

Environmental Justice in China's Urban Decision-Making

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Abstract

Environmental decision-making is a field where justice claims are made and justice discourse articulated. This article examines and assesses the notion of environmental justice in China. It begins by reviewing literature on the dimensions of environmental injustice claims, considering both academic discussions and articulations by environmental justice movements. The paper then assesses the dimensions of recognition, participation, and procedural justice in China's environmental decision-making, treating them as processes and sites through which claims of injustice are generated. The case of Beijing inhabitants mobilising against an incineration plant planned for the Liulitun area is described and analysed to illustrate the justice discourse developed in the environmental decision-making process, which saw a dynamic emerge between stakeholders who included local inhabitants, the media, and different government departments. The article concludes with an outline of the main dimensions of environmental injustice in China, noting their causes and implications for China's politics.

Introduction

China, a country developing with a tremendous rapidity, is greatly involved in the world economy and is strongly affected by globalization. The birth of capitalism in China has created a drastic imbalance of wealth distribution, widened the gap between rich and poor, and caused serious environmental degradation and resource depletion. Beyond damage to the natural environment, there has been substantial impact on the social and economic welfare of the Chinese, resulting in public health problems, forced resettlement, and social unrest.

Alerted by the fact that environmental problems have formed a bottleneck for sound socio-economic development, the Chinese Party state has initiated reform of its environmental governance. One of the main measures advocated by the Communist Party is to expand mechanisms for political participation in policy-making. In 2007, the Seventeenth National Congress of the Communist Party of China noted that the public is to be consulted on policies that have significant impact on their interests. Other measures include promoting government accountability, improving transparency and disclosing government information to the public.

Environmental policies in China have been questioned and challenged by Chinese citizens in recent years. The public has gained awareness of its legal rights and has shown enthusiasm for articulating opposition to unjust treatment by government officials on environmental protection matters, while an increasing number of lawsuits are filed against governmental environmental protection agencies: the first ten months of 2009 saw as many Environmental Administrative Reconsideration cases as the total number for 1997-2007.¹ A majority of these suits have resulted from cross-sector decision-making, and many are concerned with land, health threats, urban planning and estate exploration (Vice Minister for Environmental Protection Yue Pan, quoted in *China Environmental News* 2009).

During the same period, China has also witnessed the burgeoning of civil society, characterized by a rising number of associations in an expanding public space. There has been a veritable explosion of non-governmental organizations (NGOs) at both national and local levels, estimated to number around 354,000 (*Xinhua* 2007). These range from charities to scientific associations, trade and business associations, cultural groups, professional societies and youth groups, with environmental NGOs being the most active in the political arena. The expansion of public space is also illustrated by the growing autonomy that media and the internet enjoy in China. Throughout the last decade, more and more media have gained growing independence from the Party state. Sullivan and Xie's examination of environmental networks in cyberspace has shown that the internet has had a significant influence on the evolution of environmental activism and on the potential emergence of social movements in China (Sullivan and Xie 2009).

This article discusses the notion of environmental justice in China. By examining discourses raised in environmental policy-making in China, it explores the processes and causes that produce injustice. The case of Beijing inhabitants in opposition to an incineration plant in Liulitun is described and analysed in terms of dynamic interactions among stakeholders with different interests.

The Concept of Environmental Policy-Making

Environmental decision-making is defined as 'a varied search for understandings of society to facilitate meaningful and legitimate political actions, agreed upon in mutual interaction, to improve our collective quality of life' (Hajer 2003: 191). This definition indicates that environmental policy-making is a dynamic process that may generate a distinct set of action forms with different outcomes (Corbera *et al.* 2007), and that this process is likely to cause tension and conflict. Environmental problems to be resolved are often scientifically complex and uncertain (Jordan 2001), making environmental decision-making worth examination for the environmental injustice that it may produce.

¹ 'The Measures for Environmental Administrative Reconsideration and Litigation' (2006) is a major legal document for the public to defend their environmental interests against government.

Notions of environmental injustice have been developed both in academia and in the environmental movement. Four main concerns have been raised: those of *distribution, recognition, participation, and procedure*.

The significance of *distribution* has dominated justice theory and thinking for a long time. Derived from Marxism, justice is found to be rooted in systems of production (Dobson 1998), which produces institutional classism and racism and market imperatives. These are the causes of inequality in the distribution of environmental hazards and their impacts. Distributional injustice is therefore understood as the result of socio-spatial patterning of the environment, which produces outcomes and impacts on health and well-being. This understanding of inequalities tends simply to reduce injustice to disproportionate proximity or unequal spatial patterning (Walker 2009). It ignores the geographical relations that are intertwined with socio-spatial patterning, and how other forms and scales of such patterning can also contribute to environmental vulnerability or well-being.

This leads to a consideration of *recognition*. Schlosberg (2004) argues that recognition and/or respect are inherent preconditions for distributive justice. In Rawls' liberal justice theory, the equality of persons is taken to mean equal respect for all citizens, and so recognition refers to identifying or respecting group differences, including different social characteristics of class, ethnicity, cultural and institutional exclusion, or experience of prior injustice by social oppression (Fraser 1997). This aspect of justice has been widely strengthened in the US environmental justice movement, in which various racial and other groups articulate injustice discourses by claiming that their identities have not been recognized. (Harvey 1996; Brosius 1997; Fan 2006). Recognition is also related to accepting one's rights to possess and express legitimate knowledge about environmental issues. Citizens, as carriers of their own social commitments and assumptions, have begun to develop environmental knowledge (Beck 1992). Broader questions of public distrust of institutional science arise, as the public becomes increasingly informed, environmentally aware, and sensitive to the partiality of expert-political information (Beck 1992; Wynne 1994; Bickerstaff and Walker 2005).

Environmental justice therefore also encompasses *participation*. From a pluralist perspective, participation stresses the actual behaviour and actions that are associated with justice articulation. Environmental movements have expressed demands for political access, the right to a voice, to be heard and to participate, suggesting that community-based democratic participation needs to be established in the construction and on-going process of governing institutions (Scholsberg 1999; 2004). However, these democratic values do not necessarily apply universally, particularly in the Global South. It remains questionable whether all social groups have access and are competent to articulate and practise environmental justice activism (Williams and Mawdsley 2006; Featherstone 2003).

Justice as *procedure* refers to the 'justice' or 'appropriateness' of policy formation (Zavestoski, *et al.* 2006; Walker 2009). This perspective emphasizes the process of environmental policies, and highlights that a claim of injustice may be made if processes are not open, transparent or fairly conducted, or if the public is not treated with respect by authorities or by other participants (Tyler

and Lind 1992; Maguire and Lind 2003). This means giving consideration to questions such as how 'those who are most affected' should be defined. Justice as procedure is also related to contexts where the rules and practices of decisions are made and constructed socially and culturally. The 'rightfulness' and 'legitimacy' of a decision refers to the extent to which policy decisions are accepted by individuals/communities (Adger *et al.* 2003), as divergent beliefs exist about what constitutes a legitimate political act. Relevant literature has focused on the prescriptions for how procedural environmental justice should be achieved (Lake 1996), or what constitutes fairness in decision-making (Hunold and Young 1998). These aspects of procedural justice are significant for solving environmental problems in which the political logic of state or regions is intertwined with the complexities of geographical spatial patterning (Walker 2009).

These notions of justice are closely related, and this is particularly so for distribution, recognition and participation (Scholsberg 2004). As discussed above, the notion of distribution needs clarification and can be regarded as contained in recognition. While the notions of recognition and participation focus on agents and actions that are involved in policy-making, procedure stresses the dynamic processes at work. Therefore, these are the three notions that are here adopted in order to examine environmental justice in China's policy-making.

Environmental Policy-Making in China

Although the Party state in China has a monopoly rule over environmental governance, formal institutions as well as informal actors are involved in environmental policy-making. This section assesses the potential injustice that is generated in China's environmental policy-making. It first examines formal institutions and their compliance with policy-making laws, with an emphasis on the justness and fairness in these processes. It then examines the effectiveness of participation in policy-making, which occurs both directly through filing environmental complaints and indirectly through the NPC and CPPCC. Third, to illustrate how recognition as justice is realised in China's environmental policy-making, it explores GONGOs and NGOs as agents representing and articulating public environmental interests.

Environmental policy-making and legitimacy

The Chinese state monopolizes environmental governance, and environmental protection organizations are located in the state's administrative structure. They are not independent and do not possess authority over other functional units at different administrative levels. This framework suits coordination within one industrial sector, but works poorly when cross-sectoral interests are combined (Zheng 2001; Ma and Ortolano 2000), especially when the Chinese Communist Party (CCP) is involved (Jahiel 1998).

As a consequence of this environmental governance structure, the legitimacy of environmental policies has become increasingly challenged, especially those that are issued at local level. Local environmental governance is seriously impeded by a lack of transparency, rule of law, and official accountability (van

Rooij 2006; Lo and Leung 2000; Economy 2009). The Environmental Impact Assessment Law is enforced weakly and violated (C. Wang 2007); environmental impact assessments are often manipulated, and sometimes industries can get help from local environmental officials, or at least secure their non-interference (Bernard, Wall, and Wang 2006). Large construction projects are approved at the local government level, despite a potentially substantial environmental impact that ought to be approved by higher authorities.² The central authorities are well aware of these problems and have taken measures to counterbalance local authorities' power, such as sending a special supervision team from the State Council to supervise local environmental management (Pan Yue, quoted in *Xinhua* 2007). However, many environmentally-significant projects that should be halted are allowed to continue, even after warnings from central authorities. According to studies of China's urban development, local authorities have developed into entrepreneurial states which aim to maximize profits and obtain development gains from the substantial power they have over projects (He and Wu 2005; Zhang 2002; Zhu 1999).

Legal framework on environmental governance

In the past 20 years, an environmental law framework has been established in China, with well over 100 environmental laws and hundreds of regulations. As prescribed by a series of legal documents, including the Environmental Impact Assessment Act (EIA) and the newly-promulgated Environmental Strategic Planning Law,³ individual citizens are entitled to get involved in environmental decision-making through public consultation. In the case of urban water pricing reform, it has been argued that through the organization of public hearings, Chinese citizens have increased opportunities to be formally involved in environmental governance (Zhong and Mol 2008). Moreover, the public is also empowered to supervise environmental quality and to enforce government policy by accessing environmental information. According to the 'Measures on Open Environmental Information for Trial Implementation, adopted by the Ministry of Environmental Protection' (MEP) in 2007, citizens are entitled to request information from environmental protection agencies, and a greater

² According to the 'Notification on Strengthening Construction Projects' Environmental Impact Assessment Approval through Administrative Ranking' (2004), MEP approval of the EIA is required for projects that have an investment of US\$ 75 million or more; also, specific descriptions are required on the nature of construction projects. The 'Strategic Environmental Impact Assessment' (2009) replaced the 'Regulation on Environmental Impact Assessment through Administrative Ranking' (2002-2009) and provides more specific requirements on what type of projects should be sanctioned by central authorities. These three regulations were promulgated by the Ministry of Environmental Protection.

³ These are complemented by the 'Environmental Protection Administrative Licensing Hearings Provisional Measures' (2004) and the 'Provisional Measures for Public Participation in Environmental Impact Assessment' (2006).

disclosure of information is required both from governmental bodies and private enterprises.

Citizens are also entitled to challenge environmental protection agencies' policy decisions. The Ministry of Environmental Protection established the 'Measures on Environmental Administrative Reconsideration' (MEAR) in 2008 to curb unjust treatment of citizens by government officials on environmental protection matters.⁴ This law expands the legal framework of the Administrative Reconsideration Law⁵ and the 'Regulations for the Implementation of Administrative Reconsideration Law',⁶ providing guidance on the administrative reconsideration work at MEP and its subordinate environmental protection agencies. In comparison with previous legal precedents and procedures on administration litigation, the law now covers a broader range of areas upon which citizens can seek judicial relief against unsatisfactory administrative decisions. According to central authorities, these laws are appropriate measures that facilitate government agencies to review and correct problems (*Xinhua* 2006). Recently, a few cases of environmental public interest litigation have taken place in China, indicating the promise of an emerging revision of litigation laws, which are expected to advance environmental enforcement and the rule of law (Standaert 2009). Nevertheless, the current law gives only very simple stipulations for realizing decisions made following administrative reconsideration, and guaranteeing enforcement of decisions remains a problem (Yang 2002; Ma 2005).

In sum, these legal documents have no further articles specifying how to realize public participation in decision-making, and they therefore limit the public's access to the policy process (Buckley 2006). They permit citizens to challenge only an unsatisfactory decision that has already been made, instead of allowing their participation in policy formation. Moreover, the ability of these laws to promote accountable administrative conduct has been limited by the lack of an independent judiciary in China (see Palmer 2006).

Participation in Environmental Policy-Making

Environmental complaints

Currently, the environmental policy-making system in China is designed so that the public can resolve environmental pollution problems through the dispute resolution system and the environmental complaint system. This serves as an institutional channel through which the public's grievances can be addressed,

⁴ This law replaces the 'Measures for Environmental Administrative Reconsideration' and the 'Response to Administrative Lawsuits' promulgated by the State Environmental Protection Administration in December 2006.

⁵ The law of the People's Republic of China on Administrative Reconsideration was adopted by the Standing Committee of the National People's Congress, 29 April 1999, and was effective from 1 December 1999.

⁶ 'Regulations for the Implementation of the Law of the People's Republic of China on Administrative Reconsideration' was promulgated by the State Council, 29 May 2007, and was effective from 1 August 2007.

and court judgments can be challenged by filing complaints (*xinfang*) about environmental problems to Environmental Protection Bureaus. The same mechanism is used to resolve other civic disputes.

However, the institutional design impedes the effective recognition of citizens' interests and demands. The special offices established to receive filed complaints do not have the authority to conduct investigations or make decisions. They pass their files to government administrative agencies of the same rank or inferior to them for a response. Lacking an independent and competent judiciary, government bodies are less responsive to citizen complaints (van Rooij 2010); they are either ineffective at accepting citizens' demands or they even violate laws. It is suggested that citizens have lost trust in the complaints system and that this is why the number of complaints filed has been falling in recent years (Feng 2007). The complaints system is therefore futile for articulating environmental concerns (Bretelle 2003), and seems rather to be a way for the state to exert social control on citizens who disagree with political authorities (see Palmer 2006).

NPC and CPPCC

China's primary legislative body, the NPC (almost 3,000 members) and its many different local and regional branches, represents one institutional arrangement for public participation. It aims to realize citizens' rights by investigating, listening to problems, providing legal suggestions and supervising legal implementation. The Chinese People's Political Consultative Conference (CPPCC) is another important organ in the institutional structure, providing the masses with the possibility of participating in political consultation. Its role and powers are somewhat analogous to an advisory legislative upper house, and it functions as an important forum for promoting socialist democracy in the Chinese political system.⁷

The NPC and CPPCC are crucial institutional arrangements for articulating and coordinating public interests (Cho 2006). This is illustrated both by organizational development and by the power gained from independently influencing policies. One important indicator is the establishment of the Environmental Protection and Resource Conservation Committee (EPRCC) in 1993, as a Standing Committee of the NPC, among nine other standing committees. In recent years, the EPRCC has also been established at all territorial levels across the country. In 1998, the CPPCC in turn established the Population and Resource Protection Committee as a standing committee. According to the PRC constitution, Local People's Congresses (LPC) and their respective standing committees are authorized to adopt local regulations (*difang fagui*), provided these regulations are in accordance with superior legislation and regulations. Legally, LPCs enjoy extensive powers of approval and control over government activities, in particular where finances are concerned, although in reality their power is usually symbolic and the NPC has seldom upheld its

⁷ The CPPCC has not been formally included in the PRC Constitution. However, there have been occasional proposals to formalize this role.

oversight power; real power has been asserted only on occasion (Pei 2006; Cabestan 2006).

Another problem inherent with the political bodies representing the public is that environmental issues do not seem to be their major concern. According to statistics provided by Friends of Nature, a national ENGO in China, at the CPPCC's 2008 conference only 2.1 per cent of a total 4,526 reports were related to the issues of protecting the environment and natural resources (Friends of Nature 2009). In comparison with 1,864 reports which were concerned with economic development, the mere 95 environmental reports indicate that issues relating to the public's environmental concerns are not yet the main focus of political bodies in China.

Recognition in Environmental Policy-Making

GONGOs

'Government Organized Non-Governmental Organization' is a special category of NGO which has close relations to governmental institutions while not being part of the government. Traditional GONGOs were established by the Chinese Communist Party as mass organizations within the mainstream political structure of the Communist Party: for instance, the Trade Union, the Peasants' Union, the Federation of Industry and Commerce, the China Communist Youth League (CCYL), and the All China Women's Federation. They serve the political output system by means of their policy enforcement and monitoring activities. In environmental protection, new GONGOs have been established, such as the Chinese Renewable Energy Industries Association (CREIA, established in 2000) and the All-China Environmental Federation (ACEF, established in 2005). In the past two decades, GONGOs have acquired a certain level of independence and have begun to play a leading role in setting professional standards and norms in the policy decision-making process (Wu 2002; Zhang 2003).

As GONGOs have acquired a greater independence, they have also begun to articulate the public's environmental interests by cooperating with ENGOS (Wu 2002; Xie 2009). GONGOs bridge environmental groups with the government and become a platform for environmental activists to interact with political authorities (see Xie 2009). Through GONGOs, voluntary environmental groups can implement their projects by using administrative structures that GONGOs possess and strengthen the implementation of their programmes (Zhao 2004). Nevertheless, many GONGOs still function as administrative organs and act as the supervising institutions of voluntary environmental groups. They have not been acting proactively in empowering the public and challenging the ruling party and its legitimacy.

NGOs

The growth of environmental non-governmental organizations (NGOs) is one notable development in China's environmental governance. By October 2008, 3,539 environmental groups had been registered with the Ministry of Civil Affairs or its local bureaus (All-China Environmental Foundation 2008). As well as those

which have been registered, there are perhaps an equal number of unregistered environmental NGOs, including web-based organizations, grassroots ENGOs, or ENGOs registered as business organizations.⁸

Although lacking resources in organizational development, such as personnel, office facilities or funding, ENGOs have been active in raising the public's environmental awareness, supervising polluting enterprises and participating in environmental decision-making (Xie 2009; Yang 2005). In carrying out their activities, NGOs are entitled to participate in policy consultation, as prescribed in both the Environmental Impact Assessment Act (EIA) and the newly promulgated Environmental Strategic Planning Law. As well as this, personal connections have proven to be one way of coping with an undemocratic political system in accessing policy information and influencing policy processes (Xie 2009; Xie and Mol 2006). Moreover, Chinese ENGOs have also formed an alliance with the media. Whereas efforts at building public consensus through the media take a long time, the social impact can also be powerful (Yang 2005; Xie 2009).

In sum, there are very limited options through which citizens can articulate their concerns and be heard in environmental policy-making. Established political bodies such as the NPC and CPPCC and their local branches remain the major channels by which citizens collectively express their concerns. Under the monopoly of the Party state, ENGOs – as one form of institution to represent citizens' interests – have yet to be recognized by either the public or political authorities.

We can therefore conclude that procedure as justice is lacking in China's environmental policy-making. Recognition is relatively low in China's political system, with ineffective participation mechanisms available for individual citizens to get involved in policy formation processes. This explains why individual citizens increasingly choose to use direct action to produce pressure when their interests are violated (Feng 2007). In particular, demonstrations and protests are common in rural areas where formal institutions reflect weak participatory mechanisms.

The Environmental Justice Movement in China: the Case of the Anti-Liulitun Incineration Plant

Waste management in contemporary Chinese cities is increasingly challenged, with municipal waste (MW) being produced at an unprecedented speed. The metropolitan area of Beijing generates about 184,000 tonnes of MW each day, with an average increase of 8.42 per cent annually, similar to the global average, and the city's capacity to accommodate MW is increasingly declining. As 90 per cent of the current MW is buried, available land that can be used for burying MW rapidly reducing each year.

Since 2000, the Beijing Municipal Government has been discussing how to enlarge its MW accommodation. Most importantly, waste quantity reduction is to be achieved, and policy options are aimed at substantially reducing household

⁸The survey undertaken by the All-China Environmental Foundation (2008) may have had difficulties reaching groups that are without formal legal status.

waste and increasing recycling. Supported by central government, two influential policy papers were promulgated with this in mind.⁹ In 2005 the Haidian district government announced plans to build a waste incineration plant next to the Liulitun landfill, with an investment of approximately 112.5 million US Dollars, with the capacity to incinerate 1,200 tonnes of rubbish per day. After the Beijing Environmental Protection Bureau (BEPB) approved the project's environmental impact assessment in November 2005, the construction of the plant was planned to start in March 2007 and completed before the start of the 2008 Beijing Olympic Games.

The decision to construct the waste incineration plant was greeted with strong opposition from residents who lived in the nearby estates of Yihe Shanzhuang (YSZ) and Baiwang Xincheng. These are commercial estates that only the middle-class can afford. YSZ is located west of the landfill, and at the shortest point only 1 km distant from it. Completed in the end of 2007, Baiwang Xincheng has a built area of 1.72 sq. km, housing approximately 27,000 residents. Also within the area, Muoli Garden (BMG) and Zhonghai Fenglian estate (ZFL) are both located south of the landfill. As homeowners in these well-built estates, the residents are mostly well-educated social elites, constituting civil servants, university lecturers, software engineers, and IT professionals whose organizations are located nearby. Together, the residents submitted petition letters and environmental administrative litigation, and developed a media consensus to defend their environmental interests.

Potential conflict exists between the Beijing government and the Ministry of Environmental Protection, which is in charge of responding to environmental administrative litigation. The Beijing Area and Land Planning Bureau approved the project and it was labelled as one of its major ecological projects. Inside the MEP, opinions on solutions to waste management are not coordinated. One group of high officials insists that the building of incineration plants should be a major solution to the pressing issue of waste management, while another group of MEP officials has reservations about this solution and had pressed for the Environmental Impact Assessment Law to be implemented so that the public can be consulted on the policy (Ministry of Environmental Protection 2007). Due to social leverage applied by the local residents, the MEP halted the project.

Social Mobilization

A collective consensus was formed among homeowners from YSZ, BMG and ZFL. They started by opposing the stench from the Liulitun Landfill; it filled the air and was suspected of causing health problems. Homeowners from YSZ, BMG and ZFL discussed their opinions and articulated criticism through discussion boards on housing websites.¹⁰ From the news, the residents learned

⁹ These are the *White Paper on Beijing Household Waste Management* and the document on *Beijing Municipal Planning for Solid Waste Management (2006-2010)*, available respectively from <http://www.bxsdl.com/upload/book/b2008040314264615.pdf> and from <http://www.beijing.gov.cn/zfzx/ghxx/sywgh/t705871.htm>.

¹⁰ The sites are substantial and have search functions. They are <http://house.focus.cn/mslist/1396> and <http://bj.bbs.house.sina.com.cn/forum-10888-1.html>.

of the government's decision about the incineration plant and were increasingly concerned about the health implications, especially the emission of carcinogenic dioxins. By using the online discussion boards, both online and offline connections were built. Inhabitants were organized against the incineration plant, with special action groups formed in BMG and ZFL to lead opposition activities with a distribution of labour and expertise.¹¹

The primary strategy was to lodge a complaint, drafted by professionals who had accumulated extensive scientific knowledge of carcinogenic dioxins from incineration systems. The complaint was well-supported by environmental legislation that regulates the construction of power generation from waste,¹² including reports of negative effects caused by incineration plants in other parts of China, and reports of cases of cancer induced by incinerations around the world. The complaint collected about 10,000 signatures and was submitted to the MEP, BEPB, Haidian District Government, and the Beijing Municipal Administration Commission. By post and through the internet, copies were sent to news agencies and government bodies in the Municipal and State governments.

Liulitun inhabitants also actively mobilized local resources. Through contacting representatives from Haidian People's Congress, they successfully put the issue on the political agenda of the Beijing People's Congress. Further, a representative on the Haidian CPPCC lives in the area, and so the issue was also brought to the agenda of this political body. Major companies in the area, such as Yongyou Software, were approached and sympathy was gained. As an important economic actor in the capital, Yongyou agreed to support residents' contacts with municipal officials to push for a solution.¹³

During the process of submitting complaints, residents become aware that their articulation through the complaint system was actually effective.¹⁴ Their frequent contacting of government agencies brought responses which strengthened their belief that legal measures could affect policy decisions. Together, 137 residents resorted to legal measures with requests for environmental administrative reconsideration submitted (with the help of a lawyer) to the MEP and to the Beijing Strategic Planning Commission.

To press the government for a fair response on the administrative reconsideration lawsuit, on Environment Day (5 June) about 1,000 organized

¹¹ Groups are set up with different focuses. The financial group is responsible for fundraising, public relations, and contacts the media, while the law group is in charge of examining issues relating to environmental law and other legal documents. A command centre coordinates all activities.

¹² This document cites a government document collectively issued by the MEP and National Development and Reform Commission in 2006, strengthening the principle that environmental impact assessments are to be conducted on biomass or waste generation projects. It forbids waste incinerator plants from being constructed in medium or large-sized cities. Further, it stipulates that these plants should not be located at locations where wind will blow the emissions into cities.

¹³ However, it did oppose the construction of the incineration plant.

¹⁴ This is the view expressed in an on-line journal by a residents' committee against the incinerator, and can be seen here: <http://lvsebaiwang.blshe.com/post/10360/367614>.

residents protested in front of the MEP office building. They expressed their opposition and concerns by displaying posters that read 'we refuse cancer', 'oppose incinerating garbage', and 'we want good health'. This collective action was informed by a Xiamen citizens' demonstration against a chemical factory a few days earlier,¹⁵ and it succeeded in having the MEP halt the construction.

Discourse Formation

Residents were not willing to accept projects that might have negative effects on them. They expressed and disseminated their opinions by posting articles on internet sites and discussion boards. The issue was incorporated in a national policy discussion after it was raised by Zhou Jinfeng, a Beijing representative in the CPPCC in March 2007, generating media attention and further frequent contact from the public. The residents' concerns gained support from a number of national media outlets. Public consensus was formed on three issues: the necessity of establishing public consultation; the public administration's accountability in environmental governance, and the extent to which the decision should be based on scientific grounds.

Public consultation and approval of policy

Inhabitants claimed that the process of public consultation required by the EIA was 'not fairly-conducted' and was 'lacking in justice'. According to the official environmental impact assessment report, project information was disclosed to the inhabitants and a public consultation meeting was conducted. In its public survey of 85 people, 71 per cent agreed to the construction, and a few resident representatives were sent on a trip to Shanghai to learn about the Hongqiao incineration plant there. However, in the environmental administration reconsideration document filed by resident representatives, it is pointed out that the conducted survey involved only 100 participants, out of a total of 11,000 local residents. The majority of local residents stated that they were not aware of the project until it was announced three months before construction was supposed to start. Together they demanded a 'fair, just and professional' consultation be conducted (Y. Wang 2007a).

A small number of residents who participated in the government's public hearing also complained that the government's information was misleading and false. They were told that 'waste incineration plants have no negative environmental impact', that 'incineration can generate electricity', and, most importantly, that a solution existed for reducing the smell from the dumps. Concerned by these objections, a few university students designed another public survey on opinions about the planned plant in 2007 and disseminated it through the internet. Four hundred residents voluntarily participated in this. Although the questionnaire was rather simple and brief in its design, 97.5 per cent of the interviewees believed that measures preventing pollution from the

¹⁵ On 1-2 June 2007, about 10,000 Xiamen citizens protested on the streets against a Paraxylene plant to be built in the city.

incineration plant would be 'unreliable' and hence 98 per cent opposed the planned waste incineration plant. Only 2 per cent showed no opposition.¹⁶

Public administration in environmental governance

A strong public consensus was formed on the accountability of the BEPB's approval of the project. Pressured by the public, the BEPB disclosed the project environmental impact assessment on the incineration project (the EIA report) and the official approval, neither of which had been publicized previously. The reliability of this report, however, was regarded as strongly suspect by inhabitants, scientists and the media. The report did not consider carefully the potential harm that would come with the incineration plant, nor the scientific evidence suggestive of this. The report was instead very positive, stating that during the incineration process almost no toxic effects are produced once the temperature and timing are controlled, and that controls would prevent pollution (Beijing Municipal Environmental Protection Bureau 2007). Strong opposition came from scientists and experts, who argued that current technology made it difficult to monitor and control toxic emissions. It was also noted that the report had neglected to account for the cooling process after incineration, when carcinogenic dioxins are most likely to be produced. Residents believed that such important information was being deliberately omitted to avoid opposition to the project.

There was also strong suspicion of the Beijing Municipal Research Institute of Environmental Protection (BMRIEP), which was responsible for conducting the environmental impact assessment on the project. The BMRIEP was accused of lacking impartiality and independence because of its working relationship with the BEPB. The media cited past reports on institutes that have close working relationships with EPBs to conduct environmental impact assessments, and stressed corruption cases among some staff. This indicates that the administrative accountability of government bodies cannot be guaranteed in environmental governance (Li and Wang 2007).

Additionally, the administration of the Haidian District government was suspected of lacking accountability. The Hong Kong media was the first to report that the decision to develop the Liulitun incineration plant had involved a corrupt political official, Liangluo Zhou, head of Haidian District government. He took part in the development of more than 51 per cent of the land area in Northern Haidian between 2002 and 2006, including the planning of the Liulitun incineration plant (21 *ShijiJingji Baodao* 2007).

Decision-making and its scientific basis

One major public consensus formed about this incident is that the government's policy is not developed on a sound scientific basis, and that the public's well-being might be threatened. The government was strongly condemned for its plans to build a highly risky incineration facility that may cause harm to

¹⁶ The discussion board site was again used to circulate the questionnaire, see <http://house.focus.cn/msgview/1396/97572386.html>.

residents. Inhabitants printed and hung on their residences slogans that read: 'we oppose the incineration plant in the name of all our families', 'we don't want to breathe toxic air', and 'we don't want to live in fear of cancer'.

The original intention of the policy was also explored. The media disclosed that the government gives a high preference to efficiency in waste management (Zhang 2007). Newspapers reported that Haidian district has been confronted with growing pressure over waste management. Liulitun landfill is the major waste management facility in the district, but the production of 2,500 tonnes of garbage produced daily goes far beyond its capacity of 1,500 tonnes. As the planning of waste management in Beijing requires each district to manage garbage in its own administrative area, the problem has to be solved by Haidian government alone.

Waste incineration is believed to be more effective in reducing the quantity of MW, while the electricity that is to be produced from the incineration process could be sold with considerable subsidies from the state, thereby balancing the high cost of building the plant. This answer was rejected by the residents and the media. They dismissed the Haidian government's claims to be accountable, and distrust grew. The historical origin of the debate was traced back to a decision made in 1995 to approve Liulitun Landfill. The environmental impact assessment of the project had led to objections from the BEPB, which indicated that 'the construction of [a] landfill is not appropriate because of its potential negative environmental impacts'. The BEPB believed that the project might contaminate groundwater and warned that 'no permanent facilities should be built within the distance of 500 metres to the landfill'. Haidian district, however, against the warnings of the BEPB, developed the surrounding area into residential estates which attracted many due to the area's beautiful geographical appearance. But it was soon claimed that the site was contaminating the groundwater and that this had led to health problems among local residents, including increasing cases of cancer (Liu 2007). Haidian district government and the BEPB were consequently accused of exposing the public to a degraded environment, and of showing no concern for mitigating the negative effects that the construction of a landfill would entail (*Sina.com.cn* 2007; *China Business Times* 2007).

The debate has also focused on the location of the incineration plant. According to Haidian district, Liulitun was chosen because of its proximity to the current landfill, which will 'lower transportation costs and make dumping the remnants to the landfill convenient'. However, local inhabitants showed a NIMBY ('not in my backyard') attitude in their opposition, refusing to have the incineration plant close to their homes, and stressing that 5,000 inhabitants live within 500 meters of the designated site. Additionally, inhabitants also emphasized that Liulitun houses the nation's top universities, software industrial parks and the country's astronaut training base. The building of an incineration plant would therefore affect the development of business and trade across Haidian and affect the 'hexie' ('harmony') of this area, because Baiwan Xincheng was 'planned as Haidian's largest residential area... and aimed at

providing good living conditions for professionals working in nearby science and technology parks'.¹⁷

Further, inhabitants also stressed Liulitun's geographical importance to the whole city of Beijing. Liulitun is described as being in a '*Shangfeng shangshui*' position in relation to the capital, from where the dominant wind would carry hazardous toxics in the air towards the whole city. Moreover, as Liulitun is very close to Miyun reservoir, which is Beijing's main source of drinking water, they concluded that the contamination of groundwater from incineration would endanger the water quality of all of Beijing's inhabitants. This argument about the importance of Liulitun for the whole of Beijing was adopted by Beijing representative Zhou, CPPCC representatives, and a number of media outlets. Liulitun is called a '*min'gan*' ('sensitive') location that would put Beijing's 9 million inhabitants at risk. Therefore, a consensus was formed on 'relocating' the planned incineration plant (see also Y. Wang 2007b; Zhang 2007).

This incident shows that a strong public consensus affected specific policy decisions. The MEP halted the project by acknowledging both the residents' opposition to the project location and the lack of public participation in the EIA process. Being the administration in charge of litigation, it is at its own discretion to make a decision on the future of the incineration plant. In February 2009, Haidian District government's annual report disclosed that it was resuming and speeding up construction of this project, and the MEP was once again involved in a campaign to ban the project.

Concluding Remarks

The anti-Liulitun incineration plant campaign led by local residents was a success. It shows that citizens have acquired a high level of awareness about their 'lawful rights' (O'Brien and Li 2006). The success of this campaign has significant implications. It enlightened Chinese citizens in other parts of the country about how to defend their interests when they are exposed to environmental risks and hazards, most apparent on the same issue of building incineration plants (*Nanfang Daily* 2009). The campaign also illustrates how urban citizens respond to the rapid growth of environmental problems of a metropolitan character (Badshah 1996; van der Heijden 1999).

Reflecting on notions of justice, this case shows that procedure, recognition, and participation are relevant aspects of environmental justice in relation to China. Among the three dimensions, procedural justice seems the most relevant. As is illustrated by this case study, as the state apparatus monopolizes environmental governance, procedural justice in relation to administration is crucial for gaining policy legitimacy. But with limited functional dispersal of power between the legislative, the executive and the judiciary, the administration is hardly accountable, generating claims of procedural injustice. One factor that is

¹⁷ The complaint was filed to a number of government departments, including the MEP and BEPB, as noted on a message to the webforum <http://bjmsg.focus.cn/msgview/1396/1/72368685.html>; the administrative litigation document has been posted on this site: http://blog.people.com.cn/blog/template/blog_template.html?log_id=1172558402774986&site_id=36753; See also *Sohu.com* (2007).

attributed to the growing demand for procedural justice is the Chinese government's improved transparency and information disclosure. The Chinese government has shown increasing willingness to adopt a scientific approach in making decisions. Scientific evidence is given close attention and form a basis for when policies are formed. Therefore, when scientific evidence is lacking, policies are perceived as unjust.

Recognition is an aspect that is often neglected in China's environmental policy-making. Mechanisms for taking account of various interests are largely ineffective. As indicated in this case, strong claims of injustice exist when different demands are not recognized. Not only formal institutions (Haidian People's Congress and Haidian CPPCC) are contacted, but also informal mechanisms (such as demonstrations and the creation of a public consensus) were adopted to articulate inhabitants' interests and objections. It should be noted, however, that informal institutions such as the media and internet coverage have also played an important role in strengthening inhabitants' demands to have their voices heard. This proves that despite China's political context, the mass media plays an active role in defining environmental issues and the risks to which individuals are exposed (Beck 1998). Another factor attributed to the successful mobilization of resources is that in this case those affected were mostly middle-class. This explains why urban environmental protests tend to be more effective than their rural counterparts, even if the latter go through the same formal mechanisms, including complaints and legal suits (see van Rooij 2006; Brettell 2003). Rural protests do not incorporate or rely on informal mechanisms, and the success of urban citizens shows how certain social groups are more capable of having their interests recognized. This shows how another form of injustice – related to recognition – can manifest in a context where huge social disparity exists (see Williams and Mawdsley 2006).

Without doubt, this insufficient recognition is closely linked to a low level of participation. Under the monopoly rule of the Party state, there are only very few channels for participation. Therefore, demand for participation is an equally important dimension of justice as recognition, and requests for participation also widely exist in other types of policy fields. However, the growing middle class has become increasingly defensive over their interests, especially as related to environmental issues that might have an immediate impact on their daily life. As indicated by this case, those who have sufficient legal knowledge or resources have begun to utilize legal measures against government decisions. They are not simply satisfied by being recognized, but ultimately press for involvement in decision-making processes. This shows the formation of a steadily growing force demanding democracy, with environmental governance as its experimental field.

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