, I reflect on methods, my own positionality and the limitations of the study are discussed and a future research agenda is presented in Chapter 7.4.

7.2 Overall results

7.2.1 Environmental challenges in the studied cities

The first research aim sought to identify the key environmental challenges in Bardhaman and Medinipur. To a large extent the challenges identified are what one would expect to find in a small, not heavily industrialised city in eastern India. In particular the expected brown agenda issues are present, for example SWM is lacking, drinking water is limited and unevenly distributed, and underground sewers do not exist. Green agenda issues are also present, centred around parks and limited beautification efforts, but to a much lesser extent than brown agenda issues and not displaying characteristics of "bourgeoisie environmentalism" identified in India's Metropolises (Baviskar 2003, 90).

Thus, while this research aim was a useful starting point it was too broad to aid in the selection of embedded cases to be presented within this thesis. Rather, I chose to focus on the particular cases that were representative of broader patterns, where the particular politics were illustrative of situated dynamics or where the findings were unexpected. The remainder of this subsection summarises why each empirical case was presented in this thesis and points to the key contributions each makes to the literature.

As detailed in Chapters Four and Five, the role of clubs as governance actors was an unexpected finding during fieldwork. Clubs are explored only in an extremely limited way within the empirical literature on West Bengal. Both Tom Harrison's (2012) notable contribution and Roy's (2002) brief engagement with clubs in her influential monograph on Kolkata, explore the role of clubs as part of the political grassroots. Meanwhile a small number of other authors only mention clubs in passing (Dasgupta 2009, Bhattacharyya 2009) or in connection to the hosting of *pujas* (Sarma 1969, Ghosal 2006, Chakrabarti 2006, Islam 2004). Within a section of one essay Partha Chatterjee (2004) offers important insights into the historical formation of clubs in Kolkata (see also Sen 2011). Thus, in spite of their ubiquity and the importance demonstrated in this

thesis, there is a clear gap within the literature, to which the work herein makes an original contribution to the body of knowledge on urban governance dynamics in West Bengal. The empirical engagement on clubs within this thesis demonstrates their role within environmental governance networks and explores how clubs (re)produce a particular spatialised social structure, that of the *para*. It further demonstrates the manner in which affiliation with clubs as a social institution can be mobilised as a source of power.

To some extent, in the same way that exploring clubs is mandated within the thesis due to their particularity, so too is the exploration in Chapter Five of the governance of the urban pondscape. On the one hand these ponds are a socio-natural artefact of the historical modification of local hydrological system. Present actions undoubtedly (re)produce a particular hydrological configuration within the city that could usefully be explored through an ecology led UPE approach. On the other hand, these ponds are part of what we termed the pondscape—a composite resource, at the same time land, water and public space. This paper focussed on the pondscape as a heuristic through which particular situated micropolitics could be explored. Through the development of an actor oriented urban political ecology approach and by mobilising access analysis (Ribot and Peluso 2003) this paper was able to highlight the complex relationships of power that mark everyday governance in urban West Bengal. In particular it demonstrated how the usual conditions of social marginalisation, including poverty and being part of a minority or low caste group could be offset, at least momentarily, through ascription to powerful local institutions, notably clubs and political parties. Through the exploration of the pondscape, this paper pushed to broaden the focus of (UPE) studies of water to explore the hereto under-explored politics of urban water bodies (see for example Campion and Owusu-Boateng 2013, D'Souza and Nagendra 2011, Ernstson 2014, Follmann 2015, Mathur 2012). It also demonstrates the value in exploring the everyday micro-politics of access as a way to more fully understand how power shapes the (re)production of urban environments (see also: Loftus 2007, Truelove 2011, Sultana 2011).

In answering the first research aim, to identify the significant environmental challenges facing small cities, Chapter Six's focus on Solid Waste Management is the most direct response. Managing garbage is a fundamental task of the local state, the politics of which are well explored in the literature (see for example: Bjerkli 2013, Fahmi and Sutton 2006, Gill 2009, Moore 2009, 2012, Myers 2014, Shinoda 2005), though less so by those utilising a UPE approach (Baabereyir, Jewitt, and O'Hara 2012, Hartmann 2012, Lawhon 2012, Leonard 2012, Njeru 2006, Osella and Osella 2000a, Parizeau 2015, Pickren 2014, Yates and Gutberlet 2011b). At a basic level the article presented in Chapter Six contributes to the empirical depth of knowledge developed within these literatures. However, it also seeks to push UPE approaches in particular to pay more attention to the politics of everyday, not openly contested socio-natures (Rattu and Véron in press), and to pay more attention to the politics of policy (Bryant 1992). This paper argues that doing both of these things is an important part of engaging with how particular urban socio-natures are (re)produced. The focus on policy implementation further served as a way to examine the practices of state actors, which are less explicitly addressed in the other articles. Chapter Six addressed questions of both local practices and broader dynamics. This demonstrated the complex power dynamics that shape policy implementation and the role of electoral politics within policy choice. In doing so, it challenged accounts of policy implementation that centre on simplistic arguments of political will or policy structure. Further, and in line with the broader evaluative literature on decentralisation (Bhagat 2005, Vidyarthi 2004, Mathur 2007), it demonstrated that ULBs have limited autonomy *vis-à-vis* policy choice, thus question the extent of true decentralisation. These insights contribute to the hereto-limited literature on the political economy of governance in small cities in India.

7.2.2 Governance actors and networks in the studied cities

The second research aim sought to identify the key local environmental governance actors, map their relationships and examine the actual practices through which they govern. Each article focused on a different set of actors, including the state (at multiple scales) (in Ch.6 but also 4 & 5), clubs (Ch.4 & 5), and 'the party' (Ch.5 & 4), as

well as set of non-institutional actors (ie: the 'refugees' or pond owners/licensers in Ch. 5), the networked and relational nature of governance was demonstrated in each (Keil 2006, Gupta 1995, Lindell 2008).

By focussing on actors and practices, the work in this thesis has demonstrated that governance is not a simple hierarchical structure, but rather the result of continually (re)produced and (re)negotiated relationships and processes (Berenschot 2010, Blundo and Le Meur 2009b, Hust 2005, Kooiman 2003, Olivier de Sardan 2008). Thus governance networks are continually in flux and must be understood as inherently instable for this reason. By examining these networks, this thesis has demonstrated that governance occurs within multiple spheres, at multiple scales and through complex practices that may intersect, overlap, complement and/or at times contest (directly or indirectly) the practices of other actors, who may have multiple identities. Figure 4 below illustrates the relational, interconnected nature of everyday governance.

Figure 4. Networked environmental governance actors in West Bengal
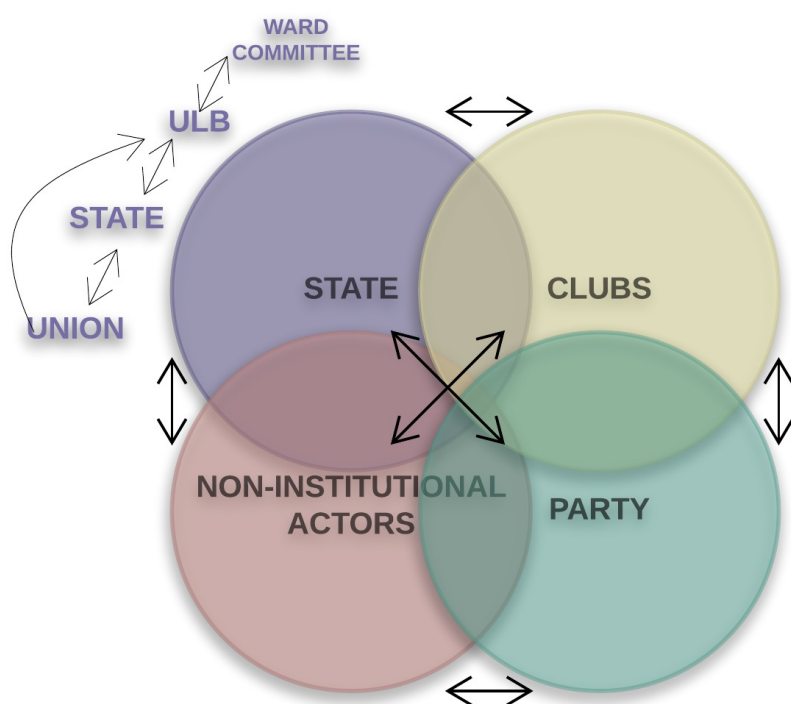
Author: N.Cornea

As illustrated and noted above, this research identified four main groups of everyday environmental governance actors: the state, clubs, 'the party' and non-institutional actors. In recognising the relational nature of governance it becomes difficult and arguably unhelpful to attempt to completely untangle the webs of governance. However, whilst acknowledging the inherently intertwined nature of relational webs and practices, in the remainder of this subsection I attempt to loosen the strands somewhat by highlighting key dynamics and relational practices of each group.

7.2.2.1 The State

As an actor group, the state is present at multiple scales and encompasses not just the Union, State and local (ULB) governments, but also Ward Committees and those who temporarily represent the state (i.e. the labourers who insist that residents segregate their garbage Ch 6.2.8.3). While the state is always present, each case study involves different registers of interaction. Within Chapter Six the state is the dominant actor and that chapter highlights the complexity of relational governance between state actors and citizens, as well as power dynamics between actors at different scales within the state (e.g. Berenschot 2010, Gupta 1995, Schindler 2014, Ruud 2000). The findings thus contribute to the hereto limited literature on political economy of urban decentralisation in West Bengal and India more broadly (Chattopadhyay 2012, de Wit, Nainan, and Palnitkar 2008, Crook and Sverrisson 2001, Jacob 2011, Mathur 2007). Moreover, the actor-oriented approach serves to complement more structural analysis of the state and decentralisation. Moreover, by examining the actual practices that shaped policy choices and implementation, the article presented in Chapter Six demonstrates the relational and often informal way that states govern in practice (Bierschenk and Olivier de Sardan 2014b, Blundo and Le Meur 2009b, Corbridge et al. 2005, Olivier de Sardan 2013, Tarlo 2000).

The relative position of the state in Chapters Four and Five is quite different than that in Chapter Six. Through examples of interactions between state and other environmental governance actors, these two case studies have de-centred the state within everyday environmental governance networks. That is, they have demonstrated

that both the state and other actors engage and disengage with each other in strategic and political ways. For example, the Govinda Club (Ch. 4.2.6.3) found that their prior relationship of privilege with the local state (the ULB) was now not replicated by the State (the Government of West Bengal). Conversely, other clubs strategically chose when to avoid and when to engage with the State in ways that were beneficial to them.

7.2.2.2 Clubs

Chapters Four and Five have demonstrated that *para* based clubs are enmeshed within the micropolitics of urban environmental governance in West Bengal. Unlike other actors, including the state and the party, who govern at and across multiple sites and scales, the environmental governance practices of individual clubs are more territorialised (Donner and De Neve 2006, Schindler 2014). The environmental governance practices of clubs occur primarily within their *para* and (in part) through these practices they reproduce the *para* as a spatialised moral community. This is achieved through the creation of both secular and sacred places by Netaji Club, Mahtab Sangha and Govinda Club (Ch. 4.2.6), as it is through the use of the "spectre of trouble" by the All India Club to gain access to Kaju Pukur (Ch. 5.2.8.3). While clubs employ various practices, all serve to (re)produce their role as governance actors. In part, this is achieved through the construction of a particular subject position amongst *para* members ('the *para* public'). The manner in which governance practices shape subject positions is discussed in more detail below.

While the purview of clubs is the *para* environment exclusively, their relationships and networks extend beyond the *para*. Importantly, both the examples of the relationships between the Netaji Club (Ch. 4) and the All India Club (Ch. 5) with their respective pond owners demonstrated that clubs may be in the dominant relational position even with those who do not live in their *para*. This dominance relied in part on the non-para resident actors acknowledging the general authority and strength of clubs as a social institution.

Finally, while touched upon above, the relationship between clubs and the state is an important part of the networked nature of local environmental governance (Gupta 1995, Keil 2006, Lindell 2008). Clubs interact with the state in complex, temporal and often instable ways. However, their interaction with the state is both a strategy to obtain goods and service for the para public, but also an ennunciative practice (de Certeau 1984) which helps to coproduce the club as legitimate power holders.

7.2.2.3 The Party

As a direct environmental governance actor, the role of the party emerged in only a limited way within the cases presented within this thesis. The party is an actor in the manner in which the "party boys" were able to use their status in order to access the fish in Jhodha Pukur with relative autonomy (Ch. 5.2.8.4). However, as is asserted in Chapter Two 'the party' as a social structure, both under the CPI-M until 2011 and under the TMC now, is a significant actor within patterns of governance more broadly (Bhattacharyya 2009, 2010, Chatterjee 2009, Donner 2013, Ruud 2000). Thus, even though they did not appear much within the embedded case studies on environmental governance, their influence must be recognised.

7.2.2.4 Non-Institutional Actors

The group I have labelled as "non-institutional actors" is that group of actors who govern in the everyday in their individual capacity. Within this thesis two are particularly notable. The first is the licensee of Jhodha Pukur who attempts to assert his right over the pond through the hiring of guards and the imposition of fines (Ch. 5.2.8.4). The second are the residents' labelled 'refugees' who control part of the pondscape of the "unseen pond" (Ch. 5.2.8.2). These actors use the structures available to them in their attempts to control who accesses particular parts of the pondscape. Their practices must be recognised as part of the governance networks that shape the socio-nature of the profiled cities.

Examining the practices of non-institutional actors in particular (though not only them) also serves to highlight that in the same way that reducing power to repression is "inadequate and possibly dangerous" (Foucault 1980, 59), reducing governance to

domination is to ignore significant nuance and the complex way that power infuses everyday relations (Blundo and Le Meur 2009b). It also ignores agency, thus failing to recognise the way that actors subvert systems and take advantage of opportunities and spaces of ambiguity (de Certeau 1984). Paying close attention to the dynamics of everyday governance thus allows us to decentre "logics of domination, resistance and compliance" (Baptista 2013, 50).

7.2.3 Patterns and politics of environmental governance in the studied cities

The final research objective is focussed on patterns and the politics of them. This aim is largely concerned with illustrating what we can learn from the embedded case studies beyond empirical specificity and case specific findings. As discussed in Chapter 1.6 following an inductive approach to research and analysis brings to the fore three dynamics that cut across the empirical cases. These are: issues of power and politics within everyday governance; place making as a governance practice; and the construction of subject positions as governance practice. In discussing these dynamics a certain degree of re-reading of the individual cases is required, as each dynamic is not discussed explicitly or equally within the articles themselves.

7.2.3.1 Power and politics in everyday governance practices

Questions about power fundamentally underpin the research presented within this thesis and the analysis of the data. Of the three crosscutting themes identified above it is perhaps the most obviously addressed throughout the empirical cases, however I argue that re-addressing it here remains important. The empirical cases have been analysed with a broadly Foucauldian (1982) understanding of power as diffuse, relational and enacted. Understanding power in this way then allows for an analysis that goes beyond a dichotomised Marxian analysis to examine intersectionalities within everyday power relations (Loftus 2007). This approach has further highlighted the fragmented (Ribot and Peluso 2003, Sharp et al. 2000), and situated nature of power (Lawhon, Ernstson and Silver 2014). One can return to the case studies to demonstrate how these characteristics of power work within everyday governance practices.

Situated intersectionalities within power relations have been highlighted throughout the case studies. This is particularly seen in those examples of actors who have been able to mobilise alternate sources of power, namely access to social and political authority, in ways that (at least temporarily) offset a marginalised class or caste position. this dynamic is, for example, discernible in the cases of Kaju Pukur and Jhodha Pukur (Ch. 5.2.8) and that of the Mahtab Sangha (Ch. 4.2.6). In the governance relationships enacted by the Mahtab Sangha and by the National Club over Kaju Pukur the manner in which situated social power is concentrated within (social) institutions (Lindell 2008), in this case the *para* club, is highlighted. Similarly, access to and affiliation with the "party", which acts as a hybrid social/political institution within the Bengali context, provides the "party boys" with a situated form of power in their access relations with the licensee of Jhodha Pukur.However, as has been aptly demonstrated by the case of the Govinda Club's shifting relationship with the state (Ch. 4.2.6) power within governance relationships is temporal, wherein actors' positions and ability to access or mobilise sources of power are not structural and static but rather constructed and in flux.

The multiple intersectionalities that shape relationships of power and the multiplicity of actor's rationalities further complicate any simple reading of how power shapes governance practices. Actors make complex decisions about how, when, and to what end to exercise power within these relationships. For example, the owner of Kaju Pukur, who has legal rights and economic power, chose to not try to contest the policy of control established by the All India Club because he was "not political" on one hand and on the other wanted to avoid "trouble" (Ch. 5.2.8.3). Conversely, Mr Roy had power and chose to exercise it, often in highly political ways, in order to implement the SWM scheme. However, he highlighted that he could or was willing to exercise this power because he had no electoral-political ambition to keep it – or as he phrased it, he was unconcerned with "popularity". This contrasts with other elected representatives who were reluctant to exercise power in the same manner. Within that same case we can also see the complexity inherent in such everyday politics when actors (such as the SUDA officials) choose to exercise their power in ways that are markedly 'informal' (and

potentially illegitimate) in order to achieve a desirable, formal end (the implementation of a SWM project) (Ch. 6). These examples of everyday politics, conscious decisions about the exercise of power, aptly highlight that conceiving governance and power only as domination misses the complexity inherent in the everyday.

Yet, as Massey (2000) points out, we must engage with the micropolitics and pervasiveness of power without losing sight of real, lasting inequalities of power. Thus it is essential to recognise that the everyday politics of governance practices may serve to reinforce particular hierarchies of power and have had inequitable outcomes. For example the governance practices of clubs (Ch. 4 & 5) largely rest on the exclusion (both active and indirect) of non-*para* residents. In doing so they both secure benefits for those within their *para* but also enunciate their own power and authority. Similarly, within other examples the practices through which actors gain access to a resource is predicated on the denial of the legal rights of other owners to the same resource, for example in the case of Jhodha Pukur (Ch. 5.2.8.4) or the Netaji Club (Ch. 4.2.6.1). The result of these practices is the production of urban environments that are highly unequal.

As has been highlighted throughout this thesis and specifically re-addressed in this sub-section, everyday environmental governance occurs within complex relational webs of power (Lawhon, Ernstson and Silver 2014, Ribot and Peluso 2003). Examining these webs of power within and across the case studies serves to highlight the particular ways that power shapes everyday practices of environmental governance by both state and non-state actors and thus in turn the urban socio-natures in Bardhaman and Medinipur. However, beyond the empirical specificity I follow Lawhon et al (2014) in suggesting that such a situated analysis of power has theoretical implications as well. Incorporating post-structural understandings of power as relational, diffuse and enacted on the one hand, and being attuned to alternate, place-specific sources of power and identity on the other may serve to broaden engagement within urban political ecology with a diversity of urban experiences.

7.2.3.2 Place making as governance practice

If in order to engage critically with the complexity of everyday governance, one is attentive to the situated and intersectional nature of power relations (Lawhon, Ernstson and Silver, 2014) the political nature of space becomes quickly apparent (Donner and De Neve 2006). Across the empirical cases, place making emerges as both a practice of governance and the outcome of governance practices.

It is in the practices of clubs where place making and the politics of space are most clearly seen. Clubs co-produce the *para* both in its material, spatial form and as imaginary and social structure, the *para* as moral community (Ch. 4 & 5) (Appadurai 1995). Within their place making strategies clubs use normative registers (Olivier de Sardan 2014) that combine the sacred and profane (Gooptu 2001). For example, this is seen in the Netaji Club's renovation of the temple in order to control how the land was used (Ch. 4.2.6.1). Less overtly, the Govinda Club also relies on ideas of sacredness, cultivated through the use of the open land for *pujas,* creating a (temporary) sacred place. This is an act that in turn contributes to their reputation of doing good work, and thus being worthy beneficiaries of that land (Ch.4.2.6.3). The place making practices of clubs extend to creating places of conviviality but also of obligation (as in the case of Kaju Pukur – Ch. 5.2.8.3), and embodied gendered morality (the Mahtab Sangha's yard and ladies washroom/toilet structure Ch.4.2.6.3). Thus the place making practices of clubs have real, material outcomes in terms of access to and control of resources, but they also serve to shape social behaviours.

Practices of place making are also part of the other actors' environmental governance practices. This ranges from the literal making of space and then settled domestic place from the pondscape by the refugees (Ch. 5.2.8.2). To the manner in which the construction of hygienic and environmental subjects necessarily relied in part on transforming the "outside", namely the space of streets and the ward more broadly, into a place of meaning, one which has obligation attached to it (see, Ch. 6.2.8.4 of this thesis, or Kaviraj, 1997 and Chakrabarty, 1991 for the distinction between 'outside' and 'inside').

One should recognise place making as practice and continual process rather than discrete outcome (Appadurai 1995). For example, the creation of the *para* requires continual action by both the *para* club and residents in re-confirming this social structure. Similar, transforming the streets into place of meaning and obligation where one will not place their refuse (Ch.6) is not the result of a single declaration or action, but rather that of multiple actions by the ward committee, the waste collectors and the residents themselves. As highlighted by the respondents however, this place (and the obligations ascribed to it) is not permanent. For example, when waste collectors do not collect the segregated waste on time, priority is given to maintaining the cleanliness of the home. The meaning and obligation attached to the streets is not inviolable. This example further highlights how place making is the result of the complex intersections of multiple relational processes, in this case relationships between: state actors and local residents; the ward committee and bureaucrats on the one hand and the waste collectors on the other; and waste collectors and residents (amongst others).

As is well highlighted by Sharp et al (2000:25):

> Places are thereby constructed and experiences as both material ecological artefacts and intricate networks of social relations, being the focus of the imaginary, of beliefs, desires and discursive activity, filled with symbolic and representational means. They are also the products of institutionalised social and political-economic power.

Understanding place to be the result of practices (Massey 2000, Sharp et al 2000) and more specifically focussing on how everyday environmental governance practices are explicated within (re)production of place has consequences for how one understands the (re)production of urban environments. I suggest that at a local level place making is part of the symbolic and material production of particular socio-natures, dependent on both discursive and material practices. If we accept Desai et al's (2015) understanding of infrastructure as both the material and social configurations that constitute the "systems that enable urban life", then one can understand place making as practices that constitute and alter urban infrastructure. Thus, place making can be understand as a constitutive component of the (re)production of urban socio-natures.

7.2.3.3 Subject formation and everyday governance

The final major dynamic that cuts across the embedded empirical cases is that of the formation of subject positions (see also Gabriel 2014). Chapter Six explored how the discursive and relational practices of state actors constructed the environmental (Agrawal 2005) and hygienic (Foucault 1980) subjects who would comply with the segregation-at-source solid waste management scheme. In that case a combination of different governmentalities (moral, neoliberal and disciplinary) acted to shape behaviour around solid waste. In Chapters Four and Five the role of subject formation as a governance technique by clubs is also clearly present. Clubs as institutional actors use a number of governance practices to establish particular policies[54] that shape access to and use of resources. Through these practices local households are inscribed as participants within a particular system or regime of governance. When the *para* public and/or actors outside of the *para* conform to these policies, for example by agreeing to rent a pond below market value in order to remain "non-political" and avoid "trouble" (Ch. 5.2.8.3), non-club actors are consuming and reconfirming the policies of the clubs over these resources. This act of co-production of policy and institutions (re)produce one of the multiple, complex and potentially contradictory subject positions (Huxley 2008) of the *para* public.

Suggesting that everyday environmental governance practices contribute to subject formation has theoretical implications. The first being the inter-connection between the three dynamics highlighted here: power, place making and subject formation. The second implication is related to the potential dissonance between an actor-oriented understanding of the everyday and the concept of the 'subject' itself.

In theorising the intersection of power, place as practice (place making), and the construction of subjects as dynamics of everyday governance I turn retrospectively to Sharp et al (2000). They build upon a Foucauldian perspective of power to argue that is it is within particular places and times where relationships of power become tangible and create particular subjects, identities and knowledges. While the authors do not clearly

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[54] Here I return to the broad definition of policy offered within that chapter to mean the range of both formalized and non-formalised, not necessarily stable, regulations that shape practices (Blundo and Le Meur 2009b).

distinguish between subjects and identities or the inter-connection between them, the concepts are, to my understanding, related. Following Weedon (2004, 19) I understand identity to be "a limited and temporary fixing for the individual of a particular mode of subjectivity as apparently what one is." Thus, if the construction of subject positions is a practice of power (Wan 2015) than the modes of subjectivity and identity that emerge are equally reflective of power relations (Weedon 2004). One can recognise subject formation not as a negative effect of power but rather as a "productive dimension of the practices that produce power [and] knowledge" (Gabriel 2014, 42). If as I have argued above place making is a continually reproduced, and renegotiated relational practice of power (Massey 2000, Sharp et al 2000), as is governance (Berenschot 2010, Blundo and Le Meur 2009b, Hust 2005, Koiman 2003, Olivier de Sardan 2008), then the construction of subjects can be seen to emerge as a part of these practices. From this perspective then, engaging with the intersections among power, place, and subject within regimes of governance can be part of a broader attempt to broaden the scope of both governance and urban political ecology studies to theorise with more urban experiences in mind (Lawhon, Ernstson & Silver 2014).

There is however a potential theoretical dissonance between an actor-oriented approach and the idea of (Foucauldian) subject formation. Following Bevir (1999) I suggest that this arises only when one fails to distinguish between an autonomous subject and an agent. Autonomous actors in principle could experience, 'know' and act outside of social context, un-influenced by norms and regimes of power or knowledge. Conversely, agents exist only within a social context, and regime of power/knowledge. While this regime and context are understood to influence agents, the agent is still able to act in creative and/or unpredictable ways. Bevir (1999) thus suggests, I believe convincingly, that Foucault's critique is of autonomy (or what is referred to as the founding subject) and not of agency.[55] Following from this, and as I have suggested above, if we understand subject positions to emerge from practices, to be created, then it is a logical extension to argue that through practices subject positions can be re-created

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[55] Bevir (1999) acknowledges that there is internal contradiction within Foucaults body of work. While it is suggested in Zimmer (2012, citing Lemke 1997) that Foucault became more sympathetic to agency in his later writings.

and altered. That is to acknowledge that actors can act in ways that alter the social system in which they are situated and in turn alter their subject position. The need to acknowledge agency is similarly clear within de Certeau's (1984) discussions of the ways that people escape the system without leaving it.

I suggest that examining these three cross-cutting dynamics of everyday environmental governance points to the broader implications of said practices. Exploring the way that practices reflect power, create places and contribute to subject formation serves to broaden analysis beyond empirical specificity. It also points to potential points of comparison with other cases. Arguably engaging with the dynamics can serve to make broaden governance studies and research that explores the reproduction of urban socio-natures.

7.3 Reflecting on the limitations of this study

7.3.1 Methodological reflections and positioning of the researcher

Prior to beginning this project I had spent a significant amount of time in India. In addition to a stay as a researcher in Chandigarh in 2011, I had also travelled extensively in 2006 and 2010, and spent three months as a volunteer in Mumbai in 2006. These experiences had equipped me with a fair amount of cultural knowledge and experience doing qualitative research in an Indian context. Thus the challenges I experienced in the field were largely not unexpected.

My identity as a 30 something, single, middle-class, western, Caucasian female was both at times an advantage and a disadvantage. I am very aware that these characteristics gave me access to people and certain social liberties not afforded to fellow female Indian researchers. For example, I was able to secure an interview with a senior State official on the basis of a single email identifying myself as a researcher from Switzerland, whereas an Indian colleague had emailed the same office numerous times with no success. In contrast to my Indian colleagues and my research assistants though, I was unencumbered by worries about what my parents or brother would think of my research activities. However, particular spaces and experiences remained as closed to me

as a foreign woman as they are to my (female) research assistants or colleagues. For example, regardless of if I was accompanied or not by a research assistant, I was unable to engage in *adda*[56] at the local tea stall. Similarly, while I was interested in the inner workings of clubs, participant observation with club members was not possible. In small town West Bengal both tea stalls and club buildings are exclusively male spaces and not even my foreignness would give me access to them—access that my western male colleagues may have been able to get. Finally, my positionality affected my social life and integration into the community during my first period of fieldwork. Within a more conservative small city setting the majority of my Indian contemporaries are married, have children and/or significant domestic responsibilities. Moreover, in that context it would have been inappropriate to socialise on my own with members of the opposite gender. As such, my ability to integrate into the community was limited to a greater degree than it might have been in a more cosmopolitan city.

In addition to my positionality, my lack of language skills was an impediment to both participating more fully in interviews, but also to increased ethnographic depth. While I attempted to learn the basics of Bengali through a self-study book prior to entering the field, my skills improved little once there. I was unfortunately unable to find an experienced Bengali teacher in Bardhaman and my arrangement with a tutor did not work out. In hindsight I should have spent 4 – 6 weeks doing intensive Bengali in Kolkata or elsewhere prior to entering the field. Even such a short period may have helped me to develop a broader base upon which I could build. As I wish to continue doing research in India I hope to find the opportunity in the near future to improve my language skills.

As previously stated, I conducted fieldwork with a fairly open approach to methods and a willingness to experiment. Thus even when things did not work well I accepted it as a lesson learned and altered my practice the next time. While I am largely satisfied with how the research activities went, I am dis-satisfied with the data collection that occurred during the survey. A number of small mistakes were made by many of the enumerators, largely in terms of incomplete answers. This led to the survey data being of

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[56] The Bengali tradition of leisurely but often political or intellectual chat.

poorer quality than is ideal. However, I remain confident in the validity of the data, even if it is less rich than it might have been. While the enumerators where trained and provided with a detailed guide to the survey, I should have conducted the first few surveys with each of them and supervised them more directly in the field. While this remains a disappointment it is a learning experience for future research, as well as further evidence of the advantages of pursuing multiple lines of inquiry and employing multiple methods.

7.3.2 Contextual challenges

Reflexivity is a key practice within qualitative research and one that should occur at many stages. While Chapter Two devoted space to methodological reflection and to my positionality as a researcher, it is important within this conclusion to reflect on two limitations of this study. The first relates to the extent to which I was able to engage with actual practices of state actors. Overall, non-state governance actors received more attention during data collection and in the research presented within this thesis. On the one hand, engaging with these actors is important and offered a chance for a nuanced analysis of the (re)production of particular socio-natural conditions. Moreover, it allowed me the space to take the role of clubs seriously, thereby making an important contribution to the literature. On the other hand, increased engagement with state actors, particularly elected officials, would have contributed to a more holistic narrative of governance processes and the role of political parties (see for example Berenschot 2010). In order to achieve the level of engagement needed to address this limitation significantly more relationship building with these actors would have been required. Improved language skills on my part would have facilitated this as well. However, the party sphere is male dominated (even when the councillor is a woman) and thus is questionable to what degree my gender would have remained an impediment in these attempts.

7.3.3 Completing a PhD via articles and within a project

A second limitation of this study relates to the study design and the challenges of being associated with a project. The research needed for the project's objective of comparison was much larger than what one might have established for a single PhD project. The objectives of comparison of both inter and intra-state dynamics led to a research design of multiple embedded case studies explored in both cities. However, the article structure of this thesis limited the ability to engage comparatively. A traditional PhD monograph which might have achieved this was not a realistic option given the desire and need to disseminate project findings more widely. If this research had been conducted only as PhD research the multiple embedded case study design would have been replicated but the topic would have been much narrower. That is to say, that I would have engaged only with clubs, or with SWM or with the pondscape and water. Doing so would have resulted in a very different study with its own strengths and weaknesses. While being part of a project was a challenge, it was also a great advantage. The research idea was formulated and a general conceptual approach decided upon before I began my thesis. Equally, and perhaps more importantly, engaging as a team pushed my thinking and challenged me in ways that might not have occurred otherwise.

Finally, the differences between a PhD by article and one developed via traditional monograph should be acknowledged. This research was exploratory in nature and followed an inductive approach; thus, while a conceptual framework guided field research the goal was not to demonstrate or validate a particular theory. Within that context, writing a PhD by article allowed for a great deal of theoretical and conceptual freedom. I was able to utilise what I believed to be the most appropriate theoretical and conceptual lens for the data at hand. However, the result is less internal conceptual coherence than one would expect in a monograph, though I hope this final chapter has addressed this. Similarly, the evolution of thought is more clearly laid out within the articles. In particular, while Chapter Three was conceptualised prior to fieldwork it was written last. Similarly, the work of de Certeau (1984) was discovered late in the writing process, but might have been usefully mobilised in the first two articles. Further, useful literature that was discovered after articles were submitted could not be incorporated

prior to submission of this thesis as it might have been within a monograph. Yet, equally the writing of articles intellectually forced me to streamline arguments, allowed for a wider dissemination of research findings, and pragmatically serves as useful preparation for my academic career.

7.3.4 A comment on academic knowledge and accessibility

As a scholar situated in the Global North, working on the Global South it is important to recognise that the politics of knowledge production, institutional biases and (to an unknown extent) language barriers shape the findings presented here. At the most basic level we need to recognise that claims about limited literature on topic 'x' or the limited attention to 'y' should more honestly state that there is, for example "limited internationally accessible literature written in English". Paasi (2005) (and others) have highlighted that there is an "intellectual and theoretical exclusiveness of certain Anglo-American journals" and scholars based outside of that system are largely marginalised within the research disseminated there. Similarly, Kim et al (2012) has highlighted the marginalisation of non-Anglo-American political ecologists (see also Zimmer (2010) on German political ecology). Particularly relevant to this thesis is the limited amount of scholarship by academics based in India, particularly those based at small universities, which is published in internationally accessible journals. Similarly, there is a wealth of knowledge contained in PhD and Mphil theses that are not published online in full or at all. The research presented herein is unfortunately limited by this reality.

7.4 Future research agenda

The work within this thesis has demonstrated the role of clubs as environmental governance actors. However, there remains significant scope to further engage with clubs as governance actors more broadly. One line of inquiry could continue to focus on the practices of clubs themselves. To this end engaging further with the production of clubs as a social institution may be fruitful. As well further work on the territorial practices of clubs, including the use of community subscriptions to fund *pujas* as a technique of control and subject making is needed. A second line of inquiry would examine interactions between clubs, the state and political parties. This could include

further work on clubs within governance networks. While Roy's (2002) portrayal of clubs as subservient to the party and without real power was not supported by my results. Further work is needed to examine how the State government and parties uses clubs. Examining how the TMC appears to be using clubs as part of populist strategy to build much needed grassroots support (as suggested by one respondent) is a potentially rich avenue of inquiry.

Further comparative research on small cities is also needed. The standard journal article format is not conducive to detailed, descriptively rich comparative work. However, this work may be particularly illuminating. To this end the Small Cities project has discussed a monograph as a possible way to engage with the data collected in a comparative manner. In addition to that potential project, I would argue that there is scope to engage in a comparative manner not just across small cities, but also with larger cities and with cities in other regions (both North and South). McFarlane and Robinson (2012) suggest potential fruitfulness of comparison across certain differences by focussing on particular patterns or issues. The utility of this has been demonstrated by Ranganathan and Balazs (2015) who examine issues of water access between cities in India and the United States. Potential patterns or terms of comparison emerging from this research project include the politics of urban water bodies, or the practices of policy implementation.

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Appendix 1: List of interviews

Interview code	Interviewee	Main Topics	
KOWB.20130211.001	Professor - Urban Management Center, Administrative Training Institute	planning, water, infrastructure	
KOWB.20130212.002	Academic- CSSS	decentralization, privatisation, water, politics,	
KOWB.20130212.003	Academic - IIM Kolkata	politics, municipal funding, decentralization	
MIWB.20130213.004	Chairman Midnapore ULB	politics, SWM, ULB, planning	
BAWB.20130214.005	Academic Professor Geography - Burdwan University	municipal structure, politics, privatization	
BAWB.20130214.006	Urban Planner	planning, infrastructure, politics, funding	
BAWB.20130214.007	Chairman, ULB of Burdwan	politics, municipal structure, water, sanitation	
BAWB.20130805.008	Urban Planner and Municipal Secretary	politics, SWM, sanitation, municipal structure	
BAWB.20130807.009	Merchant (Bangle shop), Boranilpur	ponds, fishing, ULB	
BAWB.20130807.010	Merchant - bike shop, Boranilpur	ponds, fishing, ULB	
BAWB.20130807.011	fishing boys	fishing	
BAWB.20130807.012	Assistant Engineer Burdwan Development Authority	BDA, water, sanitation, infrastructure	
BAWB.20130807.013	Town Planner, Burban Development Authority	planning, mapping	
BAWM.20130807.014	Municipal engineer Burdwan ULB	ULB, ponds, sanitation	
BAWB.20130812.015	Municipal Secretary	ULB, ponds, parks	
BAWB.20130812.016	Town Project Officer	self-help, women's empowerment, EWS	
BAWB.20130813.017	middle class residents proximate to the dump (3 households)	SWM (dump), politics	
BAWB.20130813.018	middle class residents proximate to the dump	SWM (dump), city growth	
BAWB.20130814.019	Merchants (2), shoe shop owners - Kurzon Gate Market	SWM, ULB, politics	
BAWB.20130814.020	man in front of shirt shop	SWM, politics	
BAWB.20130814.021	Merchant - lottery shop owner near "5 year dum" - Kurzon Gate area	SWM, politics	
BAWB.20130814.022	4-5 men outside of tailoring shop -Kurzon Gate	SWM, ULB, politics	
BAWB.20130814.023	Municipal Accountant	ULB, budget, ULB	
BAWB.20130816.024	Merchant near Kurzon Gate market	SWM, roads	
BAWB.20130816.025	Merchant	SWM, roads, drainage, politics, ULB, bus stand	
BAWB.20130816.026	Merchants (3)	SWM, Roads, politics, drainage	
BAWB.20130819.027	Asst. Director of Fisheries	ponds, fishing	
BAWB.20130820.028	Health Officer	health department	
BAWB.20130820.029	Sanitary Inspector	SWM, drains	
BAWB.20130820.030	Superintendent of Water Works	water	
DUWB.20130827.031	Junior Scientiest and In-Charge, Durgapur Regional Lab, West Bengal Pollution Control Board	WBPCB, water, air, SWM	

BAWB.2013082 9.032	Merchant and Pond Owner - Chotanilpur	pond, drainage, fishing	
BAWB.2013083 0.033	Masons (3) near dump	dump	
BAWB.2013083 0.034	lower middle class/poor residents proximate to dump (3 households)	dump	
BAWB.2013083 0.035	Waste Picker	dump	
BAWB.2013083 0.036	TMC work, resident proximate to dump	dump	
BAWB.2013083 0.037	resident proximate to dump	dump	
BAWB.2013083 0.038	resident proximate to dump	dump	
BAWB.2013090 3.039	Merchant and Pond Owner - Chotanilpur	pond, fishing	
BAWB.2013090 3.040	local residents (4)	pond, fishing	
BAWB.2013090 3.041	Merchant (snack shop)	pond, fishing	
BAWB.2013090 3.042	youth, local resident, son of man who fishes pond	ponds, fishing	
BAWB.2013090 3.043	"Netaji Club / Tagore Club" member	clubs	
BAWB.2013090 3.044	Merchant - near Pir Pukur	pond, fishing, ULB, politics	
BAWB.2013090 4.045	Bike Repairer - near "Kaju Pukur"	pond	
BAWB.2013090 4.046	group of men, local residents near "Kaju Pukur"	pond, local club	
BAWB.2013090 4.047	Merchant (mechanic) Niazaj Pukur (near "Kaju Pukur")	pond	
BAWB.2013090 4.048	Assistant District Officer & Personal Assistant to Assistant District Officer, Forestry Department	forestry department	
BAWB.2013090 5.049	resident proximate to dump	dump, protest	
BAWB.2013090 5.050	Waste Picker and 2 local women, residents proximate to the dump	dump, protest	
BAWB.2013090 5.051	Fisherman, local resident, "Netaji Club / Tagore Club" member	fishing, clubs	
BAWB.2013092 5.052	women washing at "Kaju Pukur"	pond	
BAWB.2013092 5.053	Vice-Pradhan GP Rayan	dump, ULB	
BAWB.2013092 5.054	Petty Vendor - Khatal leaf seller	livelihoods	
BAWB.2013092 6.055	Waste Vendor	livelihoods, waste	
BAWB.2013092 6.056	Waste Vendor	livelihoods, waste	
BAWB.2013092 6.057	Waste Vendor	livelihoods, waste	
BAWB.2013092 6.058	Waste Trader	livelihoods, waste	
BAWB.2013092 6.059	Assistant District Magistrate (General)	role of DM's office	
BAWB.2013092 7.060	Waste Worker (recycling)	livelihoods, waste	
BAWB.2013092 7.061	Waste Godown Owner	livelihoods, waste	
BAWB.2013092 7.062	group of residents proximate to dump	waste, dump	
BAWB.2013093 0.063	young men fishing angling in "Jhodha Pukur"	ponds, fishing	
BAWB.2013093 0.064	group at the end of "Jhodha Pukur"	ponds, fishing	
BAWB.2013093 0.065	Dhobiwalla - "Jhodha Pukur"	livelihoods, ponds	

BAWB.2013100 1.066	group of residents, para proximate to "Jhodha Pukur"	livelihoods, fishing, slums	
BAWB.2013100 1.067	Rayan 1 Gram Panchayat member	dump	
BAWB.2013100 1.068	ex Rayan 1 Gram Panchayat member	dump	
BAWB.2013100 3.069	Caretaker - Krishna Sayar Eco-Garden	parks	
BAWB.2013100 3.070	'honourary Secretary' Krishna Sayar Trust	parks	
BAWB.2013100 6.071	President Rotary Club of Burdwan South	civil society, parks, SWM, ULB	
BAWB.2013100 7.072	Station Manager, Burdwan Junction	railway station pukur	
BAWB.2013100 7.073	Assistant District Officer & Personal Assistant to Assistant District Officer, Forestry Department	Ramna Bagan Mini Zoo	
BAWB.2013100 8.074	Petty Vendor - neem stick seller	NR livelihoods	
BAWB.2013100 8.075	Secretary to the Assistant Engineer Railways - Burdwan Junction	railways pond leases	
BAWB.2013100 8.076	leasor of "Jhodha Pukur"	ponds, fishing	
BAWB.2013100 8.077	Vice Chancellor Burdwan University	krishna sayar, ponds	
BAWB.2013100 9.078	President"All India Club"	clubs	
BAWB.2013100 9.079	R*** Sagar crowd	sagar use	
BAWB.2013102 1.080	Merchant (small food shop) beside "Jhodha Pukur"	railway pond lease	
BAWB.2013102 1.081	Merchant (milk) at P** Pukur	pir pukur details	
BAWB.2013102 3.082	young members of G***** Sangha	clubs	
BAWB.2013102 3.083	"All India Club" Members - president and ladies	clubs	
BAWB.2013102 4.084	small scale Sand Miner	sand mining	
BAWB.2013102 4.085	Lanourer - sand mining	sand mining	
BAWB.2013110 6.086	Econ prof and former Dean of Arts, University of Burdwan	krishna sayar, ponds	
BAWB.2013110 7.087	residents of Haradhan Pali	slums	
BAWB.2013110 8.088	professor in the Environmental Science dept	ponds, SWM management, land	
BAWB.2013110 8.089	Town Planner and Municipal Secretary	PPP, DDP	
BAWB.2013111 2.090	President of the Rice Millers Association	rice mills, enviro regulation	
BAWB.2013111 2.091	President of College of Art and Design, Teacher in Charge and students	art college, krishna sayar	
BAWB.2013111 3.092	former MLA, insitigator of Krishna Sayar	krishna sayar, ponds, BDA,	
BAWB.2013111 3.093	"All India Club" area women	clubs, water	
BAWB.2013111 3.094	group at "Kaju Pukur"	clubs, water	
BAWB.2013111 4.095	Haradhan Pali residents	environment, rice mills, slums, clubs	
BAWB.2013111 4.096	group of female resident in Haradhan Pali	environment, rice mills, slums, clubs	
BAWB.2013111 4.097	group of people who had been shifted from Haradhan Pali main lane, due to bypass road widening	displacement	
MIWB.2013111 8.098	Municipal Secretary & various officials	general, hawkers, bus stand	
MIWB.2013111 9.099	Merchant (utensil shop), Boro Bazar, Medinipur	environment, sanitation	

MIWB.20131120.100	Service Engineer, Medinipur ULB	housing, water, sanitation, SWM	
MIWB.20131120.101	Municipal Secretary (Stenographer)	revenue, slums, politics, water	
MIWB.20131120.102	Land Acquisition Officer, Midnapore Kharagpur Development Authority (MKDA)	MKDA, water, SWM	
MIWB.20131121.103	Sanitary Inspector	SWM, PPP, environmental health	
BAWB.20131125.104	general secretary of a TMC suppourted students union	Krishna Sayar	
BAWB.20131126.105	leasor of "Jhodha Pukur"	ponds, politics	
BAWB.20131126.106	Chairman	vision, ULB/ULB	
BAWB.20131202.107	President and Vice President of INTTUC (municipal union)	municipal union	
BAWB.20131202.108	former chairman Burdwan ULB	ULB	
BAWB.20131204.109	"Netaji Club / Tagore Club" president	clubs, fishing	
BAWB.20131205.110	3 sweepers - Dangar Para	SWM, ULB	
BAWB.20131205.111	people at "Mahtab Sangha"	SWM, ULB, sanitation, ponds, slums, clubs	
BAWB.20131205.112	Sweeper - Haradhan Pali	SWM, ULB, rice mills	
BAWB.20131205.113	Health Workers (3) at Haradhan Pali	health centre, ULB	
BAWB.20131206.114	K**** Sangha Secretary	clubs, ponds	
BAWB.20131206.115	Secretary B****** Sangha	clubs	
BAWB.20131206.116	Club committee members(4) A*** Sangha	clubs	
BAWB.20131209.117	Clerk - Southern Railways	ponds, leasing	
BAWB.20131211.118	District Magistrate District of Burdwan	ULB	
BAWB.20131212.119	Secretary - S***** Sangha	clubs	
BAWB.20131213.120	members B****** Club	clubs	
BAWB.20131222.121	Owner of temple renovated by "Netaji Club / Tagore Club"	ponds, clubs	
BAWB.20131222.122	H**** Pali club secretary	clubs, slum displacement	
BAWB.20131222.123	owner "Kaju Pukur"	clubs, ponds	
BAWB.20131218.124	District Forestry Officer	forestry department	
BAWB.20131219.125	Tea Shop Owner - Dangar Para	legal status of slum	
BAWB.20131219.126	Road Cooley Ward 6	legal status of slum	
BAWB.20131220.127	Member Chairman In Council (MCIC)- SWM & Disposal	SWM	
BAWB.20140122.128	TMC party worker	politics	
BAWB.20140122.129	Chairman	water project, plastics	
BAWB.20140123.130	Burdwan Welfare Society member	NGO activity, politics	
BAWB.20140127.131	Chairman	observations of politicians	
BAWB.20140129.132	Observation of Councilor	observations of politicians	
BAWB.20140213.133	Rag Picker	SWM (dump), municiaplity	

BAWB.20140213.134	MCIC SWM	SWM, labour, ULB, ponds	
BAWB.20140213.135	TMC party "team leader" - GT road	party offices, politics	
MIWB.20140217.136	Municipal Secretary (Stenographer)	ULB, labour, ponds	
MIWB.20140217.137	Chairman Midnapore ULB	SWM	
MIWB.20140217.138	Secretary - Conservancy Union	SWM, politics	
MIWB.20140217.139	Councillor, Midnapore ward 22	ULB, drains, infrastructure	
MIWB.20140218.140	secretary B***** Club	clubs, development societies, ULB	
MIWB.20140218.141	secretary, B*.N*. Development Society	development society, ULB	
MIWB.20140219.142	leasor of S**** Pukur	ponds,ULB, SWM	
MIWB.20140219.143	Harison Nagar residents	water, ponds	
MIWB.20140219.144	members of the B**** Club	clubs	
MIWB.20140219.145	Mahila Samity leader	ULB, politics, bustees	
MIWB.20140220.146	Midnapore Ward 2 middle class household	SWM	
MIWB.20140220.147	Midnapore Ward 2 - middle class road	SWM	
MIWB.20140220.148	Midnapore Ward 2 - bustee area	SWM	
MIWB.20140220.149	members G***** Club	clubs, ULB	
BAWB.20140214.150	Prasenjit **photo project**		
BAWB.20140126.151	Chandni **photo project**		
BAWB.20140126.152	Babita **photo project**		
BAWB.20140127.153	Sujon **photo project**		
BAWB.20140127.154	Alludin **photo project**		
MIWB.20141013.155	Chairman Midnapore ULB	SWM, decentralisation, ULB	
MIWB.20141013.156	Executive Officer, Midnapore ULB	ULB	
MIWB.20141013.157	Assistant District Magistrate (General) - Paschim Medinipur	ULB, State, governance networks	
MIWB.20141014.158	S**** Club member	club, para, governance networks	
MIWB.20141014.159	Ward 2 committee members - "Mr Roy"	SWM, politics	recorded
MIWB.20141015.160	Municipal Secretary (Stenographer)	ULB,	
MIWB.20141015.161	Municipal Engineer	Governace networks, ponds	
MIWB.20141015.162	MCIC water, councillor	Governance networks	
MIWB.20141015.163	Sanitary Inspector	SWM scheme, politics	
MIWB.20141016.164	Councillor	Governance networks, politics, clubs	
MIWB.20141016.165	Councillor's husband (defacto councillor)	governance networks, water, clubs	
MIWB.20141016.166	Urban Planner	planning	
KOWB.20141020.167	official - Subaj Sangha (NGO)	clubs and NGOs	recorded

BAWB.2014102 1.168	Town Planner	SWM, PPP, transport	
KOWB.2014102 2.169	Secretary, MNERGA		not typed
KOWB.2014102 2.170	officer SUDA Change Management Unit	role of the state	recorded
KOWB.2014102 4.171	head - PUBLIC (NGO)	environmental politics	recorded/not typed
BAWB.2014102 7.172	Chairman	governance networks (attempt), water, politics	
BAWB.2014102 8.173	Secretary - N**** Sangha	clubs, governance ntworks, politics	
BAWB.2014102 8.174	Councillor's husband (defacto councillor)	clubs, politics, governance networks	
BAWB.2014102 9.175	members R***** Sangha	clubs, politics, (governance networks)	
BAWB.2014102 9.176	Councillor and husband	clubs, governance networks, politics	
BAWB.2014103 0.177	members L **** Sangha	clubs, (governance networks)	
BAWB.2014103 0.178	secretary and members S**** Sangha	clubs	
BAWB.2014111 0.179	Councillor (male - reserve seat) and Ward Committee Member (defacto councillor)	governance networks, clubs, water, rice mills	
BAWB.2014111 1.180	MCIC SWM	SWM, PPP	
BAWB.2014111 2.181	women in Town Hall grounds, Burdwan	SWM, clubs, politics, environment	
BAWB.2014111 2.182	secretary and members - SK **** Sangha	clubs, politics, gov. networks, slums	
BAWB.2014111 3.183	Abhijit - **photo project**	photo project	
BAWB.2014111 3.184	club members - J**** Club	clubs, politics,	
MIWB.2014111 8.185	Finance Standing Committee President	SWM, finance	
MIWB.2014111 8.186	secretary, N**** Sangha	clubs, governance networks	
MIWB.2014111 8.187	President and Secretary J**** Samity	clubs, governance networks, social environment	
MIWB.2014111 9.188	Rag Pickers at dump	conditions of landfill	
KOWB.2014112 6.189	Principal Secretary, Urban Development Department	development authorities, political will	
KOWB.2014112 6.190	Head Planner, Dept of Urban Dev, Gov. of WB	planning	
KOWB.2014120 3.191	Deputy Secretary, Department of Municipal Affairs	policy, finance, municipal	
MIWB.2015020 2.192	Chairman	SWM, PPP, flow of ideas, political relations	
MIWB.2015020 2.193	Urban Planner	CDP, ULB-Dev Authority Relations	
KOWB.2015020 3.194	Secretary, MNERGA	Politics, Clubs	
KOWB.2015020 4.195	officer SUDA Change Management Unit	KUSP, CMU	
KOWB.2015020 4.196	member - 4th State Finance Commission	Municipal Finance	
KOWB.2015020 4.197	Dy Secr Director Institute of Local Gov and Urban Studies	training, SWM	
KOWB.2015020 4.198	Director SUDA	Schemes	
KOWB.2015020 5.199	Principal Secretary, Urban Development Department	policy	

KOWB.2015020 6.200	Deputy Secretary, Department of Municipal Affairs	policy, state schemes, SWM, data reliability	
KOWB.2015020 6.201	Chief Engineer, Directorate of Municipal Engineering	SWM	
KOWB.2015020 6.202	Municipal Development Trust Fund	Municipal Finance	

Appendix 2: Household Survey

1

Urban Governance Networks QUESTIONNAIRE

PREPARATORY PART

1. Questionnaire No.:   **2. Area:**

	1st visit	2nd visit	3rd visit	Checked by	Data entry by
Investigator					
Date					
Time				-	-
Duration				-	-
Observations					

A : absent   R : refused to answer   SP : survey postponed
SNC : survey not completed   SC : survey completed

3. Name of Head of Household: _____

a.   (1) Male   (2) Female

b.   (1) migrant   (2) native

4. Caste of Head of Household

  (1) General   (2) OBC   (3) SC/ST   (4) Other

5. Name of Respondent(s) (if different) and relationship to head of household:

6. House type: (1) Pucca basti   (2) Kutcha basti   (3) basti – semi pucca

                     (4) Pucca 1 story bungalow

                     (5) Pucca multi-storied bungalow

                     (6) Pucca flat in apartment block with guard

                     (7) Pucca flat in apartment block without guard

7. Area/street type   (1) formal   (2) informal

8. Education Level of Most Educated   (1) 0   (3) 4-6
    Adult (18+) in Household: (2) 1-3, & neoliterates   (4) 7-9
                                        (5) 10-12   (6) graduate or more

2

9. **What are the Primary Income Source(s):**
  (1) Unskilled labour on daily wage

  (2) Unskilled labour on contract

  (3) Skilled labour on daily wage

  (4) Skilled labour on contract

  (5) Skilled labour (self-employed)/ craftsman with own workshop

  (6) Urban agriculture/dairy/cattle rearing (own or leased land/own cattle)

  (7) Peon or Clerical post (private or government)

  (8) Petty vendor/ trade (own family business)

  (9) Organised trade/business (own medium or large scale business with non-family employees)

  (10) Specialised/Managerial employment (private)

  (11) Specialised/Cadre employment (government)

  (12) Other: _____

Specify occupation:_____

PART ONE
Let's start with some open questions.

10. How do you judge the condition of your local environment?
  (0) prompted   (1) unprompted

11. What are the good or positive aspects about your neighbourhood's environment?
  (0) prompted   (1) unprompted

12. What are the bad or the negative aspects about your neighbourhood's environment?
  (0) prompted   (1) unprompted

13. In your opinion is the environment of your neighbourhood better or worse than it was in the past? (10 years ago)

  (1) Better
  (2) Worse
  (3) About the same

14. Thinking about the rest of the city, in your opinion is the environment in your neighbourhood better, worse or about the same as the rest of the city?

  (1) Better
  (2) Worse
  (3) About the same

15. What do you think should be done to improve the environment in this neighbourhood?
  (0) prompted   (1) unprompted

16. Can you order the following environmental issues in order to how important they are to you? It is ok to place some on the same level if they are equally important.
note to surveyors – record rank scores once people have decided the appropriate order. If they place the cards on the same level they get the same score.

Feature	Rank scores
General cleanliness	
Beauty / aesthetics	
Environmental conducive to health	
Clean drinking water	
Water scarcity	
Pollution of water bodies – clean rivers / lakes / ponds	
Clean air (air pollution)	
Solid waste management (garbage)	
Green cover (number of trees etc)	
Noise pollution	

PART TWO
Let's start with discussing what environmental services you receive from the municipality
Note to surveyors – record any additional details provided
*98 "no answer" *99 "don't know"*

Do you receive the following environmental services from the municipality?

17. Water
  (1) Yes – in house
  (2) Yes – from a community tap
  (3) Other: _____ (specify)
  (0) no
  (98)   (99)

18. Garbage removal
  (1) Yes – door to door removal by a municipal worker
  (2) Yes – access to a community dustbin which is cleared by the municipality
  (0) no - waste is thrown somewhere else, the municipality does not clear it
  (3) Other: _____ (specify)
  (98)   (99)

19. Drains present in community
  (1) Yes – open drains are present
  (2) Yes – covered drains are present
  (0) no – drains are not present
  (98)   (99)

20. Streets and Drains swept
  (1) Yes – a municipal sweeper cleans the roads and clears the drains
  (2) No – the roads and drains are cleared; however this is done by a private person
  (0) no - no-one comes to clear the streets and drains
  (98)   (99)

Let's discuss some of the environmental amenities you might have access to:
Note to surveyors: In the case of questions with multiple options, tick all which are applicable

21a. Is there a park or green space in your neighbourhood or within easy walking distance to which you have access?
  (1) Yes – park/green space is present

        b. Do you or your children visit the local parks or green spaces anywhere in the city?
        (1) Yes
                c. If yes, what purpose do you visit it for?
                (1) relax
                (2) play on playground
                (3) game/sports
                (4) walking
                (5) meet friends
                (6) other: (specify)_____
        (0) no
                d.If no, why not?

        e. Do you or your children go to a park or green space in a different part of the city?

Conducted by the University of Lausanne, Switzerland as part of the "Small cities, Urban Environments and Governance in India" project. Contact: natasha.cornea@unil.ch

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(specify which one)_____
   (1) yes
        f. If yes, what purpose do you visit it for?
         (1) relax
         (2) play on playground
         (3) game/sports
         (4) walking
         (5) meet friends
         (6) other: (specify)_____

   (0) no

22. a. Is there a pond/river/stream within easy walking distance of your house to which you have access?
  (1) Yes –pond/ river/stream is present
        b. Do you use the pond/river/stream for any purpose?
         (1) Yes

        c. If yes, for what purpose (check all that apply)
         (1) religious purposes
         (2) bathing
         (3) washing own clothes
         (4) washing clothes on hire
         (5) washing utensils
         (6) washing car
         (7) fishing
         (8) recreation
         (9) other (specify):_____

        (0) no
        d. If no, why not?

  (0) no – pond/ river space are not present

23. a. Is there a fully grown tree within easy walking distance of your house to which you have access?
  (1) Yes – tree is present
        b. Do you use/appreciate the tree for any purpose?
         (1) Yes

        c. If yes, for what purpose (check all that apply)
         (1) religious purposes
         (2) shade
         (3) enjoying the beauty
         (4) use of wood for own purpose
         (5) use of leaves for own purpose
         (6) use of fruit for own purpose
         (7) use of wood for sale purpose
         (8) use of leaves for sale purpose
         (9) use of fruit for sale purpose
         (10) other (specify):_____

        (0) no
        d. If no, why not?

  (0) no – tree is not present

6

Let's move on to your own views about the municipality and its importance to you or your family:
When things go wrong in our lives, or when we need help or advice, we all turn to someone - perhaps a family member or a neighbour or someone from the government or the municipality/panchayat or a political party. I'd like to ask you about who you would turn to in various different situations.

24. (a) Have you faced difficulties with your water supply? Who did you turn to?
(b) If it happened that you faced difficulties with your water connection, who would you turn to/ask for help?

	(a) Actual Practice	*(b) Hypothetical*
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members ……………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**…………………	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker (**specify**) ………..	(7)	(22)
MLA/MP **(Specify)**………………………………….	(8)	(23)
Municipal Govt. **(Specify)**…………………………	(9)	(24)
State Govt. Employee(s) **(Specify)**………………	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President ……………………………………	(12)	(27)
Relative(s) **(Specify)** …………………………….	(13)	(28)
Other **(Specify)** ……………………………………	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

25. (a) Have you had problems with the cleanliness of your neighbourhood? Who did you turn to?
(b) If it happened that there were problems with the cleanliness of your neighbourhood, who would you turn to/ask for help?

	(a) Actual Practice	*(b) Hypothetical*
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members ……………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**…………………	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker (**specify**) ………..	(7)	(22)
MLA/MP **(Specify)**………………………………….	(8)	(23)
Municipal Govt. **(Specify)**…………………………	(9)	(24)
State Govt. Employee(s) **(Specify)**………………	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President ……………………………………	(12)	(27)
Relative(s) **(Specify)** …………………………….	(13)	(28)
Other **(Specify)** ……………………………………	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

26. (a) Have your faced difficulties with housing (for example if you are threatened with eviction)? Who did you turn to?
   (b) If it happened that you faced difficulties with your housing, who would you turn to/ask for help?

	(a) Actual Practice	*(b) Hypothetical*
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members …………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**………………..	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker **(specify)** ………..	(7)	(22)
MLA/MP **(Specify)**………………………………	(8)	(23)
Municipal Govt. **(Specify)**……………………….	(9)	(24)
State Govt. Employee(s) **(Specify)**……………..	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President …………………………………	(12)	(27)
Relative(s) **(Specify)** ……………………………..	(13)	(28)
Other **(Specify)** …………………………………..	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

27. (a) Have you had difficulties with storm water drainage? Who did you turn to?
   (b) If it happened that you faced difficulties with your drainage, who would you turn to/ask for help?

	(a) Actual Practice	*(b) Hypothetical*
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members …………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**………………..	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker **(specify)** ………..	(7)	(22)
MLA/MP **(Specify)**………………………………	(8)	(23)
Municipal Govt. **(Specify)**……………………….	(9)	(24)
State Govt. Employee(s) **(Specify)**……………..	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President …………………………………	(12)	(27)
Relative(s) **(Specify)** ……………………………..	(13)	(28)
Other **(Specify)** …………………………………..	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

26. (a) Have your faced difficulties with housing (for example if you are threatened with eviction)? Who did you turn to?
   (b) If it happened that you faced difficulties with your housing, who would you turn to/ask for help?

	(a) Actual Practice	*(b) Hypothetical*
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members …………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**…………………	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker (**specify**) ………..	(7)	(22)
MLA/MP **(Specify)**………………………………	(8)	(23)
Municipal Govt. **(Specify)**……………………….	(9)	(24)
State Govt. Employee(s) **(Specify)**………………	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President …………………………………	(12)	(27)
Relative(s) **(Specify)** ……………………………..	(13)	(28)
Other **(Specify)** …………………………………	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

27. (a) Have you had difficulties with storm water drainage? Who did you turn to?
   (b) If it happened that you faced difficulties with your drainage, who would you turn to/ask for help?

	(a) Actual Practice	*(b) Hypothetical*
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members …………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**…………………	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker (**specify**) ………..	(7)	(22)
MLA/MP **(Specify)**………………………………	(8)	(23)
Municipal Govt. **(Specify)**……………………….	(9)	(24)
State Govt. Employee(s) **(Specify)**………………	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President …………………………………	(12)	(27)
Relative(s) **(Specify)** ……………………………..	(13)	(28)
Other **(Specify)** …………………………………	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

8

28. (a) Have you had difficulties with sanitation (sewers / toilets)? Who did you turn to?
      (b) If it happened that you faced difficulties with your sanitation (sewers or toilets), who would you turn to/ask for help?

	(a) Actual Practice	*(b) Hypothetical*
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** …………….	(2)	(17)
Club Members …………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**…………………	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker (**specify**) ………..	(7)	(22)
MLA/MP **(Specify)**………………………………	(8)	(23)
Municipal Govt. **(Specify)**………………………	(9)	(24)
State Govt. Employee(s) **(Specify)**…………….	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President ………………………………….	(12)	(27)
Relative(s) **(Specify)** ……………………………..	(13)	(28)
Other **(Specify)** …………………………………	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

29. (a) Have you had difficulties with noise pollution? Who did you turn to?
      (b) If it happened that you faced difficulties with your noise pollution, who would you turn to/ask for help?

	(a) Actual Practice	*(b) Hypothetical*
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members …………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**…………………	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker (**specify**) ………..	(7)	(22)
MLA/MP **(Specify)**………………………………	(8)	(23)
Municipal Govt. **(Specify)**………………………	(9)	(24)
State Govt. Employee(s) **(Specify)**…………….	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President ………………………………….	(12)	(27)
Relative(s) **(Specify)** ……………………………..	(13)	(28)
Other **(Specify)** …………………………………	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

30. (a) Have you had difficulties with air pollution? Who did you turn to?
    (b) If it happened that you faced difficulties with air pollution, who would you turn to/ask for help?

	(a) Actual Practice	(b) Hypothetical
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members ………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**…………………	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker (**specify**) ………..	(7)	(22)
MLA/MP **(Specify)**………………………………	(8)	(23)
Municipal Govt. **(Specify)**……………………….	(9)	(24)
State Govt. Employee(s) **(Specify)**………………	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President …………………………………	(12)	(27)
Relative(s) **(Specify)** ……………………………..	(13)	(28)
Other **(Specify)** …………………………………	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

31. (a) Have you had disputes over environmental resources with other people? Who helped you sort them out?
    (b) Who would you turn to if you needed help to sort out disputes with other people?

	(a) Actual Practice	(b) Hypothetical
"Ordinary" Neighbour(s) **(Specify)** ………………	(1)	(16)
Caste Panchayat Member **(Specify)** ……………..	(2)	(17)
Club Members ………………………………..	(3)	(18)
(specify are they also member?) ..		
Informal Area Leaders **(Specify)**…………………	(4)	(19)
Municipal Councillor **(Specify)** …………………	(5)	(20)
Ward Committee Members **(Specify)** ………….	(6)	(21)
Local Party Member / worker (**specify**) ………..	(7)	(22)
MLA/MP **(Specify)**………………………………	(8)	(23)
Municipal Govt. **(Specify)**……………………….	(9)	(24)
State Govt. Employee(s) **(Specify)**………………	(10)	(25)
Religious leader **(Specify)** ………………………	(11)	(26)
Society President …………………………………	(12)	(27)
Relative(s) **(Specify)** ……………………………..	(13)	(28)
Other **(Specify)** …………………………………	(14)	(29)
Nobody	(15)	(30)
	(0) Don't know	

Name of person(s) – also specify position and other details as above: _____

If the respondent has named specific people in questions 24-31, ask:
32. You mentioned a number of people who can help solve problems regarding your environment. What do you think, who is giving the best help?
Name: Official Position (if any):

33. Why is this person's help the best?

10

Quality of the interview

To be filled very carefully by the interviewer alone, immediately after the end of the interview and before the following one

34. Did respondents seem to understand questions (without any difficulty to get what was asked)?
        (1) Yes
        (0) No

35. Did they answer easily (finding questions easy to answer)?
        (1) Yes
        (0) No

36. Where there additional people present during the interview?
      (a)   (1) Yes

                              (b). Were these persons members of the household?
                              (1) yes, all of them
                              (0) no, some strangers

                              (c). Did the respondent seem to answer freely even if these persons were present?
                              (1) yes, totally
                              (2) rather yes
                              (0) no, he/she was impressed or uncomfortable

                              (d). Did other people intervene or help the household to answer to some questions?
                              (1) yes, often
                              (2) rather yes
                              (0) no

        (0) No

clean drinking water
পরিশুদ্ধ পানীয়জল

Clean air (Air pollution)
পরিশুদ্ধ বায়ু (বায়ু দূষণ)

Green cover (trees)
সবুজ আবরণ (বৃক্ষ সংখ্যা ইত্যাদি)

Solid waste management (door to door collection)
কঠিন বর্জ্যের ব্যবস্থাপনা (জঞ্জাল)

General cleanliness (a clean city)
সাধারণ পরিচ্ছন্নতা

Environment conducive to health
সুস্বাস্থ্যের উপযোগী পরিবেশ

Water scarcity
জল সংকট

Pollution of water bodies (lakes/rivers/ponds)
জল দূষণ - পরিস্কার নদী /হ্রদ /পুকুর

Noise pollution
শব্দ দূষণ

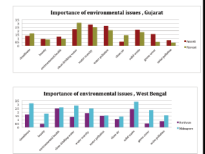Beauty & Aesthetics (a beautiful city)
সৌন্দর্য

Appendix 3: Method for analysis of environmental priority data

Question 16 *"Can you order the following environmental issues in order to how important they are to you?"* ranked 10 environmental-related problems from 1 to 10 being 1 the most important issue and 10 the least. Participants were told that they were allowed to place two or more numbers on the same level if the issues were equally important. During the data treatment these results were transformed and took in account partially as follows:

1. The ranking from 1 to 10 was inverted, meaning that the most important issues were now ranked with a 10 (instead of a one) and the least important with a 1 (instead of a ten). This was simply for a more logical visualization where the most important issues could have the highest scores.

2. Several duplicated values were observed in the least important issues since they were equally important to the respondents. This raised several problems since the duplicated numbers would unbalance the scores, as the number of responses would be different for each issue. Also, it wasn't clear what number to take for a duplicated score since the perception of the answer for each respondent could be different; for instance: 4 of the issues were ranked as the least important, so with a 7 since there are only 10 scores, meaning that there would be no 8th, 9th or 10th value. Shall we interpret them as being equal in the 7th place, were they not important (10th place) and only left out together or an average? Agreeing that the question focused on the most important environmental issues and their comparison, only the 5 highest scores (most important) were kept.

3. Following the 1st and 2nd step the result numbers ranged between 6 and 10 (lower to higher score). For a more logical interpretation they were transformed to values from 1 to 5 (lower to higher score).

4. For the data interpretation the average number of each issue was computed (number larger than 1 and smaller than 5) and later plotted; the cities' results ranged between 0.4 and 3.35.

Steps	Original data		1		2		3	4
			Data treatment in steps, question 16					
More important	+		+		+		+	
	1	➔	10		10	➔	5	Average and Plot
	2	➔	9		9	➔	4	
	3	➔	8		8	➔	3	
	4	➔	7		7	➔	2	
	5	➔	6		6	➔	1	
	6	➔	5	✖	0			Range : 0.4 - 3.35
	7	➔	4	✖	0			
	8	➔	3	✖	0			
	9	➔	2	✖	0			
	10	➔	1	✖	0			
Less important	-		-		-		-	

*Note: Data analysis by P. Gomez, student assistant; any and all errors remain my own