



Maria Bondes

Chinese Environmental Contention

Linking Up against Waste Incineration

Amsterdam
University
Press

FOR PRIVATE AND NON-COMMERCIAL USE
AMSTERDAM UNIVERSITY PRESS

Chinese Environmental Contention

China's Environment and Welfare

China's environmental challenges are an issue of global concern. This however has meant that in much writing on the topic 'the environment' has become equated with 'pollution'. In similar ways, the study of welfare has become synonymous to the study of illness. This book series champions a broad analytical rethinking of these terms, and encourages explorations of their complex interconnections. Practices under scrutiny may range from fengshui and hygiene to farming, forest governance, mining and industry. Topics may be equally wide-ranging, spanning from climate change, waste incineration and cancer villages to everyday environmentalism and cultural and ritual engagements with environment and welfare.

Geographically, the series covers rural and urban areas as well as their growing hybrid meeting point. Interdisciplinary in scope, the series will feature disciplines from across the social science and humanities, including anthropology, sociology, geography, development studies and political science. As a whole, the series promotes a conception of welfare which positions human welfare as part of broader ecological welfare and probes human-ecological interactions. It will make an excellent contribution to the study of China by significantly improving understanding of these major topics and redefining them in a creative and innovative way. The series will also contribute to key debates in Chinese studies on state legitimacy, agency and social change through a close study of these topics.

Series Editor

Anna Lora-Wainwright, School of Geography and the Environment, University of Oxford

Editorial Board

Mikkel Bunkenborg, University of Copenhagen

Jane Duckett, University of Glasgow

Sarah Eaton, University of Göttingen

Mette Halskov Hansen, University of Oslo

Michael Hathaway, Simon Fraser University, British Columbia

陆继霞 Lu Jixia, China Agricultural University, Beijing

Genia Kostka, Free University of Berlin

Ralph Litzinger, Duke University, Durham

Nicholas Loubere, Lund University

Fengshi Wu, University of Melbourne

Guobin Yang, University of Pennsylvania

Heather Zang, University of Leeds

Chinese Environmental Contention

Linking Up against Waste Incineration

Maria Bondes

Amsterdam University Press

FOR PRIVATE AND NON-COMMERCIAL USE
AMSTERDAM UNIVERSITY PRESS

Cover illustration: Gaoantun incinerator, Beijing, November 2012
Source: Maria Bondes

Cover design: Coördesign, Leiden
Lay-out: Crius Group, Hulshout

ISBN 978 94 6298 892 7
e-ISBN 978 90 4854 133 1 (pdf)
DOI 10.5117/9789462988927
NUR 761

© Maria Bondes / Amsterdam University Press B.V., Amsterdam 2019

All rights reserved. Without limiting the rights under copyright reserved above, no part of this book may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the written permission of both the copyright owner and the author of the book.

Every effort has been made to obtain permission to use all copyrighted illustrations reproduced in this book. Nonetheless, whosoever believes to have rights to this material is advised to contact the publisher.

FOR PRIVATE AND NON-COMMERCIAL USE
AMSTERDAM UNIVERSITY PRESS

Table of Contents

List of Abbreviations	8
Preface	9
1 An Emerging Network in China's Green Sphere	15
Towards an Environmental Movement?	
Introduction	15
Networked Contention: Horizontal and Vertical Linkages and the Diffusion of Contention	24
Methods and Data	39
2 A Burning Issue	53
Waste Incineration in China	
A 'Golden Age' of Chinese Waste Incineration: Policies and Economic Incentives	53
Critical Voices: The Chinese 'No Burn' Community	63
A Wave of Local Resistance: Local Community Contention Against Waste Incinerators	79
3 Learning between Homeowners	87
The Urban Case of Beijing Asuwei	
Setting the Stage: Waste Incineration and 'Homeowner' Resistance in Beijing	87
For the Broader Public Good: The Case of Beijing Asuwei	97
Analysis: The Role of Horizontal and Vertical Linkages in the Asuwei Campaign	137
4 Making the Most of External Linkages	145
The Rural Case of Panguanying Village	
With a Little Help from their Friends: The Case of Panguanying Village	145
Analysis: The Role of Horizontal and Vertical Linkages for the Panguanying Villagers	173

5	The Limitations of Linkages	181
	The Peri-Urban Case of Beijing's Dagong Village	
	'Resistance is Futile': The Case of Dagong Village	181
	Analysis: The Role of Horizontal and Vertical Linkages in the Dagong Struggle	214
6	Conclusion	219
	Networked Contention: No Longer Fragmented, Not Yet a Movement	
	Environmental Actors Linking Up: Implications for Local Anti-Incineration Contention in China	219
	Beyond Localized Struggles: Networked Contention and the Prospect for a Broader Movement	245
	Beyond Waste Incineration: Linking Up as a Broader Trend in Chinese Environmental Contention	248
	Beyond China: Networked Contention, Linkages, and Diffusion in a Restrictive Political Setting	252
	Appendices	257
	Appendix I List of interviews	257
	Appendix II List of cited documents	263
	Appendix III Basic information on collected cases	279
	Appendix IV Brief description of sample and central background cases	288
	Appendix V Case protocol template	292
	References	295
	Index	321

List of Tables and Figures

Tables

Table 1.1	Sample and background cases	46
Table 1.2	Data collected during fieldwork	48
Table 6.1	Vertical linkages between intermediaries and local communities	236
Appendix III	Basic information on collected cases	279
Appendix IV	Brief description of sample and central background cases	288
Appendix V	Case protocol template	292

Figures

Figure 1.1	Case sampling matrix	40
Figure 1.2	Cases of local anti-incinerator contention	42
Figure 1.3	Beijing cluster	43
Figure 1.4	Shanghai cluster	44
Figure 1.5	Guangzhou cluster	45
Figure 2.1	Guangzhou Likeng incinerator, July 2013	83
Figure 3.1	Gaoantun incinerator, November 2012	93
Figure 4.1	Construction site of Panguanying incinerator, July 2013	147
Figure 4.2	Villager signatures collected by the Panguanying farmers, November 2012	182
Figure 5.1	Main road of Dagong village, June 2013	
Figure 5.2	Relocation notice in Dagong village, July 2013	213
Figure 5.3	Roadside banner advocating relocation in Dagong village, July 2013	214
Figure 6.1	Nonrelational linkages among sample cases	221
Figure 6.2	Direct relational linkages among sample cases (face-to-face; one-time)	221
Figure 6.3	Online relational linkages among sample cases	222
Figure 6.4	Sustained direct relational linkages among sample cases (face-to-face; sustained)	222

List of Abbreviations

BBS	Bulletin board system
BMAC	Beijing Municipal Administration Commission
BOT mode	Build-operate-transfer mode
CAMS	China Academy of Meteorological Sciences
CATS	Communities against Toxics
CCTV	China Central Television
CDM	Clean Development Mechanism
CLAPV	Center for the Legal Assistance to Pollution Victims
CPPCC	Chinese People's Political Consultative Conference
CWIN	China Waste Information Network
EIA	Environmental impact assessment
EPB	Environmental protection bureau
GAIA	Global Alliance of Incinerator Alternatives / Global Anti-Incinerator Alliance
IPEN	International POPs Elimination Network
KfW	Kreditanstalt für Wiederaufbau
LED	Light-emitting diode
MEP	Ministry of Environmental Protection
MSW	Municipal solid waste
MSWI	Municipal solid waste incinerator
NDRC	National Development and Reform Commission
Ng	Nanogram
NIABY	Not-In-Anybody's-Backyard
NIMBY	Not-In-My-Backyard
NPC	National People's Congress
PhD	Doctor of Philosophy
POPs	Persistent organic pollutants
PRC	People's Republic of China
PX	Paraxelene
RMB	Renminbi
SEE	Society of Entrepreneurs and Ecology
SEPA	State Environmental Protection Agency
TEQ	Toxic equivalents
UNFCCC	United Nations Framework Convention on Climate Change
WtE	Waste-to-Energy

Preface

When I came to China in 2011 to look for a specific issue field to study in my dissertation project on local environmental contention in China, the *Guardian's* Jonathan Watts, whose environmental reporting about China I had followed and admired for a while, was kind enough to meet me and share his insights about the most recent developments in China's environmental sphere. He pointed me towards the then-newly founded environmental organization *Nature University*, whose staff member Chen Liwen urged me to take a closer look at the issue of waste and particularly waste incineration. Having spent time studying desertification and water issues in Western China for my master's research, at first I found the problem of waste, while certainly urgent, rather uninspiring – thinking mainly of the waste collection and separation projects I had come across in Western China. However, upon taking a closer look I found it to be a most fascinating issue field, one which, as a member of one environmental organization put it, encompasses the broader environmental problems and regulatory failures in China. Apart from the environmental and health risks associated with waste incineration, more general problems such as the lax local implementation of environmental laws and regulations, lack of public participation and transparency in the environmental sector, failure to guarantee the rights of pollution victims and affected communities, and local corruption issues are all reflected in the struggle against China's incineration policies and specific waste incinerator projects.

My original idea was to analyze the widening spectrum of contentious methods and strategies employed by affected communities in their fight for a clean and healthy living environment and the factors for the success or failure of individual campaigns. Apart from the difficulty of pinning down the meaning of 'success', particularly where different social groups are affected, I also made another observation that led me to shift the focus of my research. During my first interviews with the members of affected communities that had staged contentious action against waste incineration projects, I was surprised by the frequent references to other cases and reports of receiving assistance from supra-local environmental organizations, experts, lawyers, and activists from other localities. This did not seem to fit my assumption that (particularly rural) local communities were largely isolated from both each other and from the support of supra-local actors – as was the widespread opinion in the literature on social contention in China at the time. I therefore decided to study the linkages among the different actors

in the issue field and their impacts on the emergence and development of contention at both the local and higher political levels. During my research I uncovered a dense network of contention spanning different sites and actor groups that had a major impact on both local campaigns and national-level advocacy activities, as described in this book.

The political climate in China has drastically chilled since the bulk of the data for this study was collected between 2011 and 2013. Under the reign of Xi Jinping, the maneuvering space for both supra-local actors and for local contention and collective action has significantly shrunk amidst the general tightening of political control. The political opportunity structures during the later Hu Jintao era (in the late 2000s and early 2010s) – facilitated by the then-booming spread of social media in China – that enabled the formation of networked contention as described in this study should be regarded as a window of political opportunity that has narrowed during the course of Xi Jinping's consolidation of power.

At the local level, affected communities across China continue to fight against waste incineration plants in their neighborhood. However, state reactions to local contention and particularly large-scale street protests, including those against waste incinerators, seem to have become fiercer in the years after the main observation period and have led to violent clashes between contenders and state forces in several anti-incinerator cases – such as in Hangzhou (2014), Wuhan (2015), Xintao (2016), and Liaoning (2018). In recent years the supra-local actor groups that are important nodes for networked contention have also experienced significant drawbacks that hamper their advocacy activities and engagement at the local level. Since 2017, a new law requiring the registration and strict oversight of international organizations limits their action range and ability to provide assistance and financial aid to Chinese organizations and local campaigns (Hsu and Teets 2016; Shieh 2018). This move to tighten control over social organizations has been regarded as part of an overall trend of 'shrinking [the] spaces' for civil society both in China and beyond (Hayes et al. 2017; Lang and Holbig 2018; Richter 2018). At the same time, the party-state's crackdown on *weiquan* ('rights protection') lawyers has made it more difficult for affected communities to find legal support and advice (Duggan 2015; Jacobs and Buckley 2015; Fu 2018). The Chinese media sphere that was characterized by an overall liberalization and 'greening' under Hu Jintao has also – together with the Chinese Internet – felt the clout of the central party-state (Economy 2018; Bandurski 2019).

In other words, the conditions for the formation of networked contention in China have become more adverse than described in this book.

Nonetheless, it is likely that the different actors in the environmental arena will continue to find ways to link up via the pathways observed in this study – particularly to exchange information via informal ties. The identified mechanisms through which such linkages may promote both local and higher-level contention remain the same under a more repressive framework, but it has become more difficult for such linkages to foster contentious action – or, in the terms of social movement theory, to translate into diffusion effects. On the other hand, networked contention as a loosely organized form of resistance that permits its actors to stay relatively under the radar of state attention compared to conventional social movement organizations or formal networks may hold even more merit under the present adverse political climate.

I would like to thank my two dissertation supervisors, Michael Friedrich from Hamburg University and Björn Alpermann from the University of Würzburg, for their supportive guidance of my research that helped me keep a critical eye throughout the course of the project. They always had an open ear and were excellent and compassionate mentors beyond the scope of this single research project.

I am also indebted to my colleagues at the GIGA German Institute of Global and Area Studies in Hamburg and in particular the colleagues at the GIGA Institute of Asian Studies (IAS) and the GIGA Research Team ‘Persistence and Change of Nondemocratic Regimes’ who offered a great environment for learning the rules of the game of academic life. My special thanks go to the IAS ‘China community’, namely Karsten Giese, Heike Holbig, Günter Schucher, Margot Schüller and Georg Strüver, for many inspiring discussions, helpful reading of my writings, and delightful lunches and cups of coffee. Thanks, Günter, for teaching me to take academia just seriously enough to not miss the fun part of it! I also thank our excellent head of library Uwe Kotzel for always being up to date on the relevant China literature and for more delightful lunches and cups of coffee. And I thank our IT team for equipping me with enough technological gimmicks to feel like I could keep my sources safe enough during field research while touching upon sensitive issues.

I am further indebted to my GIGA colleague Heike Holbig, who brought me to GIGA as a staff member of her third-party funded research project ‘Ideological Change and Regime Legitimacy in China’ but was generous enough to give me enough leeway to also conduct my own research on environmental contention. I thank the German Federal Ministry of Education and Research (BMBF), the German Aerospace Center/Project Management Agency, and in particular Rolf Geserick, who made my research stays in

China and numerous conference visits possible. The research project on ideological change (BMBF project 01UC1011D) was part of the BMBF-funded research network 'Governance in China' (2010-2016), and it was a real treasure to be part of this excellent research cluster. I am very grateful to the network's other heads of projects Björn Alpermann, Thomas Heberer, Sebastian Heilmann, and Gunter Schubert, as well as the other project staff, Anna Ahlers, Sandra Heep, Susanne Löhr, Elena Meyer-Clement, Baris Selcuk, Lea Shih, René Trappel, Eva Wieland, and Katja Yang. I also thank the members of the Association for Social Science Research on China (ASC). The annual meetings and conferences that brought together not only German-speaking China scholars but also renowned international scholars such as Ching Kwan Lee, Susan Whiting, Stig Thøgersen, Vivienne Shue, Anne-Marie Brady, Greg Mahoney, Frank Pieke, Patricia Thornton, Andrew Nathan, Carolyn Hsu, and Andrew Kipnis, to name only a few, were always an inspiration and an excellent platform to present our own research.

The research network 'Governance in China' also introduced me to Chinese colleagues from the China Center for Comparative Politics and Economics (CCCPE) in Beijing, who kindly opened their doors and hosted me as visiting scholar during my research stays. I thank the CCCPE colleagues for their heartening welcome and assistance. I also thank Greg Mahoney from East China Normal University for welcoming me whenever I passed through Shanghai. I further thank Thomas Johnson from the University of Sheffield for sharing his insights as an 'old hand' in the issue field of Chinese anti-incineration contention and for his great cooperation during our joint work on a topical special section in the *Journal of Contemporary China*. A further debt is owed to the editor of this series, Anna Lora-Wainwright, the series' editorial board, and an anonymous reviewer for their very helpful comments and suggestions on this manuscript, as well as to Amsterdam University Press editor Saskia Gieling for her patience.

My special thanks go to Chen Liwen, Mao Da, Feng Yongfeng, and the other staff members at Nature University, as well as the staff members of all the other environmental organizations, experts, and lawyers that populate this book. They were extremely helpful in making this research possible and spent hours and hours of their time explaining complex waste management and policy issues, establishing contacts, and letting me in on their work. I am full of admiration for their strenuous efforts to work towards a clean environment and a just society. I further thank the numerous unnamed community members in this study who stood up for their rights in spite of all hardships and let me take a glimpse into their lives and activities. I am also indebted to Heidrun Reimers, who shared her personal experiences in

the struggle against a waste incineration plant in Ahrensburg, Germany, and provided me with community member interviews, protocols, and other documentary data that helped me better understand both the universality of grievances related to waste incineration projects and the specifics of Chinese anti-incineration contention. And I thank the dog that bit me during field research in Dagong village in 2013. The long-term side-effects from the following rabies shot in a small rural hospital outside Beijing knocked me out for a while, but also gave me time to ponder my priorities. Nevertheless, I can only advise other researchers to go to China fully vaccinated.

Last but not least, I thank my family for their unconditional support, my husband Georg, who set up a home base away from home in Beijing during my research stays, as well as our two sons Samuel and Joshua, who remind me of the importance of a clean environment and a just society every day.

1 An Emerging Network in China's Green Sphere

Towards an Environmental Movement?

Introduction

Environmental contention in China has undergone significant change in recent decades. Chinese environmental activism has long centred on the campaigns and activities of 'embedded' environmental actors (Ho 2007; Ho and Edmonds 2007) – environmental organizations with close ties to the Party-state that act on behalf of broader environmental and conservationist concerns – in collaboration with their journalist counterparts in a greening Chinese media sphere (Ho 2007; Ho and Edmonds 2007; Xie 2009; Yang and Calhoun 2007). In recent years, however, a plethora of new actors has entered China's environmental arena.

Victims of pollution and local communities facing the environmental drawbacks of China's rapid development are becoming increasingly outspoken in demanding their right to a clean and healthy living environment. They voice their grievances and concerns through a diverse claim-making repertoire ranging from legal actions, such as petitions and environmental litigation, to more disruptive activities like protests and sit-ins (Deng and Yang 2013; Herrold-Menzies 2010; Lora-Wainwright 2013b; Matsuzawa 2012; O'Brien and Deng 2015; Stern 2013; van Rooij 2010). Large-scale protests against hazardous construction projects such as paraxylene (PX) plants and waste facilities have become a frequent phenomenon that have spread beyond China's major cities to both smaller cities and rural areas (Ansfield 2013; Huang and Yip 2012; Johnson 2010, 2013b; Steinhardt and Wu 2015). With advances in Chinese environmental law and growing legal consciousness, both affected communities and environmental organizations are turning to (environmental) lawyers and legal associations such as the Beijing-based organization Center for Legal Assistance to Pollution Victims (CLAPV, 污染受害者法律帮助中心, *Wuran shouhaizhe falü bangzhu zhongxin*) for support (Stern 2011, 2013; Ying 2010). Moreover, against the backdrop of the knowledge-dependent and highly contested environmental risks that are typical of modern societies (Beck 1986; Yan 2012; Zhao and Ho 2005) and which generate a sense of risk and uncertainty that is amplified by the public perception of reliable information as unattainable, experts have also come

to play an important role in Chinese environmental contention (Holdaway 2010; Lora-Wainwright 2013a, 2013b; van Rooij 2010). China's environmental arena is thus made up of an increasingly complex network of actors that go far beyond the environmental organizations and green journalists conventionally regarded as the core of Chinese environmental activism.

In Western societies, it is the local to national and (trans-)national linkages and networks between such different actors and social groups that make up and drive environmental movements (Hadden 2015; Keck and Sikkink 1998; Rootes 2004, 2013; Saunders 2013). Social movement scholars have shown how diffusion and learning processes between different contentious groups can contribute to the emergence of 'protest waves' and 'cycles of contention', and how disparate local struggles can 'scale up' to become regional, national, or transnational movements (McAdam 1995; McAdam, Tarrow, and Tilly 2001; Tarrow 1995; Traugott 1995b). Networks and alliances between different local communities, particularly those affected by similar issues, have often been the basis for both issue-specific movements, such as the anti-nuclear and anti-incineration movements, as well as for broader environmental and social justice movements in the United States and many European countries (McAdam and Boudet 2012; Rootes and Leonard 2013; Sherman 2011a; Walsh, Warland, and Smith 1997).

Grievance-driven local communities and supra-local environmentalists acting on behalf of broader environmental concerns have frequently joined together to undertake collaborative action despite the often-diverging goals and interests of these two groups (Keck and Sikkink 1998; McAdam and Boudet 2012; Rootes 2007; Walsh, Warland, and Smith 1997). Local groups have brought issues (back) onto the agenda of environmental movements and added weight to the claims and activities of environmental organizations. At the same time, environmentalists, experts, and lawyers have provided local communities with assistance that has played an important role in the emergence and development of local contention (Fischer 2000; McCormick 2009; Tesh 2000; Walsh, Warland, and Smith 1997). Despite the frequency of such phenomena, the dynamics of diffusion and the processes through which localized struggles scale up to higher levels remain poorly understood (Givan, Roberts, and Soule, 2010; McAdam and Boudet 2012: 134). This is particularly true in the study of restrictive political regimes – which are characterized by nondemocratic principles and practices such as restrictions on the freedom of expression, limited possibilities of participating in the political process, and weak rule of law – where the dynamics of contention tend to widely diverge from those observed in democratic contexts (Almeida 2003; Osa and Schock 2007; Soule 2004: 304).

The linkages and networks that connect different actors in the Chinese environmental sphere have received little academic attention, as the literature on environmental activism in China has long focused on the campaigns and activities of 'embedded' environmental organizations and journalists (Alpermann 2010b; Ho 2007; Ho and Edmonds 2007; Xie 2009; Yang and Calhoun 2007). In recent years, however, local environmental contention has also moved into the focus of academic research (Grano and Zhang 2016; Herrold-Menzies 2010; Jian and Chan 2016; Johnson 2010, 2013a, 2013b; Matsuzawa 2012; Steinhardt and Wu 2015; Tang forthcoming; van Rooij 2010; Wright 2018). In these studies, 'embedded' environmentalist activism and grievance-driven local contention have largely been investigated as two separate facets of China's green activism – partly because of the widespread assessment that Chinese environmental organizations tend to avoid becoming engaged at the local level or developing too close of ties with local contenders so as to avoid politicizing local campaigns and to ensure the survival of the their own organization (Ho 2007; Ho and Edmonds 2007; Spires 2011; Yang 2005). In this context, local communities have been described as largely 'isolated' from supra-local support (van Rooij 2010): for example, environmental organizations have reportedly shied away from getting involved in urban mass protests against hazardous construction projects despite being approached by local campaigners (Johnson 2010, 2013a; Matsuzawa 2012; Tang 2012; Zhao 2007).

Recent studies have pointed to the emergence of networking and its important role for Chinese social actors. For example, Wu (2013) and Peng and Wu (2018) have found that the development of country-spanning alliances of environmental and social organizations in China has greatly expanded their manoeuvring space and enhanced the survival of these organizations. In a similar vein, Sieckmann (2015) writes that the formation of a national network of Chinese environmental organizations focused on tackling climate change issues has significantly strengthened their national-level advocacy activities. However, these studies focus on inter-organizational connections and NGO-driven activism, leaving out grievance-driven social mobilization. The linkages between the 'two facets' of Chinese environmental activism remain understudied.

A notable exception is Mertha's (2008) study of contention against Chinese hydropower projects. He outlines the role of what he terms 'policy entrepreneurs' – primarily social organizations, media representatives, and disgruntled opponents both in- and outside of the government – who (at the time of his research) had entered the pluralizing policymaking process in China and played critical roles in the three cases presented in his

study. Mertha argues that these new actors have found ways to impact the policy process by adopting strategies to manoeuvre within the framework of 'fragmented authoritarianism' – particularly by (re-)framing the issues at stake and providing 'neutral' information in a context where reliable information is limited and hence extremely valuable. Mertha's study does not, however, attempt to conceptualize the exact nature and role of the linkages between the different actors in his cases or to identify the broader network of actors working on the same issues.

The linkages between different affected communities have also not received much academic attention. Most studies of local environmental contention focus on individual cases without paying much attention to diffusion processes and linkages between different localities. In other words, local contention has largely been regarded as locally contained, parochial, and disconnected from others doing similar work (Cai 2010; Chen 2011; Hsing and Lee 2010; O'Brien and Li 2006). This can partially be explained by the fact that the pathways of diffusion – i.e., the channels along which information may travel between different localities and actors – have long been severely limited in China. It is only in some very recent studies that these issues have started to be addressed (Bondes and Johnson 2017; Steinhardt and Wu 2015; Sun, Huang, and Yip 2017; Zhu 2017).

During the government of Hu Jintao (2003 to 2013), the liberalizing media sphere (Mertha 2008; Shirk 2010), spread of the Internet and particularly social media, and diversifying range of activities engaged in by environmental organizations (Geall 2013) created new opportunities for communication across geographic spaces and between different actors in China's environmental scene. While political control has since tightened under Xi Jinping, who became President of the People's Republic of China in 2013, to understand the current developments in Chinese environmental activism it is necessary to investigate the linkages between environmental actors that emerged during the time of political opportunity under Hu Jintao, what they mean for the spread and development of local environmental contention, and the potential for scaling up local contention to higher levels or for the emergence of an issue-specific or broader environmental movement. The investigation of these questions also helps to shed light on the dynamics of diffusion and processes whereby local struggles can scale up to higher levels within a restrictive political setting.¹

1 This touches upon several complex questions, including under what conditions communities oppose present or anticipated pollution and what factors lead to the success or failure of local campaigns. While these are interesting questions, they are not the main focus of this study and

Drawing on social movement theory, this book develops a comprehensive analytical framework for the systematic assessment of relationships between different kinds of environmental actors and the impact of these linkages on both local and higher-level environmental contention. I argue that *networked contention* among different types of environmental actors permits a diffusion of information and resources that plays a significant role in both the spread and development of local contention and the scaling up of local struggles to higher levels. The actors or network nodes that make up such networked contention encompass both the local communities that are directly affected by environmental grievances and the supra-local actors that act more out of environmentalist or social rights concerns. In this study, ties amongst affected communities are termed *horizontal linkages*, while relations between local communities and supra-local actors, i.e., between the 'two facets' of environmental contention, are termed *vertical linkages*.² Networked contention does not have to take the shape of a full-blown environmental movement. It can level out at a meso-level of contention that spans different sites and actor groups between fragmented activism and a full-grown movement. Particularly in the context of a restrictive political regime, such a loosely organized form of contention can hold significant advantages for contentious actors by strengthening supra-local policy advocacy and fostering local campaigns without drawing too much attention from state forces.

The empirical section of this book applies this analytical framework to the field of anti-incineration contention in China. One of the adverse side-effects of China's rapid economic development in recent decades has been a serious municipal waste problem brought on by the growing amounts of garbage generated by China's urban population. With China's major cities 'besieged by waste', during the last decade the Chinese government has proclaimed a national 'waste crisis' and promoted waste incineration as a space-efficient and environmentally friendly waste-treatment strategy. The government's push for incineration has not gone unimpeded, however. China's waste treatment policies and the growing number of

have been addressed more directly by other scholars for both China and other world regions. For China, see for instance Cai (2010); Deng and Yang (2013); Johnson (2013a); Li and O'Brien (2008); Lora-Wainwright (2017); and van Rooji (2010). For other world regions – particularly in the context of disputes over the location of polluting sites – see, among others, Boudet and Ortolano (2010); Hallman and Wandersman (1992); Kasperson (1988); Lober (1995); McAdam et al. (2010); McAdam and Boudet (2012); Sherman (2011a, 2011b); Walsh, Warland, and Smith (1997).

² On the concept of 'networked contention' and an abbreviated version of this argument, see also Alpermann and Bondes (forthcoming).

incinerator projects mushrooming throughout the country have been met with fierce public resistance, similar to that seen in other countries and regions including the United States, many European countries, Japan, and Taiwan (Botetzagias and Karamichas 2009; Leonard, Fagan, and Doran 2009; McCauley 2009; Rootes 2009a, 2009b; Rootes and Leonard 2009; Shen and Yu 1997; Sherman 2011a; Walsh, Warland, and Smith 1997).

As in other countries, in China opposition against both the national waste policies and individual incinerator facilities has mounted from two sides and spurred a fierce public and media debate about incineration: first, a (trans-)national network of domestic and international experts, environmentalists, and (environmental) lawyers, which publicly criticize China's waste treatment strategy, related regulatory failures, and broader environmental problems reflected in the issue field – here described as the 'no burn' community; second, numerous local communities living near proposed or active incinerator sites, which have spoken out against and protested the use of these facilities. This contention has taken manifold forms from legal means like petitions and lawsuits to more disruptive means like sit-ins and large-scale street protests. It has produced a wave of local resistance against incinerator projects across the country, similar to the series of protests observed in opposition to other industrial and infrastructure projects such as PX plants.

Several large-scale protests against waste incinerators – like those in Beijing's (北京市, *Beijing shi*) Liulitun (六里屯, 2006/2007) and Asuwei (阿苏卫, 2009) neighbourhoods; Guangzhou's (广州市, *Guangzhou shi*) Panyu district (番禺区, *Panyu qu*, 2009); and Shanghai's (上海市, *Shanghai shi*) Songjiang district (松江区, *Songjiang qu*, 2012) – have attracted major public and academic attention and are frequently brought up as examples of Chinese environmental protests together with prominent large-scale street actions against other types of construction projects like those in the cities of Xiamen (厦门, 2003), Dalian (大连, 2011), Shifang (什邡, 2012), Qidong (启东, 2012), or Kunming (昆明, 2013). Along with these other mass mobilizations, anti-incinerator contention is often given as an example of what scholars have termed a newly emerging 'Chinese NIMBY (Not-In-My-Backyard) activism', similar to that seen in Western societies (e.g., Cui 2011; Huo 2013; Johnson 2010; Lang and Xu 2013; J. Liu 2013; Otsuka 2009; Tang 2013; Wasserstrom 2008; Xia 2014).³

3 'Not-In-My-Backyard' (NIMBY) activism is a term frequently used in Western scholarship and media debates to refer to local communities' resistance against construction projects in their neighbourhood. The term NIMBY (Chinese: 邻避, *linbi*, often used with the supplement

Since similar episodes of anti-incineration contention have emerged in many other world regions, comparisons with the Chinese context can provide an assessment of the specific characteristics of diffusion and scale shift within a restrictive political regime. While anti-incineration contention in China has received some academic attention in recent years (Huang and Yip 2012; Johnson 2010, 2013a, 2013b; Lang and Xu 2013; Steinhardt and Wu 2015; Wong 2016; K. Zhao 2011), these studies have largely focused on individual cases, mostly the homeowner campaigns in Beijing city and Guangzhou city's Panyu district, and not paid much attention to the role of linkages across different cases or between the different actors in the issue field. This reflects the broader literature on environmental contention in China.

In many ways, anti-incineration contention represents a most likely case for the emergence of linkages both between different sites of contention and amongst the different actors working on the issue in China. The close interrelation between waste incineration and broader waste policies permits the alignment of local grievances with broader claims and has attracted the attention of a large number of environmental organizations, experts, and other supra-local actors. Further, the presence of a vivid global anti-incineration movement and the close linkages between the Chinese and transnational 'no burn' communities have also promoted Chinese anti-incineration contention and the emergence of a national network that benefits from assisting local communities, because the local engagement of national actors expands their action range and strengthens their political claims. While the developments described in this study are likely more pronounced than in other issue fields, the findings from this study do point to a broader tendency of networking and cooperation amongst the different types of contentious environmental actors in China – at least between 2011 and 2013 – and demonstrate the dynamics and mechanisms of how diffusion processes and scale shift can occur in the context of a restrictive political setting.

Drawing on a total of eight months of fieldwork between 2011 and 2013 (September and October 2011; September to November 2012; and April to August 2013) and a wealth of material collected both during field research and via online sources, this book investigates – to varying depths – nine cases of local contention against incinerator projects in urban and rural China. To gain a comprehensive picture of the issue field and to select

运动, *yundong*, 'movement' or 'campaign') entered Chinese media and public debates after the large-scale opposition of urban residents to a paraxylene (PX) plant in Xiamen in 2007.

cases for in-depth case studies, I collected as many known cases of local anti-incinerator contention as possible via media analysis and during field research. By 2013, at least 39 cases of local contention against incinerator facilities had occurred, encompassing a variety of forms from legal actions to large-scale street protests. These cases were mainly clustered in the larger Beijing, Shanghai, and Guangzhou metropolitan areas. A first macro-level assessment of these struggles suggests that a 'protest wave' and diffusion processes were indeed at play. A systematic investigation of the linkages between different actors, their role in the local campaigns under study, and the potential for a scaling up of local contention has to be based on in-depth case studies, however. This book thus uses a comparative case study approach (George and Bennett 2005; Stake 2006; Yin 2002) and investigates nine cases – the most recent urban, peri-urban, and rural cases from each of the above cluster regions – drawing on ethnographic methods.

Based on these cases, the book finds that during the Hu Jintao era a complex network of ties from the local up to the (trans-)national level has emerged in China's waste realm, which has significant benefits for both local communities and the supra-local actors in the issue field. Such networked contention with the Chinese 'no burn' community at its core facilitates the spread and development of local environmental contention, on the one hand, and has fostered a national issue network dedicated to sustainable waste policies and to exposing broader regulatory failures, on the other.

Within this network, local communities affected by planned or operating facilities in their neighborhood are learning from their predecessors in other localities and significantly impact each other. The emerging linkages are not restricted to urban cases, but also connect rural and peri-urban contenders. The case studies show that particularly social media have played a crucial role as source of less strictly censored and critical information. Also members of the Chinese 'no burn' community have made deliberate efforts to link up affected communities. Despite such opportunities for personal contact, the relations between the local campaigners in this study remained largely restricted to nonrelational ties. In most cases, the local actors greatly benefitted from the information about or provided by other communities via the internet, mass media or brokers. Nonetheless, they refrained from establishing direct personal relations. This can partly be attributed to the restrictive political setting in which closer ties across different localities still pose a significant risk. Particularly rural and peri-urban communities also showed little interest in the grievances of other groups or broader waste and environmental issues. Since sustained or broader action would have to be based on a shift from a Not-In-My-Backyard (NIMBY) to

Not-In-Anybody's-Backyard (NIABY) attitude, this significantly limits the prospects of a broader movement based on horizontal alliances.

Despite these limitations of horizontal collaborations, the findings from this book show that vertical linkages between local campaigners and the Chinese 'no burn' community have left their imprint also at higher political levels. In contrast to the widespread assessment in the literature that Chinese environmentalists are shunning direct local engagement, the case studies demonstrate that the environmental organizations, experts and lawyers in this study have been increasingly active at the local level and fostered individual campaigns. At the same time, they have aggregated the disparate local grievances and transformed the mostly short-lived local struggles into more sustained policy advocacy – both for more sustainable waste policies and for exposing broader regulatory failures such as the lax local implementation of environmental laws and standards; weaknesses in China's environmental litigation system; or lacking public participation and transparency.

It is unlikely that these developments will consolidate into a full-blown issue-specific or environmental movement in the near future. Particularly under the current restrictive political climate, anti-incineration contention in China will likely remain at a meso-level stage of networked contention that permits its actors to stay small and loosely organized enough not to trigger a crackdown on the network and its members. However, within the Chinese political context, the existence of networked contention as a meso-level social phenomenon is a significant development in its own right.

Outline of the Book

The rest of this book is organized as follows: The next section introduces the analytical framework for assessing horizontal and vertical linkages and their role for local and higher-level contention. The chapter also outlines the methods and data used for this study. Chapter Two introduces China's incineration policies during the last decade and the two main social forces challenging these policies – China's national 'no burn' community, on the one hand; and the growing number of contentious local communities directly affected by incinerator projects, on the other. The chapter also discusses first macro-level patterns that point towards a 'protest wave' and diffusion processes at play.

Chapters Three to Five present three in-depth case studies of local contention against planned incineration facilities in the larger Beijing metropolitan area. Chapter Three takes a closer look at the urban case of a

homeowner campaign against a planned incinerator in Beijing city's Asuwei area, which was temporarily halted due to public pressure. The case shows how urban activists from different localities have significantly influenced and learned from each other. Chapter Four investigates the rural case of a villager contention against a planned incinerator in Hebei Province's (河北省, *Hebei sheng*) Panguanying village (潘官营村, *Panguanying cun*), which was obstructed by the local community. The case demonstrates how different local and supra-local actor groups in China's environmental sphere can join forces to their mutual benefit. Chapter Five outlines the peri-urban case of a failed struggle against a planned – and by now completed – facility in Beijing's Dagong village (大工村, *Dagong cun*), showing how even the strongest linkages fail to yield effects if not rooted in sustained local contention.

Chapter Six compares the findings from the above case studies and from the broader case spectrum, outlining the network of contention that has emerged in the waste realm. The chapter also discusses the specifics of the issue field and how the study's findings can be transferred to other areas. It then moves beyond China and discusses what the findings can tell us about the dynamics of diffusion and the processes of upward scale shift in a restrictive political setting.

Networked Contention: Horizontal and Vertical Linkages and the Diffusion of Contention

The importance of networking is widely acknowledged by the literature on contentious politics. This is particularly true in the environmental arena, where the issues that motivate these disputes tend to be highly contested and require a great deal of information and expertise to trigger collective action. Networks of environmental actors have played an important role for both the spread and development of local contention and the emergence of regional or (trans-)national movements (Diani and Donati 1999; Hadden 2015; Keck and Sikkink 1998; McAdam et al. 2010; McAdam and Boudet 2012; Saunders 2007, 2013; Sherman 2011a; Rootes 2004, 2007; Rootes and Leonard 2013; Tarrow 2005; Walsh, Warland, and Smith 1997; Wu 2013; Peng and Wu 2018).

This book is interested in a systematic analysis of exactly how the various types of contentious actors in the environmental arena link up with each other, and how these linkages impact both local struggles and higher-level contention. I argue that environmental contention is fostered by a network of ties amongst different contentious actors. The actors or network nodes that make up such *networked contention* encompass grievance-driven local