An Emerging Environmental Movement in China?*

Phillip Stalley and Dongning Yang

ABSTRACT In recent years scholars have grown increasingly interested in the potential for a contentious environmental movement in China. This article explores the beliefs of university students in Beijing and finds that there is little likelihood of environmentalism among students transforming into an independent grassroots movement or becoming a source of pressure for political change.

In recent years, scholars and policy makers have focused increasing attention on environmentalism in China. One question underlying much of this scholarly interest is whether there exists in China the potential for a green social movement characterized in traditional terms of contentious political action (such as social resistance and protest, mass mobilization, public pressure lobbying, and so on). Since the 1990s China has developed an active green community, but one which lacks the sustained confrontational element commonly associated with environmental movements in other parts of the world. Most scholars explain China's lack of confrontation through an examination of non-governmental organizations (NGOs), their activist leaders and the various political constraints on their actions. While not denying the importance of environmental social organizations, this article suggests a new avenue of research that gives attention not only to potential leaders of an environmental movement (that is the NGOs), but also likely participants. Towards this end, it presents the results of a survey of university students designed to gain a sense about the likelihood of involvement in a contentious environmental movement. It finds that there is a small probability of university students joining a confrontational environmental movement. The article concludes with a brief discussion of avenues for future research.

Environmentalism without Sustained Conflict

China today is experiencing dynamic environmentalism, but no environmental movement. The spread of environmentalism, defined simply as concern and work for the protection of the natural ecology, is evident across Chinese society from the upper echelons of government to grassroots social organizations. Peter Ho documents

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the gradual "greening" of the Chinese state and shows how, particularly since the 1990s, the central government has become a good deal more serious about combating environmental degradation.[1] The result of this change is that that in the last two decades China has developed virtually from scratch an environmental protection regime that today includes approximately 20 laws, 40 regulations, 500 standards and 600 other legal norm-creating documents related to environmental protection and pollution control. In addition, there are approximately 1,000 local environmental regulations and China is party to 80 environmental treaties.[2] According to Zhang and Ferris, "most subjects or activities generally considered to be within the purview of environmental law have been covered to some extent in China by one or more legal norm-creating documents."[3] This is not to say that China's environmental protection regime is perfect – or even adequate. It exhibits well-documented weaknesses, most notably in enforcement. Nevertheless, China has taken significant strides towards the development of an environmental protection regime, which has provided space for and helped spur the growth of environmentalism across Chinese society.

The most notable sign of this growing environmentalism is the increase in environmental NGOs. It is estimated that there are at least 2,000 official environmental NGOs, although it is difficult to produce an exact number as many organizations choose not to register officially.[4] In addition, green student groups have multiplied rapidly in recent years. At the end of 1997, there were 22 student environmental groups. Only six years later, student groups were present in 176 universities across 26 provinces and one in each of China's top 40 universities.[5] Alternate manifestations of burgeoning environmentalism include greater media coverage of environmental issues and increased environmental participation by the general

1. Peter Ho, "Greening without conflict: Environmentalism? NGOs, and civil society in China," *Development and Change*, Vol. 32 (2001), pp. 893–921. For other interesting overviews of changes in central government policy, see: Elizabeth Economy, *The River Runs Black: The Environmental Challenge to China's Future* (Ithaca: Cornell University Press, 2004); Richard Lotspeich and Aimin Chen, "Environmental protection in the People's Republic of China," *Journal of Contemporary China*, Vol. 6, No. 14 (1997), pp. 33–59; Lester Ross, "The politics of environmental policy in the People's Republic of China," *Policy Studies Journal*, Vol. 20, No. 4 (1992), pp. 628–642.

2. Hongjun Zhang and Richard J. Ferris, "Reaching out to the rule of law: China's continuing efforts to develop an effective environmental law regime," *William & Mary Bill of Rights Journal*, Vol. 11 (2003), p. 569; Lester Ross, "The next wave of environmental legislation," *The China Business Review*, Vol. 21, No. 4 (1994), pp. 30–38.

3. Zhang and Ferris, "Reaching out to the rule of law," pp. 585–86.

4. Peter Wonacott, "Growing pains: green groups bloom in China," *Wall Street Journal*, 15 June 2004.

5. Hongyan Lu, "Bamboo sprouts after rain: the history of student environmental associations in China," *China Environmental Series*, Vol. 6 (2004).

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population (such as in lodging environmental complaints and bringing forward environmental court cases).[6]

But while environmentalism is evident, China is not in the midst of an environmental social movement. Without delving into an extended review of the copious literature,[7] one can state that a necessary element of a social movement is what Tarrow calls sustained "contentious collective action." As Tarrow states, "collective action becomes contentious when it is used by people who lack regular access to institutions, who act in the name of new or unaccepted claims, and who behave in ways that fundamentally challenge others or authorities."[8] The types of behaviour that constitute contentious action and collective challenges vary across historical and political settings, but contentious action is nevertheless a *sine qua non* of social movements. Even in non-democracies contentious environmental movements have sprouted.[9] This is not to say that contention alone defines a social movement or that social movements are characterized only by contentious actions. Tarrow notes that those involved in a social movement typically conduct many kinds of activities, some of which may be entirely apolitical or in accordance with authorities. The point is simply that in the absence of sustained contentious action, it is hard to speak of a social movement.

6. Anna Brettell, *The Politics of Public Participation and the Emergence of Environmental Proto-movements in China* (University of Maryland, 2003); Economy, *River Runs Black*; Jennifer L. Turner and Fengshi Wu, *Green NGO and Environmental Journalist Forum: A Meeting of Environmentalists from Mainland China, Taiwan, and Hong Kong April 9–10, 2001* (Washington DC: Woodrow Wilson Center, 2001).

7. For a good overview of just how broad and varied the social movement literature is as well as a sense of the diversity of factors that influence the development of social movements: John S. Dryzek, *Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany, and Norway* (Oxford: Oxford University Press, 2003); Doug McAdam, John D. McCarthy and Mayer N. Zald, *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings* (Cambridge: Cambridge University Press, 1996); David S. Meyer, Nancy Whittier and Belinda Robnett, *Social Movements: Identity, Culture, and the State* (Oxford: Oxford University Press, 2002); Sidney Tarrow, *Power in Movement: Social Movements and Contentious Politics* (Cambridge: Cambridge University Press, 1998).

8. Tarrow, *Power in Movement*, p. 3.

9. See for instance: Barbra Cellarius and Caedmon Staddon, "Environmental nongovernmental organizations, civil society, and democratization in Bulgaria," *East European Politics and Societies*, Vol. 16, No. 1 (2002), pp. 182–222; Michael Hsin-huang Hsiao, "The rise of social movements and civil protests," in Tun-jen Cheng and Stephan Haggard (eds.), *Political Change in Taiwan* (Boulder: Lynne Riener Publishers, 1992); Michael Hsin-huang Hsiao, "Environmental movements in Taiwan," in Yok-shiu F.Lee and Alvin Y.So (eds.), *Asia's Environmental Movements* (Armonk, NY: M.E. Sharpe, 1999); Barbara Jancar-Webster, "Environmental movement and social change in the transition countries," in Susan Baker and Petr F. Jehlicka (eds.), *Dilemmas of Transition : The Environment, Democracy and Economic Reform in East Central Europe* (Portland, OR: Frank Cass, 1998); Nick Manning, "Patterns of environmental movements in Eastern Europe," *Environmental Politics*, Vol. 7, No. 2 (1998), pp. 100–133; Andrew Tickle and Ian Welsh, *Environment and Society in Eastern Europe* (Harlow, Essex: Addison Wesley Longman, 1998); Katy Lang-Pickvance, *Democracy and Environmental Movements in Eastern Europe: A Comparative Study of Hungary and Russia* (Boulder, CO: Westview Press, 1998).

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Furthermore, in order to move beyond mere protest into the category of social movement, collective challenges must be sustained. There is no pre-determined amount of time that once reached allows one to label a protest as "sustained." Nor does sustained indicate perfectly constant. Environmental movements, particularly contentious periods, will ebb and flow, so that determining whether a movement can be deemed "sustained" requires examination of specific contexts. The emphasis on "sustained" is simply for the purpose of differentiating unorganized or narrow forms of contention – such as a rash of worker strikes, urban riots or a campaign – from a larger social movement. While an incident such as a protest might be an indication of an impending or even ongoing social movement, it alone does not constitute a movement. Nor does a campaign – which is typically focused on a particular, narrow goal (such as save the Tibetan antelope) – even though it may be contentious and prolonged.

Chinese environmentalism fails to conform to this definition of a social movement because, to date, it lacks sustained contention. This is not to say China is devoid of conflict over environmental issues. NGOs and sympathetic members of the media have on occasion conducted campaigns challenging a government policy or at least implicitly criticizing government failure to enforce environmental protection laws.[10] Some of these efforts, such as the campaign to protect the Yunnan snub-nosed monkey, lasted several years. Furthermore, in recent years there has been a growing number of environmental protests, particularly over dam projects.[11] A simple comparison between the largely unsuccessful efforts of activists against the Three Gorges Dam with recent, more influential efforts against dams on the Nu River (Nu jiang 怒江), Tiger Leaping Gorge (Hutiao xia 虎跳峡), Pubugou (瀑布溝) and other locations shows the increasing influence of environmental NGOs.

However, most of the protests have been spontaneous responses to a local policy or a particular polluting factory. NGO-led campaigns have had varying degrees of success and have undoubtedly inspired many across China, but they have not developed into a movement that has survived and broadened beyond the campaign's immediate goal. Incidents of environmental conflict have remained sporadic, fragmented and geographically contained. In contrast, in Hungary, for example, a country the size of a Chinese province, the Danube Circle grew out of opposition to the Nagyoramos dam in the latter half of the 1980s and "attracted millions of sympathizers, signatures on petitions, and tens of thousands of demonstrators." The Danube Circle and other organizations went on to challenge the central

10. Economy, *River Runs Black*, pp. 131–166.

11. Elizabeth Economy, "China faces a flood of environmental protests of dam policy," *Taipei Times*, 2004; Jing Jun, "Environmental protests in rural China," in Elizabeth J.Perry and Mark Selden (eds.), *Chinese Society: Change, Conflict, and Resistance* (London: Routledge, 2000); J.Yardley, "Chinese project pits environmentalists against development plans," *New York Times*, 3 January 2005.

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government directly not only on the construction of the dam, but a variety of environmental issues, eventually expanding to become "a centre with an interest in a wider circle of environmental problems."[12]

Moreover, despite the great attention given to protests, very little of China's environmental activity is actually contentious. While the government cannot completely ignore public opinion, there is no network of organizations or individuals who are a persistent source of external pressure on environmental policy or who are currently able to link China's scattered protests and campaigns into a broader environmental movement. NGOs played a part in January 2005 when SEPA ordered the closure of 30 large-scale infrastructure projects which had failed to complete adequate environmental impact assessments. However, this incident may be more an example of NGOs playing a supporting role in a bureaucratic power struggle than a sign of a growing environmental movement.[13] In many other arenas, such as the environmental aspects of preparation for the Beijing Olympics, NGOs have been largely marginalized in the consultative process. Elizabeth Economy admirably describes the work of China's environmental activists, but the reality is that most working in the environmental arena do not seek to challenge the government or even influence policy. Rather, they are focused on apolitical campaigns (such as battery recycling) or enhancing environmental awareness. Though designed as membership organizations, NGOs make few efforts to increase membership or mobilize members in any area beyond education campaigns. Beijing Global Village, one of the most prominent environmental NGOs, maintains a list of only about 100 volunteers of which around 20 are considered regular contributors.[14] Many of China's environmental organizations, even government-organized NGOs (GONGOs) possess some degree of freedom. Even so, they remain closely tied to the state and largely perform functions in line with central government policies. Knupp states, "many newly established social organizations have achieved a relatively high degree of autonomy, *as long as the organization's activities support the overall goals and policies of the state*" (emphasis added).[15] In other words, NGOs are free to perform the errands of the state.

12. Lang-Pickvance, *Democracy and Environmental Movements*, pp. 85, 87.

13. Some have noted that SEPA's growing boldness is more a function of its outgoing vice-administrator (Pan Yue) and his desire to increase SEPA's profile than a result of the external pressure of an environmental movement. Nailene Chou Wiest, "Green watchdog's chief not afraid to flex his muscles," *South China Morning Post*, 12 March 2005; Ray Cheung, "Watchdog is still a paper tiger, green bodies claim," *South China Morning Post*, 6 May 2005.

14. In interviews with environmental student groups and NGOs, including Friends of Nature and Beijing Global Village, all interviewees responded to the question "how do you find members?" with some variant of the answer "they find us." Staff members working for these groups tell a similar story. Most state they saw television coverage of some environmental event and then contacted the group on their own. Author interviews, November 2002.

15. Elizabeth Knupp, "Environmental NGOs in China: an overview," *China Environment Series*, Vol. 1 (1997), pp. 9–16.

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Explaining China's Environmentalism

This unique mix – growing environmentalism without widespread contention – makes China an interesting study not only for area studies scholars and political scientists, but also for researchers and practitioners of environmental movements. Why is the contentious element lacking in China? Is it simply matter of time and the case that China's environmental movement is in its nascent stages? Or are there other factors steering China's environmentalism in a direction different from the contentious movements seen in much of the rest of the world?

Given the fact that environmentalism is a relatively recent phenomenon in China – no environmental NGO pre-dates the 1990s – it is not surprising that there is relatively little literature on the political implications of China's environmentalism. Within the small body of existing work, most scholars focus their efforts on NGOs, activist leaders and government regulations restricting NGO activity. One example is Elizabeth Economy, who has written extensively on China's environmental politics and who, perhaps more than any other scholar, emphasizes the conflictual element of Chinese environmentalism. Economy hints at the possibility that China's environmentalism will develop into a wider, more confrontational movement that will not only become a player in the environmental arena but also serve as an agent of larger political change (especially democratic reforms). She portrays the Chinese environmental community as extremely active, though she concedes that it is still controlled and has "yet to challenge central government policy."[16] However, Economy contends that "the environmental NGO community in China has become adept at expanding the boundaries of the permissible while avoiding government censure."[17] Noting that the future development of China's environmental movement "will depend largely on the outlook of the next generation of environmental activists," she points to the fact that young environmentalists are "open and aggressive" and "possess the full complement of skills necessary to organize effectively."[18] In short, Economy argues it is quite possible China's environmentalists will hasten the process of breaking down the political barriers currently preventing a larger environmental movement. This view is popular with others and has been given some play in Western media.[19]

16. Economy, *River Runs Black*, p. 136. See also Elizabeth Economy, "China's environmental challenges," House International Affairs Committee, Subcommittee on Asia and the Pacific, 22 September 2004.
17. Economy, *River Runs Black*, pp. 135–36.
18. *Ibid.* pp. 166, 169, 173.
19. Nick Young, "Green groups explore the boundaries of advocacy," The China Development Brief, available at http://www.chinadevelopmentbrief.com, accessed 1 August 2004; B. Sand, "China's green activists could change China's political culture," Voice of America, available at http://www.axcessnews.com, accessed 6 January 2005; Joanne Bauer, "Fighting for the environment – and getting democracy," Carnegie

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Peter Ho has similar concerns, but draws different conclusions. Ho gives extensive discussion to the government's restrictions on NGOs and argues that government control is a major factor explaining the docility of China's environmental movement. In contrast to Economy, however, he does not emphasize the manner in which the environmental community is pushing the barriers of government control. Rather, Ho sees China's environmental community following a different path from the traditional one followed by environmental movements in much of the rest of the world. He observes that "green social organizations are increasingly courting government approval and influence in policy-making, rather than seeking a potentially dangerous confrontation with the national state."[20] The principal reason is that working in co-operation with the government, rather than challenging it directly, allows China's environmental leaders an avenue of influence. The implication is that the environmental community has less incentive to push for a change in the system and a traditional environmental movement is unlikely.

Anna Brettell, whose work most directly addresses the question of whether China's environmentalism will develop into a social movement, argues that China exhibits proto-environmentalism. Starting from the definition of a social movement given by Tarrow and discussed in the previous section, Brettell defines a proto-movement as one that contains all the elements of traditional Western social movements but which is constrained by limitations in the "political opportunity structure," and until that position changes the movement remains "proto."[21] Limitations in the political opportunity structure include lack of elections and political parties, restrictions on social organizations and the media, and lack of civil society. Brettell sees certain factors as potentially changing the political structure in a manner favourable to an environmental movement (such as development of environmental laws, NGO activity), but on the whole the conclusion one draws from her work is that in the absence of prior political reform, an environmental movement will not form in China.

The above-described works represent much of the thinking on environmentalism in China and are typical in that they explain the likelihood of a Chinese environmental movement through a focus on political constraints, largely on NGOs. Undoubtedly, government constraints on NGOs, the media and society at large go a long way

footnote continued

Council on Ethics and International Affairs, available at http://www.carnegiecouncil.org/, accessed 6 January 2005.

20. Ho, "Greening without conflict?" p. 917.

21. Brettell, *The Politics of Public Participation*, pp. 4, 35–36, 68, 415. Brettell is not entirely clear on what she means by "constrained," but presumably it is in terms of the movement's size, level of contention, and/or length of duration. See also A. Brettell, "Environmental non-governmental organizations in the People's Republic of China: innocents in a co-opted environmental movement?" *Journal of Pacific Asia*, Vol. 6 (2000), pp. 27–56.

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towards explaining the nature of China's environmentalism and the limited oppositional role played by the environmental community. Each of these works provides important insights into the nature of China's environmentalism. However, because they focus more on the likely leaders of an environmental movement and less on the potential supporters, they do not paint a complete picture. They do not answer questions such as the following. If China's environmental activists were freer to lead, who would follow? If China's environmental activists are attempting to create a more oppositional environmental movement, as Economy and others aver, can they expect to find assistance from the general population? If so, from which segment(s) will support come? Will popular sentiment push those within the environmental community, who Ho describes as currently content working inside the system, to challenge government policy more openly? Put another way, the works cited above do not investigate the issue of whether among key segments of the population there is strong desire, tepid support or patent disinclination for a more contentious environmental movement. Ho and Brettell do not address the issue of popular support for a contentious movement; Economy, like many others, simply assumes it exists. If scholars are to understand fully the political repercussions of China's environmentalism there is a need to expand the scope of inquiry and explore how those other than environmental activists view China's ecological dilemma. The research presented below attempts to take a small step toward this goal.

The Research Project

The research project consists of an attitude survey of university students in Beijing designed to provide insight about student support for a contentious environmental movement. With so limited a research scope it can offer only suggestions, not definitive claims, about China's overall environmental movement. However, it seeks to provide insight into a group that is potentially important to an environmental movement and in the process encourage scholars to begin the process of looking outside the NGO and activist community for insights into China's environmentalism.

Why an attitude survey? There are many factors that influence whether a country experiences an environmental social movement. The nature and support of its social base is one critical factor. As noted above, scholars such as Elizabeth Economy have argued that China possesses a growing number of environmental activists and NGOs who are eager to foster a more aggressive environmental movement. It almost goes without saying that these activists are more likely to succeed if they have broad public support or the backing of key segments of the population. Attitude surveys have the potential to reveal the extent of support within a particular slice of the population for an environmental movement. This is not to argue that strong pro-environmental beliefs alone generate an environmental movement

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or even translate into environmentally friendly behaviour at the individual level. One cannot leap directly from beliefs to behaviour and the relationship between the two is often complicated.[22] However, concern for the environment as a political issue is a necessary starting point for a Chinese environmental movement. Academic debates about environmentalism and post-material values, studies of eco-nationalism, and the great emphasis placed on environmental education by NGOs across the world all attest to the close connection between environmental beliefs and behaviour.[23] Recognizing the importance of attitudes, several authors have recently utilized survey research to shed light on political phenomena in China.[24] However, to date few have looked at attitudes in the environmental arena.[25]

Why university students in Beijing? University students in Beijing were selected first because they are an important influence in Chinese politics and represent China's future. As Zhao Dingxin has recently written, "The political attitudes of today's Chinese students will shape tomorrow's Chinese politics."[26] University students have a long history of shaping Chinese politics and within the China studies literature, there is a significant body of work exploring the political role of students.[27]

22. Karl-Werner Brand. "Environmental consciousness and behavior: the greening of lifestyles," in Michael Redclift and Graham Woodgate (eds.), *The International Handbook of Environmental Sociology* (Northhampton, MA: Edward Elgar Publishing, 2000).

23. For a good introductions to eco-nationalism see J. Dawson, "Anti-nuclear activities in the USSR and its successor states: a surrogate for nationalism," *Environmental Politics*, Vol. 3 (1995), pp. 441–456.

24. Hon S. Chan and Kenneth K.K. Wong, "Environmental attitudes and concerns of the environmental protection bureaucrats in Guangzhou, People's Republic of China: implications for environmental policy implementation," *International Journal of Public Administration*, Vol. 17, No. 8 (1994), pp. 1523–1554; Bruce J. Dickson, *Red Capitalists in China: The Party, Private Entrepreneurs, and Prospects for Political Change* (Cambridge: Cambridge University Press, 2003); Paul Nesbitt-Larking and Alfred L. Chan, "Chinese youth and civil society: the emergence of critical citizenship," in Timothy Brooks and Michael Frolic (eds.), *Civil Society in China* (Armonk, NY: M.E. Sharpe, 1997); Tianjian Shi, *Political Participation in Beijing* (Cambridge, MA: Harvard University Press, 1997); Dingxin Zhao, "An angle on nationalism in China today: attitudes among Beijing students after Belgrade 1999," *The China Quarterly*, No. 172 (2002), pp. 885–905.

25. One notable exception is Carlos Wing Hung Lo and Sai Wing Leung, "Environmental agency and public opinion in Guangzhou: the limits of a popular approach to environmental governance," *The China Quarterly*, Vol. 163 (2000), pp. 677–703.

26. Dingxin Zhao, "An angle on nationalism," p. 888.

27. In addition to the voluminous literature on the June 4 movement, which is too extensive to be cited, recent studies exploring the political role of China's youth include: Thomas B. Gold, "Youth and the state," in Brian Hook, *The Individual and the State in China* (Oxford: Clarendon, 1996); Merle Goldman, "The potential for instability among alienated intellectuals and students in post-Mao China," in David L. Shambaugh, *Is China Unstable?* (Armonk, NY: M.E. Sharpe, 2001); Nesbitt-Larking and Chan, "Chinese youth and civil society"; Kenneth K.K. Wong, "The environmental awareness of university students in Beijing, China," *Journal of Contemporary China*, Vol. 12, No. 36 (2003), pp. 519–536; Herbert S. Yee, *The Political Culture of China's University Students: A Comparative Study of University Students in Mainland China, Hong Kong, Macau, and Taiwan* (Commack, NY: Nova Science Publishers, 1999).

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Several scholars have pointed to the importance of college students in pushing forward China's environmental movement.[28] Yang notes that 10,000 college students' signatures on a petition against a series of dams on the Nu River were a critical element in the success of the campaign. Furthermore, though typically led by intellectuals and accomplished professionals, environmental movements are often heavily composed of well-educated young people.[29] University students were active in many of Eastern Europe's environmental movements. Over half the participants in the Reflex campaign, which began in Hungary in 1984 as environmental education initiative, were under the age of 25.[30] Therefore, when the goal is to provide insight into possibilities of the development of a contentious environmental movement, it makes sense to focus on well-educated young people. That said, university students in Beijing represent a small portion of the Chinese population and are certainly not the only potential supporters of an environmental movement. Apart from university students in other cities such as Kunming (昆明), which like Beijing is a locus of environmental activity, there are other segments of the population that are potential contributors to an environmental movement (see below). It is hoped that the research presented here will induce scholars to examine in detail some of these other groups.

The survey. The survey design was stratified sampling. Schools were divided into categories based on their speciality and then randomly selected within each category. Because virtually all students in Beijing live on campus, respondents were randomly selected based on their dorm and room number. In total, 715 students at 22 universities took part in the survey in December 2002. Some 51 per cent of the respondents were female and all four school years were represented approximately equally, although sophomores accounted for 29 per cent of the sample and seniors 17 per cent. The average age of the sample is 20. Students from all 32 of China's provinces, autonomous regions and municipalities (with the exception of Taiwan) are represented in the sample, which reflects the extent to which universities in Beijing draw students from across the country. Though inferences from the sample must be limited to university students in Beijing, the fact that 32 administrative regions are represented does allow for at least some conjecture on students across the country.

28. Wonacott, "Growing pains"; Economy, *River Runs Black*; Guobin Yang, "Global environmentalism hits China: international and domestic groups join forces to combat environmental woes," Yale Global, available at http://yaleglobal.yale.edu, accessed 6 January 2005; W.Bo, "China's young green warriors," *Time Magazine*, 23 October 2000.

29. Exceptions include Japan's pollution protests in the 1970s and Russia in the 1980s, both of which had few young participants.

30. Pickvance, *Democracy and Environmental Movements*, p. 93.

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The goal of the survey is to probe the extent to which university students are likely to support a contentious environmental movement. This first requires assessing the extent to which the environment is a salient issue for university students. Presumably, if the environment is beyond the margins of students' interests, or ranks low on their list of priorities, they are unlikely to bear the costs necessary to become supporters or participants in an environmental movement. To gauge the salience of the environment as a social issue, students were asked questions about fundamental beliefs concerning the relationship between humans, science and nature. The questions were based on the New Environmental Paradigm (NEP) scale. The NEP survey, first developed in 1978, has been used all over the world in order to gauge the ecological consciousness of populations.[31] It consists of 12 items that probe basic beliefs about the importance of harmony with nature, the need for limits to growth and the balance of nature. Students were also asked to rank a list of social issues, one of which was environmental protection, in terms of importance.

The second step is to probe the extent to which students are critical of the government's current environmental protection efforts and the extent to which they believe non-government channels provide better alternatives. Gauging critical attitudes was tricky. Though we would have liked to ask direct questions about the extent to which students approve of government environmental efforts, political sensitivity necessitated that we approach the issue more indirectly. Therefore, we presented students with a variety of items that probed attitudes about government efforts, such as ranking causes of environmental damage in which one choice included government policies. We also asked questions to gauge the extent to which their environmental beliefs and priorities mirror those of the government. For instance, we asked students to rank in order of importance ways of solving environmental problems. We also included several test questions to gauge the extent of knowledge about the environment. The results are presented below.

Findings

The survey results indicate that protecting the environment is a salient issue for university students in Beijing, who demonstrate a

31. See for example Chan and Wong, "Environmental attitudes and concerns"; Victor Corral-Verdugo and Luz I. Armendariz, "The 'new environmental paradigm' in a Mexican community," *Journal of Environmental Education*, Vol. 31, No. 3 (2000), pp. 25–31; Riley E. Dunlap and Kent D. Van Liere, "The new environmental paradigm: a proposed measuring instrument and preliminary results," *Journal of Environmental Education*, Vol. 9 (1978), pp. 10–19; Andrzej Furman, "A note on environmental concern in a developing country," *Environment and Behavior*, Vol. 30, No. 4 (1998), pp. 521–536; Roxanne Lalonde and Edgard L. Jackson, "The new environmental paradigm scale: has it outlived its usefulness?" *Journal of Environmental Education*, Vol. 33, No. 4 (2002), pp. 28–36; Paul C. Stern, Thomas Dietz and Gregory A. Guagnano, "The new ecological paradigm in social-psychological context," *Environment and Behavior*, Vol. 27, No. 6 (1995), pp. 723–743.

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remarkably high level of environmental consciousness even when compared to other countries. This can be seen in Table 1, which presents the NEP portion of the survey and also compares the results with other surveys that have used the NEP scale. Though these surveys were conducted at different times, the fact that each used the NEP scale allows for some interesting comparisons.

In terms of "balance of nature" (NEP 1-4) and "man over nature" (NEP 9-12), Chinese college students display an extraordinarily high regard for the environment. Among our respondents, support for three of the four NEP statements about balance of nature was stronger than in a survey in which 95 per cent of respondents were from developed countries.[32] Over 98 per cent of the university students believe that mankind must live in harmony with nature (NEP 3) and almost 93 per cent agree that interference with nature can produce disastrous consequences (NEP 2). On this latter question, university students were over 22 percentage points higher than residents of Istanbul, almost 10 points higher than environmental protection bureaucrats in Guangzhou, and virtually the same as members of environmental organizations in the United States. In terms of NEP items measuring beliefs about "man over nature," the results were similar (NEP 9-12).

More importantly, the environment is important even when rated against other issues. As evident in Table 2, when asked to rank six political issues in terms of importance, university students rank protecting the environment second only to controlling the population. Approximately 41 per cent of students list environmental protection as either the single most or second most important issue facing China. In ranking domestic development goals, environmental protection is placed a close third behind promoting scientific advancement and controlling the population. Around 44 per cent of students list environmental protection as either the most or second most important development goal. The conclusion is that there is no major discernible difference in the beliefs about the relationship between man and nature among college students and citizens in much of the rest of the world.

The high level of environmental consciousness demonstrated by students in the survey is consistent regardless of several aspects of the student's background. Students' average score on the NEP was regressed against several variables commonly considered to influence environmental beliefs, including gender, hometown (rural versus

32. Lalonde and Jackson, "New environmental paradigm scale." This was a voluntary internet survey, which conceivably throws into question the validity of the findings. However, assuming that those with strong environmental beliefs are more likely to respond, one would expect that the bias introduced is more likely to be in the direction of excessively pro-environmental, which makes the fact that students in Beijing show equal concern for the environment that much more interesting.

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urban), parents' education level and college major.[33] Only their "major" appears to exert an influence on students' NEP scores: students studying social science, economics or natural science tend to score about 5–6 per cent higher (that is, less environmentally-friendly). There is no discernible difference in students from highly educated versus uneducated families, urban versus rural areas, or between male and female students. The indication is that college students studying in Beijing, regardless of many facets of their upbringing, tend to demonstrate a very high level of concern for the environment. Based on the above, it is clear that students view the environment as an important issue. The question remains whether they perceive environmental issues in a critical fashion.

Despite the importance of the environment to university students, there is minimal evidence that students hold attitudes that will transform into popular pressure on the government. First, as has often been said about the Chinese government itself, students place a great deal of faith in the capacity of economic growth to solve problems. As shown in Table 1, while 49 per cent of university students in Beijing agree with the statement that there are limits to growth beyond which industrialized society cannot expand (NEP 7), only 27 per cent agreed that a healthy economy requires limiting industrial growth (NEP 8); 41 per cent disagree or strongly disagree with the need to limit industrial growth (not shown in the table). This 27 per cent figure compares with 54 per cent among Guangzhou residents, 87 per cent of Istanbul residents, and 92 per cent of American environmental organization members. When asked whether economic growth produces more problems than benefits, only around 24 per cent agree, while almost 35 per cent disagree. Further evidence for the students' faith in economic growth is evidenced by their rank of factors contributing to China's environmental problems (Table 2, issue 3). Over 55 per cent of the students cite the pace of economic development as the least or second least important factor. While the environment is perceived by students as the second most serious problem facing China, economic development outranked environmental protection in terms of domestic development goals, although the difference is small (Table 2, issues 1 and 2). Moreover, only 9 per cent of the students list economic development as either the first or second most important contributor to environmental degradation and

33. NEP scores range from 1 (most environmentally friendly) to 5 (least environmentally-friendly). The average NEP score for the overall sample was 1.94. Variables tested in the regression model include: sex, hometown (a dichotomous variable scored "1" if the student stated his or her family's home is in a village), parents' education level (both parents averaged together), and college major. The "major" variable is dichotomous and reflects whether the student majors in languages and literature. This was included in the model because difference of mean tests revealed a statistically significant difference in mean NEP score for those who major in language and literatures versus those who chose other majors (for the six categories of majors see Table 1). In addition to regression, a difference of means tests was also used.

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Table 1: **Comparison of Surveys on NEP Items: "University students in Beijing are equally if not more environmentally-friendly than citizens in much of the rest of the world"**

Items	*Percentage of respondents who "strongly agree" or "relatively agree"*					
	University students, Beijing, China (2002)	*Residents, Guangzhou, China (1996) Beijing University, 1999*	*Environmental protection bureaucrats, Guangzhou, China (1992) Chan and Wong, 1994*	*Residents, Istanbul, Turkey (1995) Furman, 1998*	*Environmental organization members, USA (1976) Van Liere and Dunlap, 1978*	*Internet survey, 23 countries (1996) Lalonde and Jackson, 2002*
Balance of nature						
The balance of nature is very delicate and easily upset. (NEP 1)	63.1	61.6	73.0	93.5	93.4	60.0
When humans interfere with nature it often produces disastrous consequences. (NEP 2)	92.9	68.1	83.0	70.5	92.2	84.4
Humans must live in harmony with nature in order to survive. (NEP 3)	98.0	81.2	94.0	97.9	99.0	92.4
Mankind is severely abusing the environment. (NEP 4)	86.1	70.7	70.0	94.9	98.0	94.2
Limits to growth						
We are approaching or have already surpassed the limit of the number of people the earth can support. (NEP 5)	71.2	61.9	75.0	51.8	93.3	71.7
The earth is like a spaceship with only limited room and resources. (NEP 6)	90.9	63.0	88.0	72.2	99.0	88.7

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There are limits to growth beyond which industrialized society cannot expand. (NEP 7)	49.3	40.0	67.0	38.0	93.1	84.4
To maintain a healthy economy we will have to develop a "sustainable development" economy where industrial growth is controlled. (NEP 8)	27.5	53.5	–	87.2	91.6	72.3
Man over nature						
Humankind was created to rule over the rest of nature. (NEP 9)	17.0	48.1	79.0	42.0	7.7	15.5
Humans have the right to modify the natural environment to suit their needs. (NEP 10)	31.0	54.4	80.0	27.6	20.2	41.9
Plants and animals exist primarily to be used by humans. (NEP 11)	5.5	45.3	34.0	37.3	7.9	10.1
Humans need not adapt to the natural environment because they can remake it to suit their needs. (NEP 12)	2.9	–	25.0	15.7	4.3	11.6

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Table 2: **Ranking the Importance of Social Issues, Development Goals and Factors Affecting the Condition of the Environment**

Issue	*Rank order of student responses (mean)**	*Most important ***	*2nd most important*	*Least important*	*2nd least important*
Domestic problems facing China	Population (2.6) Environment (3.0) Education (3.1) Employment (3.5) Social welfare (4.3) Social stability (4.4)	Controlling population (58.8%)	Protecting the environment (41.3%)	Social stability (31.5%)	Social welfare (26.8%)
Domestic development goals	Scientific progress (2.5) Economic development (2.7) Population control (2.7) Environmental protection (2.8) Social equality (4.1)	Scientific progress (51.6%)	Population control (48.1%)	Social equality (75.9%)	***
Factors contributing to China's ecological degradation in China	Citizens lack environmental awareness (2.4) Overpopulation (3.3) Business pursues own interest and ignores the environment (4.0) Government does not place enough importance on the environment (4.0) Citizens lack legal awareness (4.5) Consumption is increasing rapidly (5.5) Economic development is too fast (6.1) Spillover of ecological problems from other areas (6.6)	Environ-mental awareness of the general public (64.7%)	Over-population (41.8%)	Spillover of pollution from nearby areas (63.9%)	Economic development is too fast (55.6%)

Notes:
* For each question students were given a list of factors and asked to rank them from most to least important. The most important factor was scored 1, the second most important factor scored 2, etc. The numbers in parentheses is the mean. Therefore, the lower the mean, the greater importance students attached to the factor.
** For the "most important" and "2nd most important" columns, the numbers in parentheses represent the cumulative per cent of respondents who ranked the issue either first or second in terms of importance. For example, in row 1 58.8% of respondents listed controlling population as either the most important issue or second most important social issue facing China. For the "least" and "2nd least important" columns, the numbers in parentheses represent the cumulative per cent of respondents who listed the issue as least or second least important.
*** Several responses tied

over 30 per cent list "overly rapid economic development" the last out of seven possible factors (not shown in the table). This is not the first survey to find that Chinese hold strong economic beliefs that undermine support for environmental issues.[34] Our results are also congruent with Chan's survey (2000), which finds that while students are dissatisfied with the government on a number of fronts, they are generally more oriented towards pursuing economic achievement and independence than towards political activism.[35] This finding also lends support to Brettell's work, which lists the general public's belief in the "ideology of economic development" as a factor limiting the likelihood of an anti-pollution movement.[36]

A strong belief in economic development does not inevitably preclude the possibility of an environmental movement, and certainly beliefs about the economy are not exact predictors of propensity for environmental participation. Movements can have many ideational foundations and need not be based on shared doubts about the state's economic development model. Lee and So note, for instance, that Asia's environmental movements have had many different conceptual foundations from religious/moral beliefs to nationalistic aspirations to socioeconomic concerns. Nevertheless, Lee and So also highlight the importance of beliefs about economic development as they summarize the common strands of Asia movements by stating "it is the realization of the connections between rapid industrial development, environmental degradation, and deteriorating life prospects that has led to the 'environmentalization' of many popular social movements."[37] It is also possible that students do not see economic development and environmental degradation as an "either-or" dichotomy, which again might indicate that a strong belief in economic growth allows for participation in an environmental movement. However, environmental issues in the political arena almost inevitably involve choices between a public good (protect the environment) and an economic/consumption goal (such as increase power supplies by building more dams). When push comes to shove and students face the decision of whether to support a movement, they are often presented with the choice of "economy or environment?" For these reasons, the evidence cited above indicates that, other things being equal, there is less likely to be pressure from

34. Ronald Inglehart, "Public support for environmental protection: objective problems and subjective values in 43 societies," *PS: Political Science and Politics*, Vol. 28, No. 1 (1995), pp. 57–72 (see especially Table 3, p. 60).

35. Che-po Chan, "The political pragmatism of Chinese university students at the dawn of the 21st century," *China and Democracy: The Prospect for a Democratic China* (New York: Routledge, 2000).

36. Brettell's discussion of "ideology of economic development" is based on Abigail R. Jahiel, *Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System* (University of Michigan, 1994).

37. Yok-shui Lee and Alvin Y. So (eds.), *Asia's Environmental Movements: Comparative Perspectives* (Armonk, NY: M.E. Sharpe, 1999), pp. 5–6.

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Table 3: **Beliefs about Trends in the Environment: "University students are optimistic about the future"**

Item	*University students in Beijing*		*General public (Beijing University, 1999)*	
	Improve	*Worsen*	*Improve*	*Worsen*
In your estimation, in the last five years how has our country's environmental situation changed?	39.8	47.6	33.4	24.9
In your estimation, in the next five years how will our country's environmental situation most likely change?	53.4	21.0	45.8	11.6

Chinese students on environmental issues so long as government policies are perceived as contributing to growth.

A second reason to doubt the extent to which attention to environmental issues will spur Chinese students to support a more contentious environmental movement is that university students appear quite optimistic about China's ecological situation. As Taiwan's environmental movement took off in the 1980s and early 1990s, surveys revealed that the general public was pessimistic about the possibility of environmental improvement.[38] But as is evident in Table 3, almost 40 per cent of university students believe that China's environment has clearly or moderately improved over the last five years and over half the respondents expect progress over the next five years. By contrast, only 21 per cent expect China's environment to deteriorate over the next five years.

Optimism among the general public shows up in other surveys as well. In a cross-national survey conducted by Beijing University in 1999, only 25 per cent of the general public thought that China's environment had worsened over the last five years and only a little under 12 per cent expected it to deteriorate in the future, while almost half expected it to improve. However, Wong's survey, conducted among 350 students in ten universities in 1998–99, reaches a different conclusion. Wong concludes that university students in Beijing believe that China is an "environmental nightmare" and that only 31 per cent

38. Michael H.-H. Hsiao, "Environmental movements in Taiwan," in *ibid.* p. 33.

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of students expect improvement, while 55 per cent expect decline. The reasons for the discrepancy are not entirely clear, but may stem from Wong's smaller sample size. But perhaps more importantly, Wong's questionnaire itself may have affected the results. Wong asks students to appraise a series of 12 environmental issues in terms of seriousness, ranging from some of the bigger issues such as water pollution and air pollution down to less urgent issues such as the dilapidation of scenic spots.[39] It may be that after being presented with a long list of specific issues, the students felt less optimistic. In any case, the results presented here demonstrate that Chinese university students are not as sanguine about China's environment as the general public, but there is a clear strand of optimism about the prospects for China's environment.[40]

The final piece of evidence against the likelihood of an environmental movement is that the non-governmental sector remains on the margins of many students' awareness. When asked to name a Chinese organization or individual, other than a government bureau or official, that might help protect the Chinese environment over 50 per cent of the students responded "don't know." The percentage answering "don't know" was 6 percentage points smaller when students were asked to name an international organization or individual (other than government) that might help the global environment. One of the most common answers was Greenpeace. By contrast, virtually no Chinese NGOs were given by name.[41]

This inability to name an NGO does not stem from an inattention to environmental issues. On the contrary, university students display an impressive grasp of such issues, which both lends credence to the idea that the environment is an issue of importance and indicates that the students possess sufficient information to make critical assessments. Students were given a series of ten true/false questions testing their knowledge of environmental issues. On all questions more than half the students answered correctly. Over one-third of the sample correctly answered nine or ten out of ten. Only 14 per cent got less than half the questions correct.

39. Wong, "Environmental awareness," p. 525, Table 1.

40. Optimism today can easily become pessimism tomorrow. If in the future students' current optimism proves mistaken, unmet expectations might become a source of grievance and support for a contentious movement. We thank an anonymous reviewer for pointing this out.

41. In the question in which students were asked to list a non-governmental organization that will help China's environment, about 8% of students responded with a domestic NGO (we accepted a wide definition of NGO and included government organized NGOs (GONGOs) even though they are quasi-governmental bodies). Other common responses were "all citizens" and the media; both had around 8%. In the question about a non-governmental organization that will help the global environment, about 20% of the students named an international NGO; 18% responded "the United Nations." For more on GONGOs, see Fengshi Wu, "New partners or old brothers? GONGOs in transnational environmental advocacy in China?" *China Environment Series*, Vol. 5 (2002), pp. 45–58.

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The lack of emphasis on NGOs is also evident when students were asked to rank seven areas that should be should be emphasized in government environmental policy. "Develop NGOs" was ranked as the least important area with over a quarter of the students listing it last out of seven and another 19 per cent listing it sixth.[42] In fact, it appears that students do not really make clear distinctions between non-governmental and governmental organizations. This is demonstrated by the large number of invalid answers to the question asking students to name a non-governmental organization or individual who could contribute to China's environmental protection. Despite the specific wording of the question, a large number of responses were government organizations and officials. The same was true when students were asked about environmental participation in off-campus activities: many responded with participation in a campus group. At least in the environmental arena, the boundary between government and non-government, official and non-official seems both less relevant and less clear for university students in Beijing than it does for those in the West. Given the heavy restrictions on NGOs, and the fact that the activities of NGOs are largely indistinguishable from those of quasi-governmental and governmental institutions, it is small wonder that university students have minimal knowledge of domestic NGOs and little faith in their capacity to influence the environment. But it also hints that in the environmental realm students do not see a strong need for organizing outside the officials boundaries of school and government.

In summary, the prospects for environmentalism among students in Beijing turning into some kind of independent grassroots movement or becoming a source of pressure for political change seem unlikely. While none of the evidence alone is sufficient to warrant such a conclusion, and while it must be recognized that beliefs can change with a singular event (Bhopal, for example), taken together the data indicate that students appear disinclined to support an NGO-led movement that pursues confrontational strategies and indeed do not see a strong need for NGOs in protecting China's environment. In addition, students express a general optimism about the trends in China's environmental protection, and are less enthusiastic about the importance of environmental protection when it is weighed against lowering economic growth. Unlike many observers outside China, few seem to make any connection between the government's pro-growth policies and China's environmental degradation. In short, among university students in Beijing there seems to be a general trust in the government to handle environmental issues. Given this convergence of views, along with the ample restrictions on non

42. The students responses were ranked from most to least important as follows: improve environmental law and regulation, supervise business's pollution abatement, increase enforcement of environmental laws, strengthen environmental education, increase environmental spending, improve environmental technology, promote citizen participation, develop NGOs.

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government-sanctioned mobilization, it appears unlikely that environmental issues will push students to organize outside official auspices or make major demands on the government.

Discussion and Future Research

If nothing else, the findings presented here should give pause to those who see a political movement coming out of the environmental realm. While the survey examined only a small slice of the Chinese population, and the conclusions should be described as tentative, the results nevertheless show that China's environmentalism and the potential for a contentious environmental movement looks very different when examining the prospective supporters of a movement rather than its activist leaders. University students in Beijing recognize the gravity of China's environmental dilemma, but appear neither inclined to blame government policies nor to participate in non-sanctioned activities.

Given these findings, a natural question that has significant implications for an environmental movement is: why are the views of university students in Beijing so similar to those of the government? One answer comes from the structural factors discussed by Brettell and others, particularly the control of the media. Almost certainly the nature of media coverage influences students' views. While reporting of environmental events has increased in recent years, it is still predominantly positive coverage. A 1997 survey of newspaper articles concerning the environment found that only 12.7 per cent of the articles could be deemed critical, while 17 per cent praised China's environmental situation.[43] Many of the reports were superficial stories describing events like tree-planting ceremonies and the publication of government committee reports. The nature of media coverage has changed somewhat since 1997, and today it is not uncommon for the environmental media to publish articles critical of the government. Nevertheless, while many environmental reporters express the belief that they enjoy more freedom to pursue their stories than other journalists, the Chinese environmental media remain controlled. The editor of *China Green Times* admits: "All news media organizations in China (including those with an environmental focus) function to some extent as the voice of the government."[44] Patricia Adams, executive director of Probe International, sums it up succinctly: "With the exception of a few aggressive newspapers, very little information beyond propaganda has come from the mainland media."[45]

43. Zhongguo shehui kexueyuan huanjing yu fazhan yanjiu zhongxin (Chinese Academy of Social Science Environment and Development Research Centre), *Zhongguo huanjing yu fazhan, di er juan* (*China Environment and Development Review, Vol. 1*) (Beijing: Social Sciences Publishing House, 1999), p. 339.

44. Turner and Wu, *Green NGO and Environmental Journalist Forum*, p. 31.

45. Patricia Adams, "Environmental NGOs in China: encouraging action and addressing public grievances," Roundtable before the Congressional-Executive Commission on China, 7 February 2005.

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However, one is loath to portray student beliefs as simply the product of government propaganda. It is just as probable that the students surveyed have formed their beliefs via independent critical thought. First, China's youth have shown they are willing to criticize the government on other issues.[46] Media coverage and government officials tend to be positive regardless of the issue and students' views vary across issues, suggesting that the government's control of information is not the source of their optimism. Moreover, as discussed above, some students have already participated in environmental campaigns that have been critical of the government. Secondly, while the media are still generally positive, as Economy and others have shown the degree of freedom granted to the Chinese press (combined with the spread of the internet) means that information critical of the government is hardly non-existent in China. Thirdly, as demonstrated in the survey above, students are highly knowledgeable about environmental affairs.

One final reason to doubt that students' views are simply the product of media control is, as discussed at the outset, that the Chinese state has taken a number of steps in recent years to address environmental issues. These efforts, along with those of grassroots organizations, have helped China achieve some notable environmental successes such as keeping the growth rate of total emissions below that of the growth rate of industry. The absolute levels of some pollutants, such as SO_2, have risen only slightly and possibly even declined in recent years. In 2004, the World Bank completed a year-long study conducted in conjunction with SEPA, ten Chinese research institutes and various social organizations, and concluded that the negative environmental outcroppings of China's economic growth, while real problems, "are not the whole story."[47] In other words, even though it runs counter to most material about the Chinese environment in the Western press, student optimism may not be entirely unfounded. While analysts tend to point to the shortcomings of the Chinese government's effort to combat ecological degradation, it may be that private citizens see such efforts in a different light. The implication is that the relative trust students in Beijing place in the government to address environmental issues may simply be an additional manifestation of what Ho aptly refers to as the "greening of the state."

In any case, the above is simply conjecture and is best left for future research. This article has argued that scholars interested in the political consequences of Chinese environmentalism would be well served by broadening the range of research. One obvious subject, suggested earlier, is to study other population segments in a systematic fashion. This does not necessarily mean survey work.

46. Nesbitt-Larking and Chan, "Chinese youth and civil society."
47. World Bank, "China's environmental issues: the bigger picture," World Bank, available at http://www.worldbank.org, accessed 7 January 2005.

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Surveys can only scratch the surface of beliefs and the restrictions on foreign scholars conducting surveys in China pose an additional set of challenges. In-depth interviews of representative samples could perhaps be more revealing. One might explore the views of intellectuals and scientists, firm managers, rural peasants, urban residents, non-environmental media, university students outside Beijing, or government officials.

It might also be useful to compare the views of students who are members of on-campus environmental organizations with those who are not. In the research presented here, we started with the assumption that an environmental movement would come out of the NGO sector. Though student environmental groups are often restricted by campus authorities, given their sheer growth, it is entirely possible that they have more potential to foster an environmental movement than off-campus organizations. Hence, the manner in which campus groups affect, channel and give voice to student environmental views is a topic worthy of investigation.[48]

A second line of study might be to place views about the environment in a more comparative context vis-à-vis other issue areas. For instance, the research here has suggested that university students in Beijing are not terribly censorious of the influence of economic development on the environment. But is this a function of positive views about government environmental protection endeavours combined with a faith in economic growth (as argued here) or the result of something else? Perhaps it reflects a general scepticism about the utility of contentious politics or the remnants of a cultural tradition of remonstrance that remains geared toward officially sanctioned channels.[49] And how do students' (or other groups') views about environmental policies compare with their assessment of government policies in other realms? To what extent do students make connections between government policies across policy arenas? For example, do students see government corruption as a major inhibitor of environmental protection? Several scholars have noted that an environmental movement in China is much more likely if social organizations are able to link dissatisfaction across different issue areas. Hence, looking at beliefs across a number of policy issues might provide clues about environmental political beliefs and the potential for an environmental movement.

One final area of future research is to look at attitudes about specific aspects of China's environmental protection regime, such as the complaint system, various dispute resolution mechanisms, the public participation segment of the environmental impact assessment programme and the Green Watch programme. These all potentially offer citizens the chance to articulate environmental grievances or

48. We thank an anonymous reviewer for pointing out the importance of campus groups.

49. Elizabeth J. Perry, *Challenging the Mandate of Heaven: Social Protest and State Power in China* (Armonk, NY: M.E. Sharpe, 2002), p. 312.

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participate in the environmental policy-making process. If functional, they can pre-empt or neutralize an environmental social movement because they make people less likely to "behave in ways that fundamentally challenge others or authorities" (see Tarrow's definition, above). For those interested in the likelihood of an environmental social movement, then, the key questions about these government programmes are their effectiveness and, perhaps more importantly, public perceptions about their effectiveness. Brettell notes that citizens prefer to solve environmental disputes via the official routes rather than by other less sanctioned forms and that they increasingly use programmes like the environmental complaint system. Why is this? Is it a pragmatic issue (to choose other routes is more dangerous)? Is it an issue of lack of choice? Or is it simply because the environmental complaint system is considered efficient?[50] Exploring beliefs about China's environmental dispute resolution mechanisms may generate insight about the potential for an environmental movement.

The above suggests just a few avenues of research. As this article has tried to elucidate, the research on the political implications of China's environmentalism, much like China's environmentalism itself, is only in its early stages.

50. Brettell discusses at length how factors like pollution levels and economic development explain variance in complaint levels across jurisdictions, but provides much less discussion as to why citizens choose the complaint system instead of other forms such as protest.

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