

Brokering Environment and Health in China: issue entrepreneurs of the public sphere

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This article identifies four types of issue entrepreneurs in the creation of public issues about the environment and health in China. They are media professionals, environmental and health NGOs, villagers, and netizens. Because of the different resources of issue entrepreneurs and the constraints of China's political context, politically safe and innocuous issues and issues of concern to the urban population are more likely to enter the public sphere. Contentious issues linked to the interests of powerful business and political actors may become publicized under extraordinary circumstances such as emergencies, disasters, or epidemics, suggesting that external shocks may have a galvanizing effect. Some environment-related health issues, such as pollution-related cancer, are high-stake issues. They often affect the most disadvantaged segments of the Chinese population, yet despite their gravity, their chances of entering the public sphere are small.

On 2 November 2005, the *China Economic Times* carried a story about several 'cancer villages' in Yangji township, Jiangsu province. The story began with a letter sent by the villagers to the newspaper pleading: 'Please help to save our lives!'. Signed by over 300 villagers, the letter explained that a chemical factory in their area had poisoned their environment and in the past five years over 100 villagers had either died or were suffering from cancer. The newspaper dispatched journalists to the villages to investigate the situation. The story was the result of the investigation.

The story raises important questions about environment and health. For our purposes, the most intriguing part of the story is that the villagers had written to a newspaper to plead for help. Why didn't they seek help from the local government or from the law? As is clear from the story, they had both confronted the factory owners and petitioned the local government, but to no avail. It was thus as a last resort that they wrote directly to the newspaper. This act exposed two conditions of contemporary Chinese life: that institutional channels of interest articulation

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often fail citizens, and that under these circumstances, media exposure may play a significant role in helping to redress citizens' grievances.¹

Despite the political and institutional constraints facing the Chinese media, there has been some gradual media reform and opening.² In this process, journalists and media professionals are skilled social actors negotiating China's limited political space.³ Not only do Chinese media cover more social problems than before, but as Liebman argues, they 'have emerged as one of the most effective and important avenues of citizen redress'.⁴ Questions remain, however, about the amount of media coverage on specific issues and about the types of issues that are selected for coverage. If it is true, as media scholar Allan Mazur argues, that

the amount of reporting about an environmental or technological hazard, rather than what is reported about the topic, is the primary vehicle of communication about such risks, and that the beliefs of the audience follow directly from the intensity and volume of reporting,⁵

then a first step to understanding the role of the media in shaping perceptions of and responses to environmental impact on health is to survey the amount of media coverage of specific environmental and health issues. Moreover, as an institution, the media have their own priorities and biases. It is therefore also important to explain what issues gain more media publicity and why.

Environment and health span a broad spectrum of issues.⁶ Many of these issues have been in the spotlight of the Chinese media. Some of the media coverage of sensitive social issues reflects the increasing degree of journalistic professionalism in China and media professionals' growing aspirations for autonomy.⁷ Increasingly, commercialization and market forces exert leverage, forcing media institutions to compete for audience by covering more issues of social concern, despite the perceived trend of the collusion of commercial and political power.⁸ External

1. On the conditions under which victims of pollution may or may not resort to collective action, see Benjamin van Rooij, 'The people vs. pollution: understanding citizen action against pollution in China', *Journal of Contemporary China* 19(63), (2010).

2. Guoguang Wu, 'One head, many mouths: diversifying press structures in reform China', in C. C. Lee, ed., *Power, Money, and Media: Communication Patterns and Bureaucratic Control in Cultural China* (Evanston, IL: Northwestern University Press, 2000), pp. 45–67; Roya Akhavan-Majid, 'Mass media reform in China: toward a new analytical framework', *Gazette: The International Journal for Communication Studies* 66(6), (2004), pp. 553–565; Joseph Man Chan and Jack Linchuan Qiu, 'China: media liberalization under authoritarianism', in Monroe E. Price, B. Rozumilowicz and S. G. Verhulst, eds, *Media Reform: Democratizing the Media, Democratizing the State* (London: Routledge, 2002), pp. 27–46; Stephanie Hemelryk Donald and Michael Keane, 'Media in China: new convergences, new approaches', in S. H. Donald, M. Keane and Yin Hong, eds, *Media in China: Consumption, Content and Crisis* (London: RoutledgeCurzon, 2002), pp. 3–17.

3. Zhongdang Pan, 'Media change through bounded innovations: journalism in China's media reform', in Angela Rose Romano and Michael Bromley, eds, *Journalism and Democracy in Asia* (London: Routledge, 2005), pp. 96–107.

4. Benjamin L. Liebman, 'Watchdog or demagogue: the media in the Chinese legal system', *Columbia Law Review* 105(1), (2005), pp. 1–157.

5. Allan Mazur, 'Nuclear power, chemical hazards, and the quantity of reporting', *Minerva* 28, (1990), p. 295.

6. For a useful overview of the issues, see Judith Banister, 'Population, public health and the environment in China', in Richard Louis Edmonds, ed., *Managing the Chinese Environment* (Oxford: Oxford University Press, 2000), pp. 262–291.

7. Zhongdang Pan, 'Improving reform activities: the changing reality of journalistic practice in China', in Lee, ed., *Power, Money, and Media*, pp. 68–111.

8. Yuezhi Zhao, *Media, Market, and Democracy in China* (Urbana, IL: University of Illinois Press, 1998).

pressures similarly affect the openness of the Chinese media. Such pressures include, for example, lobbying by foreign governments and international non-governmental organizations and exposure in the international media. The availability of the Internet and other new information technologies significantly increases the chances of exposure and the costs of trying to block information. Thus sensitive issues deliberately ignored by the Chinese media are often published in the international media; and despite state control of the Internet in China, netizens often succeed in bringing critical social issues into online discussion and creating influential 'Internet incidents' (*wangluo shijian*). Some of these Internet incidents have led to changes in party policies and government behavior.⁹ With respect to environmental issues, Arthur Mol has argued that the development of new information and communication technologies has led to the rise of a 'new informational mode of environmental governance', in which 'Information generation, processing, transmission, and use become fundamental (re)sources of power and transformation in environmental reform'.¹⁰

Within this complex political and institutional context, this article explores the more specific question of media coverage of environmental and health issues. My goal is to examine the amount of media coverage of selected issues and assess the role of issue entrepreneurs in this process.

I will refer to the process of publicizing an issue as issue creation. Issue creation depends on the strategies and resources of issue entrepreneurs, namely, social actors who promote a social issue publicly. Environmental sociologists, for example, have identified media professionals, scientists, lawyers, and politicians as some of the most influential issue entrepreneurs in environmental politics.¹¹ With respect to environment-related health issues in China, I will distinguish among four types of issue entrepreneurs. They are media professionals, environmental and health NGOs, villagers, and netizens (*wangmin*).¹² I choose to focus on villagers because of the gravity of rural pollution, which directly threatens villagers' lives and livelihoods. I focus on netizens because they use alternative media channels to generate media publicity for critical issues when mass media are controlled.

I will argue that because of the resources of issue entrepreneurs and China's political context, politically safe and innocuous issues and issues of concern to the urban population are more likely to enter the public sphere. Contentious issues linked to the interests of powerful business and political actors may become publicized under extraordinary circumstances such as emergencies, disasters, or epidemics, suggesting that external shocks may have a galvanizing effect. Some environment-related health issues, such as pollution-related cancer, are high-stake issues. They often affect the most disadvantaged segments of the Chinese population, yet despite their gravity, their chances of entering the public sphere are small.

9. Yongnian Zheng, *Technological Empowerment: The Internet, State, and Society in China* (Stanford, CA: Stanford University Press, 2008).

10. Arthur P. J. Mol, 'Environmental governance in the information age: the emergence of informational governance', *Environment and Planning C: Government and Policy* 24, (2006), pp. 497–514.

11. John Hannigan, *Environmental Sociology: A Social Constructionist Perspective* (London: Routledge, 1995).

12. I use the term 'netizen' not as a simple substitute for Internet users, but to emphasize Internet users as citizen users.

Media coverage of environment and health, 2000–2007

The importance of media in China's environmental protection and environmental movement is well recognized. As early as in 1995, not long after its inauguration, China's leading environmental NGO Friends of Nature began to conduct surveys of newspaper coverage of environmental issues in China. By the year 2000, six surveys had been completed. One main finding is that the overall coverage of environmental issues consistently increased over the years. For example, in 1994, on average, each of the surveyed newspapers published one story related to the environment about every three days. By 1999, an average of two stories about the environment appeared *daily* in the surveyed newspapers.¹³

Furthermore, surveys of key words in these studies indicate the broadening of the range of issues of concerns. In 1997, the top three key words about the environment in Chinese newspapers were, in order of frequency, tree planting and greenification (zhishu lühua), environment and hygiene (huanjing weisheng), and government behavior in environmental protection (zhengfu huanbao xingwei). In 1999, the most important key words were, again in order of frequency,

- promoting environmental consciousness (cujin huanbao yishi);
- tree planting and greenification (zhishu lühua);
- protection of wildlife and plants (yesheng dong zhi wu baohu);
- atmospheric pollution and treatment (daqi wuran ji zhili);
- law, regulation, policy, and law enforcement (fagui zhengce yu zhifa);
- government behavior in environmental protection (zhengfu huanbao xingwei);
- solid waste (guti feiqi wu);
- environment and hygiene (huanjing weisheng);
- water pollution and treatment (shui wuran ji zhili); and
- urban environmental problems (chengshi huanjing wenti).¹⁴

As I will show below, the range of environmental issues covered by the Chinese media has continued to broaden up to the present, although media coverage is still biased against some issues.

The growing *amount* of media coverage of environmental issues as shown in these surveys is complemented by increasing efficacy. One study shows that the media played a significant role in the anti-dam campaign launched by Chinese ENGOS.¹⁵ Another study, which focuses on four recent environmental campaigns, finds that the media strategies adopted by Chinese ENGOS are a crucial component of their campaign efforts.¹⁶

What is missing in the current literature is an empirical survey of media coverage of environmental and health issues in the years since 2000. Linking these issues

13. Friends of Nature, "'Zi ran zhi you" gongbu woguo baozhi huanjing yishi diaocha jieguo' ['Friends of Nature announces results of surveys on environmental consciousness in Chinese newspapers'], *Friends of Nature Newsletter* no. 3–4, (2000), available at: <http://www.fon.org.cn/content.php?aid=7259> (accessed 22 August 2008).

14. *Ibid.*

15. Guobin Yang and Craig Calhoun, 'Media, civil society, and the rise of a green public sphere in China', *China Information* 21(2), (2007), pp. 211–236.

16. Fanxu Zeng, *Negotiating ENGO's Agenda: State Control, Media Strategies and NGO Identity Construction in China*, unpublished Ph.D. dissertation, Communication University of China, 2007.

is important because environmental problems, including conditions of poverty, present health threats to large segments of the Chinese population.¹⁷ To explore media coverage of environmental and health issues in China, I conducted a key word survey of the 'Chinese Core Newspapers Database', which is a product of the Chinese company Tsinghua-TongFang. At the time of the survey, the database contained 1,000 national and provincial newspapers in mainland China from the year 2000 to the first few months of 2008. I surveyed key words related to environment and health on 23 March 2008, starting in 2000 and ending in 2007. The field of the database used in the survey was 'full text' with 'precise' matching rather than 'fuzzy' matching. Given the exploratory nature of this study, I did not differentiate the amount and types of coverage by different types of newspapers.¹⁸

The survey was run in three steps.¹⁹ First, I surveyed key words of general environmental issues, including pollution, air pollution, water pollution, noise pollution, global warming (quanqiu biannuan), and animal protection (dongwu baohu). Table 1 shows the results.

Second, I surveyed three key terms related to environment and health to see how this issue compares with other environmental issues. The results are shown in Table 2.

Third, I wanted to see whether the issues covered have rural and urban differences. For rural issues, I selected rural pollution (nongcun wuran), cancer villages (aizheng cun) and pesticide pollution (nongyao wuran). For urban issues, I selected urban pollution (chengshi wuran), animal rights (dongwu quanli), homeowner rights' protection (yezhu weiquan), and people's environmental protection organizations (minjian huanbao zuzhi). 'Homeowner rights' protection' was selected because of the salience of this issue in recent years and because it often has to do with the environmental condition of the homeowners' property.²⁰ Similarly, 'people's environmental protection organizations' are an important social development in urban areas. Table 3 shows the results.

The results reveal three patterns. One is the overall growing frequency of newspaper coverage of environmental issues, confirming the findings of the surveys conducted in the late-1990s by Friends of Nature. With few exceptions, there were more news stories containing the selected key words with every passing year since 2000. The main exceptions were the notable rise in the number of stories about health and environment and animal protection in 2003 and stories about animal protection in 2005. These increases reflect the major health crises in those two years, the SARS crisis in 2003 and the avian flu and Songhua River toxic pollution in 2005.

17. Jennifer Holdaway, 'Environment and health in China: an introduction to an emerging research field', *Journal of Contemporary China* 19(63), (2010). Recognizing this importance, the Chinese government announced in late 2007 an 'Action Plan on Environment and Health (2007–2015)'. According to this document, 'The government should improve the management and research regarding environment and health, try to reduce environmental-related diseases to safeguard the public health, improve their ability to response to and offer quality service and promote harmonious development between the two'. See: http://english.sepa.gov.cn/News_service/media_news/200801/t20080108_116052.htm (accessed 22 August 2008).

18. Differences are expected to exist among central, provincial, and local newspapers. See Xiaoling Zhang, 'Seeking effective public space: Chinese media at the local level', *China: An International Journal* 5(1), (2007), pp. 55–77.

19. I thank Jennifer Holdaway for suggesting this approach.

20. Yongshun Cai, 'China's moderate middle class: the case of homeowners' resistance', *Asian Survey* 45(5), (2005), pp. 777–799.

Table 1. Newspaper coverage of selected environmental issues, 2000–2007

	Pollution (wuran)	Animal protection (dongwu baohu)	Global warming (quanqiu biannuan)	Noise pollution (zaoyin wuran)	Air pollution (kongqi wuran)	Water pollution (shui wuran)	Soil pollution (turang wuran)
2000	21,672	386	131	138	1,199	860	72
2001	21,198	452	206	152	1,568	946	87
2002	27,400	510	305	176	1,786	1,188	126
2003	40,055	1,177	398	285	2,348	1,754	161
2004	47,610	954	430	325	3,242	2,023	223
2005	72,324	1,033	606	557	6,006	2,687	373
2006	77,670	958	630	557	6,869	2,616	671
2007	82,435	798	1,832	627	8,570	2,996	705

Source: Based on survey of 'Chinese Core Newspapers Database', Tsinghua-TongFang.

Table 2. Newspaper coverage of selected environment and health issues, 2000–2007

	Environment and health (huanjing yu jiankang)	Pollution and health (wuran yu jiankang)	Food safety (shipin anquan)	Drinking water safety (yinshui anquan)
2000	23	4	277	21
2001	34	5	840	55
2002	65	2	2,162	52
2003	116	0	3,473	165
2004	91	0	6,356	318
2005	91	13	12,301	2,314
2006	144	13	13,129	4,736
2007	123	15	23,359	6,144

Source: Based on survey of ‘Chinese Core Newspapers Database’, Tsinghua-TongFang.

Second, the results show that media coverage of environment and health issues is uneven. It tilts heavily toward politically innocuous or attention-grabbing issues. Thus coverage of global warming and animal protection is significantly more extensive than that of ‘pollution and health’ and ‘environment and health’. Both global warming and animal protection are politically safe issues, because there are no clearly identifiable targets. Even if there are identifiable targets, they are unlikely to be government authorities. Global warming has been a catchy phrase world-wide for years. The extensive media coverage of this issue reflects the Chinese media’s eagerness to follow the global trend. The limited coverage of issues about ‘environment and health’ may be due to limited understanding of the relations between the two. It may also be because in cases where health problems are linked to the environment, the issues are particularly contentious; and in general, mass media avoid covering contentious issues.²¹ The pollution-induced riots in the villages of Zhejiang province in 2005 were widely covered by Western media, but I did not find any coverage of it in the ‘Core Newspaper’ database I used.

Third, media coverage is biased against issues concerning the most disadvantaged groups in Chinese society—the rural population. Rural pollution is notoriously serious and prevalent, yet media coverage is meager.²² Many villages which in recent years have documented higher levels of death due to pollution-related cancer are known as cancer villages.²³ Yet such life-threatening issues are covered more meagerly than animal rights. The obverse side of this rural bias is a bias in favor of the better-off urbanites. Animal rights is an indicator, because it is mainly a middle-class concern. Another indicator is the frequent coverage of homeowner rights’ defense. Again, this is more of a concern among the urban home buyers.

21. This is true in China and elsewhere. For the relationship between mass media and protests, see Harvey Molotch, ‘Media and movements’, in Mayer N. Zald and John D. McCarthy, eds, *The Dynamics of Social Movements: Resource Mobilization, Social Control, and Tactics* (Cambridge, MA: Winthrop Publishers, Inc., 1979), pp. 71–93.

22. Chinese observers have noted that at a time when many efforts are put into environmental protection in cities, not only is rural pollution seriously neglected, but cities have developed at the expense of the rural environment. See Deng Qingbo, ‘Huanbao chengshi vs. wuran nongcun’ [‘Protect urban environment, pollute the villages’], *Zhongguo jingji shibao* [China Economic Times], (7 June 2005).

23. See Anna Lora-Wainwright, ‘An anthropology of “cancer villages”: villagers’ perspectives and the politics of responsibility’, *Journal of Contemporary China* 19(63), (2010).

Table 3. Newspaper coverage of selected environmental issues: rural vs urban, 2000–2007

	Rural pollution (nongcun wuran)	Urban pollution (chengshi wuran)	Cancer village (aizheng cun)	Pesticide pollution (nongyao wuran)	Homeowner rights' defense (yezhu weiquan)	Animal rights (dongwu weiquan)	People's environmental organizations (minjian huanbao zuzhi)
2000	13	128	3	217	1,475	6	36
2001	39	169	3	236	2,110	8	45
2002	37	216	1	296	2,773	18	60
2003	40	213	7	344	3,965	27	92
2004	68	301	32	289	5,267	36	142
2005	144	443	48	435	8,595	34	223
2006	228	524	34	342	9,071	31	211
2007	245	560	32	298	8,223	40	248

Source: Based on survey of 'Chinese Core Newspapers Database', Tsinghua-TongFang.

How can we explain the unevenness in media coverage of environmental issues? What factors determine which issues will be covered by the media? What is the role of issue entrepreneurs?

The complex structure of political opportunities

The mobilization of collective action is constrained by political conditions. Mobilization is more likely to happen where political conditions are more open because open political structures provide political opportunities. More recently, some scholars have suggested that the concept of political opportunity structures (POS) is too general to capture complex political realities. They argue that political structures may be more open to some issues than others, depending on the relevance of the issues and the broader social context. The concept of political opportunities should thus be disaggregated.

Political opportunities may be viewed in two ways. One approach is to differentiate issue-specific opportunities. Political structures may be more open to some issues than others. Consequently there is more room to mobilize around some issues than others. It has been argued, for example, that 'different parts of the social movement sector have a specific POS [political opportunity structure]. ... not all issues movements dealt with have the same relevance within the political arena'.²⁴ As sociologists Meyer and Minkoff put it, 'Clearly, a polity that provides openness to one kind of participation may be closed to others'.²⁵

Whether social actors can seize political opportunities depends on perception and resources. In media access, villagers are at a much greater disadvantage than urbanites. This is not only because of the sheer proximity of the latter to the media institutions or because media professionals are themselves urbanites. It is also because villagers have almost always been viewed as the passive audience at the recipient end of the transmission belts of the Chinese propaganda machine. As O'Brien and Li point out, villagers have difficulty in perceiving and exploiting political openings because it is often hard for them even to obtain widely publicized policy information concerning their own well-being, because such information is often blocked by the local authorities.²⁶

In Chinese politics, there are multiple issues with a clear hierarchy, and the state is more tolerant of some issues than others. Thus popular contention faces issue-specific opportunities. Issues challenging the legitimacy of the party-state are minimally tolerated, while issues that do not challenge state legitimacy may be tolerated or even encouraged. Generally speaking, environmental issues are politically innocuous. Even the harshest political regimes cannot deny the benefits of a good environment for their citizens. This partly explains why the mass media everywhere tend to cover

24. Hanspeter Kriesi, Ruud Koopmans, Jan Willem Duyvendak and Marco G. Giugni, *New Social Movements in Western Europe: A Comparative Analysis* (Minneapolis, MN: University of Minnesota Press, 1995), p. 96.

25. David S. Meyer and Debra C. Minkoff, 'Conceptualizing political opportunity', *Social Forces* 82(4), (2004), p. 1463.

26. Kevin O'Brien and Lianjiang Li, *Rightful Resistance in Rural China* (Cambridge: Cambridge University Press, 2006).

environmental issues quite extensively.²⁷ Environmental issues enjoy political legitimacy in China as well, if only because not tackling them may lead to greater threats to state legitimacy.

Within the same issue domain, however, different sub-issues may enjoy different political opportunities. Although in general, environmental issues are politically safe in China, they are not equally so. Hardly any environmental NGOs, for example, mobilize against the civil use of nuclear power. On the other hand, as Elizabeth Economy notes, issues like species and nature conservation and environmental education are politically more acceptable.²⁸

Media coverage in China reflects these complex political conditions. Despite gradual media reform and opening, Chinese mass media are still under strict political control. They are not free to cover anything they want to. Xiaoling Zhang notes, for example, that in selecting topics, television journalists and producers are asked not to report on issues that cannot be solved quickly or that may trigger instability at home and provide ammunition for attacks from abroad.²⁹ Thus for media professionals who are themselves negotiating a politically restrictive media control regime, covering environmental issues can be one way of asserting some degree of media autonomy without directly challenging state legitimacy.³⁰ Yet, despite the news-worthiness of environmental issues, all environmental issues are not equal. The coverage of environmental issues in Chinese media is uneven. It is biased against issues of rural pollution despite the proverbial gravity of the problems. It is at this point that we must turn to the analysis of the resources and strategies of the issue entrepreneurs.

Poor people's movements

Everywhere, the environmental movement falls into two broad types—the poor people's movement and the middle-class movement.³¹ This is true in China too. The poor people's movement in China takes place mainly in rural areas. Villagers are the challengers qua issue entrepreneurs. The issues are mainly about water, air, and land pollution. The gravity of these issues is well-known to both citizens and government authorities. Since at least 2000, the official *China Environment Yearbook* (*Zhongguo huanjing nianjian*) has consistently documented the prevalence of citizen complaints and petitions regarding industrial pollution of the rural environment. Their targets are usually industrial enterprises, which are the sources of pollution, and local government authorities.

Because of their structural location, peasants are in a weak position vis-à-vis their targets. They normally try to avoid direct confrontation with the more powerful

27. Russell Dalton, *The Green Rainbow: Environmental Groups in Western Europe* (New Haven, CT: Yale University Press, 1994).

28. Elizabeth C. Economy, *The River Runs Black: The Environmental Challenge to China's Future* (Ithaca, NY: Cornell University Press, 2004), p. 145.

29. Xiaoling Zhang, 'Reading between the headlines: SARS, Focus and TV current affairs programmes in China', *Media, Culture & Society* 28(5), (2006), p. 731.

30. On how media professionals negotiate the political environment, see Zhongdang Pan, 'Media change through bounded innovations'.

31. Ramachandra Guha and Juan Martinez-Alier, *Varieties of Environmentalism: Essays North and South* (Earthscan Publications Ltd, 1997).

opponents in favor of 'rightful resistance'.³² The peasants in the pollution-related protests in two villages in Zhejiang province in 2005 had protested against the polluting factories through institutional channels for years before they resorted to radical confrontations. For instance, in Xinchang, villagers had sent representatives to present demands for compensation, and on 4 July 2005, they sent a group to demand a meeting with the factory officials.³³ The struggles in Dongyang had been dragging on for much longer. Villagers had been petitioning the government ever since the chemical factories were built in 2001. Initially they wrote and distributed open letters to express their complaints. Then they gathered signatures on the open letters, made copies, and continued to distribute them. The main activists involved, however, were harassed, arrested, and indicted under the charge of disturbing public order.³⁴

In rural areas, repeated efforts at lodging complaints through institutional channels may or may not lead to a solution.³⁵ When institutional channels fail them, peasants may be forced to take radical and disruptive action. As sociologists Piven and Cloward argue, such radical action is poor people's resource in the absence of organizational and other forms of support.³⁶ In China such action can be effective in two ways. It may catch the attention of central government authorities, whom poor villagers have no way of accessing through other means; and it may attract the attention of international media and thus gain some degree of media publicity through the transnational boomerang dynamics.³⁷ This is what happened in the environmental protests in Zhejiang province in 2005. As I mentioned above, although Chinese media remained reticent, the protests were widely covered by Western media.

When institutional channels of interest articulation fail, peasants may also contact the mass media and get the media to cover their stories. The story with which I introduced this paper is an instance of such an attempt, but even with some media coverage, the issue may remain unresolved. It is only with intensive media coverage that issues get national attention and enjoy better chances of a solution. Intensified media coverage of an issue happens under three conditions: when government promotes such coverage; when resourceful issue entrepreneurs launch successful media campaigns; and when external shocks such as natural disasters and other emergencies, combined with the difficulty of information control in the information age, force the government to open up the media.

Since government sponsorship of media campaigns and external shocks are variables hard to control, the key condition for our purposes is whether and how issue

32. O'Brien and Li, *Rightful Resistance in Rural China*.

33. Howard W. French, 'Anger in China rises over threat to environment', *The New York Times*, (19 July 2005).

34. Lang Youxing, 'Shangyi xing minzhu yu gongzhong canyu yu huanjing zhili' ['Deliberative democracy, public participation, and environmental governance'], paper presented at the *International Conference on Public Policy and Management in Transitional Societies*, November 2005, Guangzhou, available at: <http://www.chinaelections.org/readnews.asp?newsid=%7B997159BE-D604-480C-912E-383795D4E581%7D> (accessed 10 January 2006).

35. Kevin O'Brien and Lianjiang Li, 'The politics of lodging complaints in rural China', *China Quarterly* 143, (September 1995), pp. 756–783.

36. Frances Fox Piven and Richard A. Cloward, *Poor People's Movements: Why They Succeed, How They Fail* (New York: Vintage Books, 1979).

37. Margaret E. Keck and Kathryn Sikkink, *Activists beyond Borders: Advocacy Networks in International Politics* (Ithaca, NY: Cornell University Press, 1998).

entrepreneurs with the necessary resources may help to expose the problems by launching media campaigns. I begin by examining the role of media professionals through a review of environmental journalism.

Environmental journalism in China

The growing coverage of environmental issues in my survey of Chinese newspapers suggests that environmental journalism is a thriving field in the Chinese media. To understand why, I will first briefly discuss the characteristics of environmental journalism and then examine a few contributing factors.

Two broad types of Chinese media cover environmental issues. One is general-interest newspapers and television and radio programs. They include such national media as *People's Daily*, *Guangming Daily*, *China Youth Daily*, China Central Television, and China Central Radio Station. These are the most influential media channels in China. Although they do not focus on environmental journalism, many have environment-related sections or programs and thus have journalists working on environmental issues. Because of their dominance in China's media field, their stories on environmental issues tend to have enormous impact.

The other type of media that cover environmental issues are specialized environmental newspapers and magazines such as *China Environment News* (*Zhongguo huanjing bao*), *China Green Times* (*Zhongguo lüse shibao*), *China Forestry News* (*Zhongguo linye bao*), and the literary magazine *Green Leaves* (*Lüye*). The first such newspaper, *China Environment News*, was launched in 1986. According to one estimate, as of 2002, there were 407 such specialized newspapers and magazines devoted to environmental issues. Of these, 121 focus on forestry and ecological issues, 31 on environmental protection, 203 on natural resources, and 52 on general issues related to the environment.³⁸ Compared with the shrinking number of newspapers for peasants, the increase in the number of newspapers on environmental issues is revealing. As Zhao suggests, in the process of media commercialization, peasants are losing out because they are not a major target for advertising commercials.³⁹ For reasons I will discuss below, environmental news has become commercially profitable.

In the 1980s, the most influential media stories about the environment came from reportage literature (*baogao wenxue*). One of the most influential works on the environment then was Xu Gang's *Woodcutter, Wake up!* (*Fa mu zhe, xing lai!*), published in 1988.⁴⁰ Since the 1990s, environmental journalism has developed in response to complex new conditions. These conditions correspond to some degree with the four types of dynamics of environmental reform in China identified by Mol and Carter, namely, changes in political structures and the rise of an environmental state, the role of economic actors and market dynamics, emerging civil society institutions, and processes of international integration.⁴¹ These four conditions are

38. Gao Lipeng and Tang Xiuping, 'Zhongguo huanjing xinwen de xianzhuang ji qushi' ['The current situation and prospects of environmental journalism in China'], *Xinwen jizhe* [Journalists] no. 9, (2002).

39. Yuezhi Zhao, *Media, Market, and Democracy in China*, p. 69.

40. On reportage literature in the 1980s, see Rudolph Wagner, *Inside a Service Trade: Studies in Contemporary Chinese Prose* (Cambridge: Council on East Asian Studies, Harvard University, 1992).

41. Arthur Mol and Neil Carter, 'China's environmental governance in transition', *Environmental Politics* 15(2), (2006), pp. 149–170.

equally crucial for the rise of environmental journalism. Thus, the rise of an environmental state in China built on institutions of environmental laws and governance promotes general media debates about environmental issues. It provides a window of political opportunity. Mechanisms of market competition in the media field favor the coverage of issues of general social concern. This can be seen from the rise of the new genre of 'livelihood news' (minsheng xinwen, literally 'news about people's lives'). News about urban environmental issues falls under this new category of livelihood news. Civil society organizations working on environmental issues stress the importance of media for achieving their organizational missions. As I will examine below, their media strategies for campaigns and other activities often succeed in generating extensive media coverage. Processes of international integration, or globalization, are important in several ways for Chinese environmental journalism. One is the introduction into the Chinese public sphere of global environmental discourses, values, and issues. Chinese media coverage of global warming, for example, reflects the influences of a global environmental discourse. Another type of global influence is the growing presence of international environmental and other civil society organizations in China. Many of these organizations carry out environment-related projects directly. Others provide support to Chinese partners through funding and professional training.⁴² One last type of global influence is the boomerang dynamics described by political scientists Keck and Sikkink.⁴³ International media not only covers Chinese environmental issues quite extensively, but some of them offer Chinese-language services in their online versions and may reach an audience inside China more easily than before. They often cover issues ignored by Chinese media, thus serving as a form of outside pressure.

Besides these four factors, two additional conditions influence Chinese environmental journalism, namely, the development of the Internet and the conditions of a risk society. Despite growing political control, the Internet has been a crucial new arena for citizen communication since the late-1990s. Not only do citizens and civil society groups use the Internet for environmental activism, but official media channels have also opened websites and online forums on environmental issues. As communication channels expand for citizens, so do the needs for communication. Not least among the conditions compelling citizen needs for communication are risks. Disasters, emergencies, environmental risks, industrial accidents, and all sorts of crisis situations have happened before, but they seem to have become more frequent and serious over the last decade. The floods in the summer of 1998, the SARS crisis in 2003, the Songhua River chemical pollution incident in 2005, the blue algae in Taihu Lake in 2007,⁴⁴ and the snowstorms and earthquakes in 2008 are only among the most devastating of these crisis situations. As what happened in the wake of the Sichuan earthquakes shows, the management of these crisis situations depends on open information channels. Openness

42. For instance, one collaborative project between an international NGO and several Chinese partners promotes legal construction and environmental journalism in China. See <http://mlrc.cuc.edu.cn/>.

43. Keck and Sikkink, *Activists beyond Borders*.

44. The outbreak of blue algae in Taihu Lake was directly linked to industrial pollution. The crisis affected the drinking water of about two million residents in the city of Wuxi. See 'Premier demands thorough investigation of Taihu Lake crisis', *People's Daily*, (12 June 2007), available at: http://english.peopledaily.com.cn/200706/11/eng20070611_383097.html (accessed 30 August 2008).

of information not only helps citizens to understand the situations, but also is essential for mobilizing public efforts in dealing with the crises.⁴⁵

NGOs as issue entrepreneurs

The results of my online survey cannot tell whether and how environmental NGOs have any role in promoting media coverage of the issues surveyed or if they do, what environmental issues they emphasize. Nevertheless, available studies show that ENGOs attach special importance to the mobilization of media in their campaigns and activities. There is a degree of interdependence between ENGOs and media professionals, because of the similarity of their position vis-à-vis the state in their struggles for autonomy.⁴⁶ In the Nu River campaign, for example, ENGOs made strategic use of both the mass media and the Internet in mobilizing public opposition against dam-building.⁴⁷ Zeng's analysis of the campaign to protect the Tibetan antelope argues that different kinds of media—traditional party organs, newspapers striving for professionalism, market-oriented newspapers, and occupational newspapers—cover the same issues in different ways.⁴⁸ Xie's study of a case of bird-protection in Liaoning province stresses the importance of journalists' and environmentalists' personal networks in promoting media publicity of the issues of concern.⁴⁹

NGOs clearly promote media coverage of environmental issues. Indeed, the success of their environmental campaigns depends significantly on media publicity and mobilization. NGOs have a unique advantage in mobilizing media, because as the above-mentioned studies all point out, the most influential NGOs all have media professionals as founders, leaders, or core members. What is less studied is the types of issues that environmental NGOs focus on. There is considerable overlap between the issues of concern to environmental NGOs and the issues most often covered by the mass media. The bias in favor of politically innocuous and urban environmental issues in the mass media revealed in my online survey may similarly be discerned in the issue areas of environmental NGO activities. They focus mostly on environmental education, nature conservation, urban renewal, and the protection of endangered species. For example, a survey of student environmental associations in 2000 shows that 53% of their activities focused on environmental education and only 29% focused on some form of environment action. Of the four forms of environmental action identified, resource and ecological conservation accounted for 58%, with the remainder devoted to pollution prevention and solution, but it is not clear from the survey what kinds of pollution prevention and solution activities students were engaged in.⁵⁰ A 2005 survey of the membership of an influential

45. Yang Guobin, 'Sichuan earthquakes and relief efforts: the power of the Internet', *Background brief No. 389* (East Asian Institute, National University of Singapore, 25 June 2008).

46. Guobin Yang, 'Environmental NGOs and institutional dynamics in China', *The China Quarterly* no. 181, (2005), pp. 46–66.

47. Yang and Calhoun, 'Media, civil society, and the rise of a green public sphere in China'.

48. Zeng, *Negotiating ENGO's Agenda*.

49. Lei Xie, *Environmental Activism in Urban China: The Role of Personal Networks*, unpublished Ph.D. dissertation, Wageningen University, 2007.

50. Lu Hongyan, Cao Xia, Zhou Peng, Wang Li and Zhong Ping, *Zhongguo gaoxiao huanbao shetuan xianzhuang diaocha yu fenxi* [A Survey and Analysis of the Current Conditions of University Environmental Groups in China]

ENGO in China shows that its members' favorite activities include: (1) environmental education, (2) lectures, (3) social activities for members, (4) training, (5) tree-planting, (6) plant-watching, (7) publicity activity, (8) bird-watching, (9) film-watching, (10) visiting exhibitions, (11) office volunteering, and (12) chorus.⁵¹ In short, it appears that Chinese ENGOs are mostly engaged in politically safe issues and in issues of concern to the urban population.

There are both political and sociological explanations of the issue orientations of Chinese ENGOs and their media success. The political explanation is that Chinese ENGOs respond strategically to issue-specific opportunities just as much as the media professionals do. The legitimacy of urban environmentalists as members of organized groups is contingent on state recognition, and such recognition is not extended to groups that challenge state legitimacy. Far from challenging the state, environmental groups often get direct support from central government officials in their efforts to challenge local governments and businesses. This condition of embeddedness, as Ho and Edmonds term it, can be an enabling factor rather than a constraint.⁵² Still, their status is tenuous. Some groups operate without formal registration; registered organizations have to tread a tightrope, balancing between what they can do and what is permissible. Under these conditions, their strategy is to seek organizational development by operating within the range of the possible. In short, if Chinese ENGOs have focused more on politically tolerable issues, it is because their survival depends on maintaining political legitimacy. This partly explains why few NGOs focus on politically explosive environmental issues such as cancer villages.⁵³

Yet there may also be a sociological explanation. For the most part, Chinese environmentalists are well-educated urban professionals. On the spectrum of the burgeoning middle class,⁵⁴ they represent the more intellectually-oriented elements and are distinguished from the business and political elites. The membership survey of a Beijing-based ENGO mentioned above provides a rough picture of the demographics of Chinese environmentalists. Of 607 respondents (out of a total membership of about 1,500 at the time of the survey), 95% have a college or post-graduate education. In terms of occupational composition, college students make up 34% of the membership, teachers about 15%, and journalists and editors about 6%. In other words, at least 55% of the members of this organization belong to what conventionally would be considered the intellectual stratum. The membership

Footnote 50 continued

(Chengdu: Sichuan University, 2001), available at: http://www.greensos.org/mess_org/report/view/html/content/ (accessed 6 April 2002).

51. Friends of Nature, *A Survey Report on the Membership of Friends of Nature in 2004*, available at: <http://www.fon.org.cn/index.php?id=4839> (accessed 25 January 2005).

52. Peter Ho and Richard Louis Edmonds, 'Perspectives of time and change: rethinking embedded environmental activism in China', *China Information* 21(2), (2007), pp. 331–344.

53. Besides political constraints, there is also the problem of capacity. Often, NGOs are constrained to work in certain areas because they do not have the organizational capacity to work on others, such as rural pollution. I thank Jennifer Holdaway for pointing this out to me.

54. The middle class in urban China is not exactly the same as the middle class in Western industrialized societies. Chinese and Western scholars have both emphasized that this new middle class is primarily made up of salaried professionals. See Luigi Tomba, 'Creating an urban middle class: social engineering in Beijing', *The China Journal* no. 51, (2004), pp. 1–26.

also includes scientists, accountants, management personnel, doctors, lawyers, engineers, salespeople, and office clerks. Only 13 (2%) of the 618 respondents identify themselves as workers.⁵⁵

The sociological characteristics of Chinese ENGOs influence the kind of issues they are engaged in. The largely urban and middle-class character of Chinese ENGOs is a source of both weaknesses and strengths. On the one hand, the middle class background of Chinese environmentalists and their strong educational and professional credentials and experiences are essential cultural and social resources. These resources enable them to reach out to Chinese and international media. On the other hand, it partly explains why ENGOs tend to focus on urban environmental concerns rather than the more challenging issues of rural pollution. Their physical location shapes their social location and their scope of action.

Given both the political and social constraints facing Chinese ENGOs, it is notable that a few organizations nonetheless devote their work to the more challenging issues of pollution. The most influential case is the Center for Legal Assistance to Pollution Victims (CLAPV) led by Wang Canfa. As its name indicates, the Center uses litigation to defend the rights of pollution victims. Other cases include Guardians of River Huai, the Water Pollution Map created by the Institute of Public and Environmental Affairs (IPE), and the Pesticide Eco-Alternative Center (PEAC) in Yunnan.⁵⁶ With the exception of CLAPV, which was founded in 1998, the others are all recent start-ups. PEAC was set up in 2002, the Guardians of River Huai started in 2003, while IPE was formed as recently as in 2006.

Although the number of NGOs working on pollution issues is far too small compared to the numerous other NGOs specializing in other issue areas, the fact that they are in operation at all suggests that small groups of activists are pushing the boundaries of environmental contention and taking on more challenging issues related to environment and health. In each case, entrepreneurial leadership is crucial. The case of IPE certainly has something to do with the celebrity status of its founder Ma Jun. Ma was selected in 2006 by *Time* as one of 100 people who shaped the world for his work on the water crisis in China. Besides an entrepreneurial spirit, many NGO leaders like Huo Daishan, the founder of the Guardians of River Huai, demonstrate admirable civic courage. A photo-journalist by profession, Huo resigned from his job in 1998 at the age of 46 to devote himself full-time to the protection of the river of his homeland and has persisted in his efforts ever since. He experienced financial difficulties, harassment and threats because of his exposure of local polluting factories, yet he refused to give in. He finally founded his own NGO in 2003 and has won public recognition and support for his courage and persistence.⁵⁷

55. Friends of Nature, *A Survey Report on the Membership of Friends of Nature in 2004*.

56. On this last case, see Katherine Morton, 'Transnational advocacy at the grassroots: benefits and risks of international cooperation', in Peter Ho and Richard Edmonds, eds, *China's Embedded Activism: Opportunities and Constraints of a Social Movement* (London: Routledge, 2008), pp. 195–215.

57. For an introduction to Huo and his work and organization, see <http://www.greenngo.cn/company.php?comid=21> (accessed 30 August 2008).

'Netizens' as issue entrepreneurs

Given the political constraints facing the mass media, it is necessary to consider alternative media channels for issue creation. In recent years, influential public opinion has been generated through the Internet. How do China's Internet users, or netizens (*wangmin*) as they are often called, respond to environment-related health issues? What role do netizens play in bringing such issues into the public sphere?

The frequent 'Internet incidents' (*wangluo shijian*) in recent years indicate that Chinese netizens tend to speak out on issues of wide public resonance. Numerous issues are brought into Chinese cyberspace and discussed daily, yet only some of them provoke radical public responses. Most are flooded by the oceans of online postings and never get a chance to be read. One reason is that they lack resonance. Generally speaking, issues that are more relevant to the everyday experiences of the larger population, that appeal emotionally to the moral sense of right or wrong, and that have more concrete attribution of blame, have higher degrees of resonance.⁵⁸ Take several recent cases as examples. The exposure and public outrage in the cases of the chemical pollution of the Songhua River in 2005, the 'black kiln' incident in 2007, and the 'tainted milk' crisis in 2008 all involve the participation of large numbers of netizens. They discuss and debate about these issues in online bulletin boards and online communities, thus taking the issues beyond the officially guided coverage of the mainstream mass media.⁵⁹

The 'black kiln' case is illuminating in this respect. The slave labor issue involved in this case had already been exposed in television stories aired in Henan province, but it attracted national attention only after a posting appeared in the popular online communities of *Tianya.cn*.⁶⁰ The posting attracted wide attention partly because of the horrible conditions it described, but it is also because it described the conditions in a particularly graphic and emotionally stirring style. Titled 'Who Will Save Our Children?' the posting expressed anger and frustration at the inability and even reluctance of the local police to help the parents to find their missing children and pleaded:

We are the fathers of the lost children. We want to find and save our children . . . , but we feel powerless. Our children face life dangers at this very moment . . . This is an issue of life and death. Who can help us?⁶¹

An incident in the 'tainted milk' crisis shows the importance of the Internet from a different perspective. According to media reports, Sanlu, a milk producer linked to tainted milk, attempted to give China's largest search engine Baidu a half-million-dollar public relations payment in return for Baidu deleting negative reports related

58. On frame resonance, see David A. Snow and Robert D. Benford, 'Ideology, frame resonance, and participant mobilization', *International Social Movement Research* 1, (1988), pp. 197–218. On issue resonance, see Keck and Sikkink, *Activists beyond Borders*.

59. On the guided coverage of critical social issues in the mass media, see Xiaoling Zhang, 'Reading between the headlines'.

60. Shi Zengzhi and Yang Boxu, 'Civicness as reflected in recent "Internet incidents" and its significance', in Beijing University Civil Society Research Center, ed., *Zhongguo gongmin shehui fazhan lanpi shu [Blue Book of Civil Society Development in China]* (Beijing: Beijing University Press, 2008, pp. 360–372).

61. See <http://cache.tianya.cn/publicforum/content/free/1/935630.shtml> (accessed 30 January 2008).

to the producer.⁶² Baidu allegedly rebuffed the deal, but netizens indicated that for some time in early September 2008, it was hard to find negative stories about Sanlu on Baidu.⁶³

‘Internet incidents’ have both an organized and an unorganized aspect. They are unorganized in that they often happen when Internet users spontaneously speak out or protest about critical social issues. This happens most when the issues are resonant with large numbers of people and provoke popular anger or outrage. They are organized because they often have organizational settings, notably popular online communities. This is true of almost all the major cases in recent years. To the extent that netizens mobilize through online communities, these communities themselves exert significant influences. The business firms that run these online communities can guide and shape the discourse in these communities. They often do so out of both commercial and political considerations, because they have to follow state regulations and policies. The ability of netizens to generate publicity about environment-related health issues, therefore, is related both to the nature of the issues and to the interests of the business firms that operate online communities.

Conclusion: brokering environment and health

The central argument of this paper is that issue creation depends on the resources and strategies of issue entrepreneurs and issue-specific political opportunities. I analyzed four types of issue entrepreneurs—media professionals, urban NGOs, netizens, and villagers. Of these, villagers are the most adversely affected and yet have the least resources. The first three types of entrepreneurs have more resources, but they are constrained by political and social conditions. State control over media and over NGO development limits what they can do. The need to maintain political legitimacy in their operations means that they will seek issue-specific political opportunities in their activism. In addition, their urban and middle-class locations mean that they are more directly concerned with issues of interest to the middle-class rather than the poorest of the poor. Netizens appear to have greater latitude in speaking out, yet the resonance of the issues and the openness of the Internet itself matter as well.

My analysis indicates that a major gap on the agenda of environmental protection in China today may be an information gap. This gap exists at multiple levels—between the rural and the urban population, between local and central governments, between citizens and governments, and between media and citizens. There is also a gap among issues, notably between environmental issues and health issues. The lack of media coverage of ‘environment and health’ and the focus on non-health related environmental issues among media professionals and environmental NGOs reveal this gap. The villagers’ desperation in defending themselves and their families from the harms of their polluted environment also betrays this gap. Brokering all these gaps will be a major challenge for Chinese society as a whole, as well as for the issue entrepreneurs I have studied.

62. Ariana Cha, ‘Public anger over milk scandal forces China’s hand’, *The Washington Post*, (19 September 2008), p. A13.

63. Fu Jianfeng, *Let Me Skin Sanlu Alive: The Notes of a News Editor about the Sanlu Tainted Milk Powder Case*, (14 September 2008), available at: http://zoniaeuropa.com/20080920_1.htm (accessed 15 October 2008).