

Sino-American Environmental Relations: The Potential of Trans-Societal Linkages*

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This paper applies two dimensions, inter-governmental and trans-societal, to discuss US-China environmental relations. It argues that, while official bilateral environmental relations between the two over the past 15 years have not yet achieved substantial outcomes, trans-societal linkages between American and Chinese NGOs and activists have grown steadily. The scope and volume of their work may not be as visible as that of ODA projects or official initiatives, but their impact may be more sustainable and not easily interrupted by administrative or regime shifts in either country. On the other hand, this paper highlights that US-China relations in regard to climate change will explain the main trends that

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will dominate the overall environmental cooperation in the coming years. Whether or not the governments can build up mutual trust and effective mechanisms in security, trade and other policy fields will affect the possibility of a conducive atmosphere for cooperation in environmental protection.

KEYWORDS: Sino-American relations; environmental diplomacy; transnationalism; climate change politics; environmental NGO.

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China and the United States both significantly affect the global environment with their vast geographic spread, biodiversity richness and high volumes of carbon emission. In addition, their decisions in international negotiations have a substantial impact on other states' behavior and the formation of a global regulatory framework.¹ With the rising relevance of climate change in world politics, a discussion of the environmental dimension of the bilateral relations between the two countries is needed more than ever. Before leaving his post as the Chief Economist for the World Bank, Professor Justin Yifu Lin wrote for the BBC News by describing forecasting the economic future of the world as "(w)hether we are on the verge of an 'Asian Century' or not, one thing is clear: there has already been a dramatic shift in the geographic centre of the global economy. China is now front and centre, and its role as a leading dragon can be beneficial for growth prospects for the world economy."² Most political analysts of China and the U.S. would agree with Lin and point out that the rapid rise of the former is one of the most important conditions that could re-shape the changing bilateral relations. Environmental protection is not an exception here, yet the factor of ecological interdependency and the necessity for community participation in conservation contribute to the unique trends in this sector.

¹Robert Falkner, "American Hegemony and the Global Environment," *International Studies Review* 7, no. 4 (December 2005): 585-99.

²Justin Yifu Lin, "Viewpoint: China, the 'Leading Dragon' of the World Economy," *BBC News*, November 24, 2011, <http://www.bbc.co.uk/news/business-15861161>.

This paper reviews Sino-American environmental relations from two angles, namely, the official inter-governmental and trans-societal angles. It argues that while the official bilateral environmental relationship between the two has not resulted in a smooth ride, trans-societal linkages between American and Chinese non-governmental organizations (NGOs) and private foundations have grown steadily since the end of the 1970s. Not only have Chinese environmental activists and NGOs received sustained assistance from across the Pacific Ocean, but transnational policy advocacy networks have also been emerging among both Chinese and American environmental NGOs. A note of caution, however: although examined separately, these two tracks of interactions across political borders are nevertheless interconnected, directly or indirectly, in practice.

According to Conca and Dabelko, there are two conceptual pathways linking the environmental field to the conventional “high politics” between states: one is techno-political and functional, which means that experiments of cooperation in environmental protection will create opportunities for governmental agencies to interact with each other at a relatively low level of political risk and cost, and in turn, to earn necessary “cooperative knowledge” in negotiation and trust building in general; and, the other, a “post-Westphalian” trajectory that acknowledges the changing nature of interdependence among states and the increasing relevance of trans-societal linkages. A strong transnational civil society that fosters new norms of environmental responsibility and peaceful dispute resolution will gradually transform “opaque, security-minded institutions of the state” and inter-governmental relations.³

Scholars of environmental politics have further explored the “post-Westphalian” mechanism and the effects of trans-societal linkages on inter-governmental trust building, drawing upon successful experiences in the Nordic region after the end of the Cold War.⁴ Since the early 2000s,

³Ken Conca and Geoffrey D. Dabelko, eds., *Environmental Peacemaking* (Washington, D.C.: Woodrow Wilson Center Press, 2002), 10.

⁴Conca and Dabelko, *Environmental Peacemaking*; Stacy D. VanDeveer and Geoffrey D. Dabelko, eds., *Protecting Regional Seas: Developing Capacity and Fostering Environmental*

this research approach and the idea of “environmental peacemaking” have caught broad attention and made their way to policy-making circles for both international and regional affairs.⁵ However, little effort has been made to examine the emerging patterns of trans-societal linkages in the context of Sino-American relations.⁶ The trans-societal perspective is similar to, yet essentially different from, the track-two diplomacy in inter-governmental relations. While track-two diplomacy, or “public diplomacy,” to a great extent results from the leadership of statesmen and policy entrepreneurship of professional diplomats, trans-societal networks and collaborations are bottom-up endeavors mostly driven by social elites, activists, NGOs and sometimes even victim groups or transnational ethnic/cultural communities. Trans-societal linkages can have an influence on inter-governmental relations if geared by specific actors and under specific circumstances, but they are often not started or mobilized with clear diplomatic goals. With the increasing velocity, depth and spread of global-local inter-connectedness, trans-societal advocacy networks, collaboration among civil society groups and social mobilization across borders will generate new momentum and dynamics for inter-governmental politics.⁷ The field

Cooperation in Europe, conference proceedings (Washington, D.C.: Woodrow Wilson Center Press, 1999).

⁵For instance, the United Nations Peacebuilding Portal has included “land and environment” as one of its ten themes. The impact of the UN’s effort in environmental peacebuilding has been assessed both positively and critically: Ken Conca and Jennifer Wallace, “Environment and Peacebuilding in War-torn Societies: Lessons from the UN Environment Programme’s Experience with Postconflict Assessment,” *Global Governance* 15, no. 4 (October-December 2009): 485-504; Emel Akçali and Marco Antonsich, “‘Nature Knows No Boundaries’: A Critical Reading of UNDP Environmental Peacemaking in Cyprus,” *Annals of the Association of American Geographers* 99, no. 5 (2009): 940-47.

⁶The only exception here is the case of Chinese diaspora and transnational business networks and their impact on bilateral economic relations. For example, Hongying Wang, *Weak State, Strong Networks: The Institutional Dynamics of Foreign Direct Investment in China* (Hong Kong: Oxford University Press, 2001).

⁷This point has been raised and theorized since the end of the 1960s by the school of transnationalism in the discipline of international relations: Robert O. Keohane and Joseph S. Nye, Jr., *Transnational Relations and World Politics* (Cambridge, Mass.: Harvard University Press, 1972); Robert O. Keohane and Joseph S. Nye, *Power and Interdependence: World Politics in Transition* (Boston: Little Brown, 1977); James N. Rosenau, *The Study of Global Interdependence: Essays on the Transnationalization of World Affairs* (New York: Nichols, 1980); Thomas Risse-Kappen, *Bringing Transnational Relations Back In: Non-State Actors, Do-*

of environmental politics is particularly responsive to trans-societal linkages and social mobilization due to the close and substantiated ties among the community, natural resources and the ecological system, all of which fundamentally challenge the political divides enforced by state borders.⁸

This paper begins with a historical review of the official bilateral environmental cooperation between the U.S. and China and the possible trends that may dominate in the coming decade. The case of climate change is then discussed to further substantiate and explain the above observations. The next two sections of the paper will introduce and examine trans-societal interaction and cooperation in environmental protection across the Pacific, which has by and large been under appreciated and studied. The flow of information, funds and other resources has been mostly one-way, and American NGOs have been supporting the rise of environmental activism and the greening of the Chinese state since the end of the 1970s. However, in recent years, Chinese environmentalists and NGOs have been becoming more proactive, and they have initiated transnational networks and campaigns, together with their American counterparts, to target specific domestic pollution problems or policy failures. Such transnational networks have the potential to become a most active component and to introduce new dynamics in bilateral relations.

A Brief Review: Sino-American Official Environmental Relations

The official environmental cooperation between the two governments has a relatively short history of 15 years. The U.S. was not the

mestic Structures, and International Institutions (Cambridge: Cambridge University Press, 1995); Sanjeev Khagram, James V. Riker, and Kathryn Sikkink, eds., *Restructuring World Politics: Transnational Social Movements, Networks, and Norms* (Minneapolis: University of Minnesota Press, 2002); Ann-Marie Slaughter, *A New World Order* (Princeton, N.J.: Princeton University Press, 2004).

⁸Ronnie D. Lipschutz and Ken Conca, eds., *The State and Social Power in Global Environmental Politics* (New York: Columbia University Press, 1993); Paul Wapner, *Environmental Activism and World Civic Politics* (New York: State University of New York Press, 1996); Paul Wapner and Richard A. Matthew, "The Humanity of Global Environmental Ethics," *Journal of Environment & Development* 18, no. 2 (June 2009): 203-22.

Table 1
U.S. official environmental assistance to China (FY2000-2012, in thousand US\$)

Program (in thousand US\$)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	2,435	1,298	11,559	15,977	18,339	24,692	25,643	37,458	38,819	45,265	46,918	37,700	26,300
Rule of Law, Environment	0	0	0	0	0	0	4,950	5,000	9,919	11,000	12,000	7,000	0
% of total							19.3	13.3	25.6	24.3	25.6	18.9	

Source: Lum, "U.S. Assistance Programs in China."

most active government in bilateral environmental assistance to China in the early years of "Reform and Opening" (改革开放), falling far behind Japan and the European Union.⁹ The American Congress banned official development assistance to China after the 1989 Tiananmen crackdown. The ban was only lifted in the year 2000, and environmental law has since become one of the areas for funding (see table 1).¹⁰ More recently, China has reassessed its own international assistance programs, and environmental cooperation has been explored as an option to strengthen bilateral relationships with many developing countries in Africa, Southeast Asia, Latin America and even in Central Asia.¹¹ As China appears to be more interested in pursuing environmental diplomacy, the current situation in this respect with the U.S. remains rather unclear and increasingly integrated with bilateral talks on energy and trade-related issues.

In 1979, China and the U.S., then led by Deng Xiaoping (鄧小平) and Jimmy Carter, established the Scientific and Technology Coopera-

⁹Ryokichi Hirono, "Japan's Environmental Cooperation with China during the Last Two Decades," *Asia-Pacific Review* 14, no. 2 (2007): 1-16; Frank Umbach, "EU-China Energy Relations and Geopolitics: The Challenges for Cooperation," in *The Globalization of Energy: China and the European Union*, ed. Mehdi Parvizi Amineh and Yang Guang (Leiden and Boston: Brill, 2010), 31-70.

¹⁰Thomas Lum, "U.S. Assistance Programs in China," *CRS Report to Congress*, October 22, 2012.

¹¹Ding Jinguang, "Zhong-Fei huanbao hezuo de xianzhuang yu tedian" (Status and features of Sino-African cooperation in environmental protection), *Yafei zongheng* (Asia & Africa Review) (Beijing), 2008, no. 4:10-16.

tive Agreement, which served as an umbrella mechanism for bilateral exchanges related to environmental protection and energy. However, the inter-governmental efforts guided by this agreement on joint research and data collection were “notably low-funded” and “primarily ad hoc agency-to-agency cooperative initiatives.”¹² The decade after the spring of 1989 saw major shifts in Sino-American relations. Guided by the principle of “hiding one’s capabilities and biding time” (韜光養晦), China focused on improving relations with bordering countries and creating a favorable diplomatic environment for economic reforms. By the end of the first four-year term of Clinton’s administration, the U.S. side gradually adopted a new policy direction with China addressing “questions of differences on a case-by-case basis.”¹³ Such a pragmatic style of bilateral diplomacy was carried on during the second term of his presidency, and partially explains the new opportunities for cooperation in the field of the environment. The Sino-American Forum on Environment and Development in Beijing launched by then-Premier Li Peng (李鵬) and then-Vice President Al Gore as part of the bilateral agreements achieved by the two states in 1997 marked a new beginning for official environmental relations between the two countries. In the following three years, the two governments engaged in occasional ministerial level meetings, inter-departmental exchanges, project-based cooperation, and other forms of official bilateral cooperation in energy efficiency, water management, and other related fields.¹⁴

During the first term of George W. Bush’s presidency, environmental protection was not among the key areas explored to strengthen bilateral relations with China in spite of the rising global awareness of climate change and evidence of the trans-continental effects of the sand gales originating in the northwestern parts of the Inner Mongolia autonomous

¹²Pamela Baldinger and Jennifer L. Turner, *Crouching Suspicions, Hidden Potential: U.S. Environmental and Energy Cooperation with China* (Washington, D.C.: Woodrow Wilson International Center for Scholars - China Environment Forum, 2002), 41.

¹³Shen Dingli, “Zhong-Mei guanxi 40 nian: huigu yu qianzhan” (Sino-U.S. relations [1979-2018]: retrospect and prospect), *Meiguo wenti yanjiu* (Fudan American Review) (Shanghai), no. 9 (2009): 1-14.

¹⁴Baldinger and Turner, *Crouching Suspicions, Hidden Potential*.

region.¹⁵ It was not until 2006 that the bilateral environmental relationship re-gained some momentum, when the U.S.-China Strategic Economic Dialogue (SED) was founded and several environment-related agencies from both sides were included, such as the U.S.'s Department of Energy and Environmental Protection Agency (EPA) and China's Ministry of Science and Technology. However, as the name implies, the framework provided a limited institutional space for environmental cooperation. In addition, the absence of China's State Environmental Protection Administration (now the Ministry of Environmental Protection, MEP), the body corresponding to the U.S.'s EPA, from the negotiation table almost forecasted the feeble development of the incoming bilateral environmental relationship. Finally in June 2008, the two governments established the Ten Year Framework (TYF) for Cooperation on Energy and Environment in June 2008. In contrast, the European Union and China established a strategic partnership at the state level in 1985 and the Environment Policy Dialogue at the ministerial level in 2003.¹⁶

In 2009, President Barack Obama elevated the SED to the Strategic and Economic Dialogue (S&ED) and enhanced the level of cooperation with China. As one of the highlights of the 1st round S&ED meetings in Washington, D.C., July 2009, Chinese State Counselor Dai Bingguo (戴秉國), U.S. Secretary of State Hillary Clinton and U.S. Secretary of Energy Steven Chu signed the Memorandum of Understanding to Enhance Cooperation on Climate Change, Energy and Environment to identify and specify seven action plans to implement the TYF in clean air, transportation, clean electricity, energy efficiency, clean water, nature conservation and wetlands. Such concrete steps and implementation plans were at the time new in bilateral environmental history and have been considered the

¹⁵Elizabeth Economy, Jennifer Turner, and Fengshi Wu, "China's Growing Ecological Footprint: Global Threat or Opportunity for Collaboration?" in *The United States, Russia, and China: Confronting Global Terrorism and Security Challenges in the 21st Century*, ed. Paul J. Bolt, Su Changhe, and Sharyl Cross (Westport, Conn.: Praeger Security International, 2008), 70-88.

¹⁶"Fact Sheet on EU's Environmental Cooperation with China," http://ec.europa.eu/environment/international_issues/relations_china_en.htm.

beginning of a sharper cooperation in energy, environmental protection and climate change between the two governments.

The Sino-American Presidential Summit that took place in Beijing in November 2009 resulted in new bilateral initiatives in energy efficiency and carbon emission reduction. However, it was followed by a diplomatic drama in Copenhagen less than a month later. With an expiring Kyoto Protocol, the world was anticipating advancement in climate politics according to the Bali Road Map negotiated at the 2007 UNFCCC conference. Former American Vice-President Al Gore pleaded in his Nobel Peace Prize speech that “[the United States and China] should stop using the other’s behavior as an excuse for stalemate and instead develop an agenda for mutual survival in a shared global environment.”¹⁷ As the two largest emitters yet without legally-binding CO₂ mitigation goals, both China and the United States were under high pressure to drive the ball forward. Both therefore sent high-profile delegations headed by President Obama and Premier Wen Jiabao (溫家寶), respectively. Knowing that to fail to reach an agreement would invite more and harsher criticism, the two leaders managed to bring about the Copenhagen Accord at the last minute, even though this document did not have legally-binding targets. In the eyes of the U.S. and global media, China was the major hindrance that led to such a disappointing outcome. However, Chinese Premier Wen refuted all charges in his press conference three months later and argued that China’s effort in reaching an international consensus on climate change at Copenhagen was “well observed.”¹⁸ The chill in climate cooperation continued and only thawed when President Hu Jintao (胡錦濤) made a state visit to Washington, D.C. in January 2011, which led to new clean energy initiatives including the eye-catching Shale Gas Initiative, an agreement that has opened up joint work to “create standardized environmental regulations and push technologies to lessen the environmental

¹⁷http://www.nobelprize.org/nobel_prizes/peace/laureates/2007/gore-lecture_en.html (accessed April 17, 2013).

¹⁸Quoted from the report to the conference, March 14, 2010, http://news.sohu.com/20100314/n270807918_1.html (accessed November 2, 2012).

impact of shale gas exploration and extraction.”¹⁹

The 2012 UNFCCC Doha conference extended the Kyoto Protocol, and the status of the two countries remained unchanged, with China as a developing country and the United States as an outsider. The withdrawal of Canada, Japan and Russia has further weakened the treaty. In April 2013, China and the United States issued a joint-statement to call for stronger domestic energy-focused actions and more effective bilateral cooperation to not only achieve global climate benefits but also, if not more importantly, domestic improvements in energy security, environmental quality and resource availability.²⁰ Of particular note, the two are re-steering policies on climate change and expecting negotiations in this area to become a pillar in their overall relations. A special working group has thus been created under the framework of the S&ED.

The two governments’ recent move to include climate change in their bilateral strategic dialogue, the S&ED, marks a significant turn in environmental cooperation: instead of setting up a separate diplomatic arena, the environmental agenda is being completely incorporated into the overall strategic, energy and economic negotiations. Such an arrangement can be a double-edged sword to the environment. On the one hand, since the two parties have a relatively long history of and a stronger record of cooperation in technology and research than in environmental protection, political knowledge in the former areas can benefit the new collaboration in the latter. On the other hand, the “strategicalization” of climate issues and mixing them with energy and economic cooperation can also have a distracting effect on environmental protection. Over highlighting carbon emissions and only focusing on energy-related issues can mislead the public and turn attention away from biodiversity conservation and other important aspects of the environment. The next section on climate change

¹⁹Kexin Liu and Jennifer L. Turner, “Shale We Dance? Exploring a New Area of U.S.-China Energy Collaboration” (part of the series *Cooperative Competitor*, China Environment Forum, Woodrow Wilson Center, Washington, D.C., 2011).

²⁰“Sino-U.S. Joint Statement on Climate Change,” April 13, 2013, http://www.gov.cn/jrzg/2013-04/13/content_2377183.htm (accessed April 17, 2013).

will further discuss these two equally relevant trends in Sino-American environmental relations.

Climate Change and “Strategicalization” of Environmental Politics

Over the past two decades, one issue, climate change, has moved from being marginal to the centre stage of international politics. China and the U.S. topped the world in CO₂ emissions with a combined share of 43.4% in 2011.²¹ Bilateral cooperation in climate change has evolved from being minimal in the 1990s to becoming mainstream in the current decade. China’s conventional claims on its low per capita emission and status as a developing country have become obsolete to American and global audiences. Being the one and only OECD country outside the Kyoto Protocol, the U.S. also faces rising criticism. With mounting pressure from the rest of the world, there is a real need to search for common goals between the two to revive enthusiasm in bilateral cooperation in carbon emission reduction and climate change mitigation. Having been increasingly incorporated into bilateral economic and energy-related negotiations, climate change politics both has the potential to shape the overall Sino-American relations and also runs the risk of having its environmental agenda hijacked.

By and large, the two countries negotiated climate change issues within the existing multilateral frameworks until the U.S. firmly withdrew from the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC) and China surpassed the U.S. in terms of carbon emissions in the mid-2000s. The U.S. was the largest CO₂ emitter in the world every year throughout the 20th century (1901-2000) and played an active role in international climate negotiations leading to the estab-

²¹“BP Statistical Review of World Energy 2012,” http://www.bp.com/content/dam/bp/pdf/Statistical-Review-2012/statistical_review_of_world_energy_2012.pdf (accessed September 17, 2012).

lishment of the Kyoto Protocol in 1997. However, during the run up to the closure of the Kyoto negotiations, the U.S. Senate passed a unanimous resolution (95 vs. 0) that prevents the ratification of any international treaty that would: “(a) impose mandatory greenhouse gas emissions reductions for the U.S. without also imposing such reductions for developing nations, or (b) result in serious harm to its economy.”²² Although then-President Clinton signed the Protocol by the end of his term of office, and the U.S. became an Annex-B party of the Protocol committing itself to the mitigation goals such as reducing annual average emissions over the period 2008-2012 to 7% lower than the 1990 level, then-President Bush made it clear that the “developing nations” underlined in the Senate resolution mainly referred to China and India, and withdrew the U.S. from the Kyoto Protocol in March 2001.²³

Meanwhile, China’s interest in international climate change negotiations grew from being lukewarm in the 1990s to moderately enthusiastic in the 2000s. The task of state level policy coordination was transferred from the Ministry of Science and Technology to the Office of Climate created within the structure of the State Commission of Development and Reform under the direct supervision of the State Council. With the dissemination of knowledge related to climate change and the market-based measurements of carbon emissions reduction, for example, the Clean Development Mechanism, policy networks of policy-makers, researchers, regulators and entrepreneurs had emerged in China by the mid-2000s.²⁴ Stronger scientific evidence has come out since the Kyoto Protocol was first negotiated and has more firmly established the link between human activities and climate change.²⁵ With its CO₂ emissions surpassing those

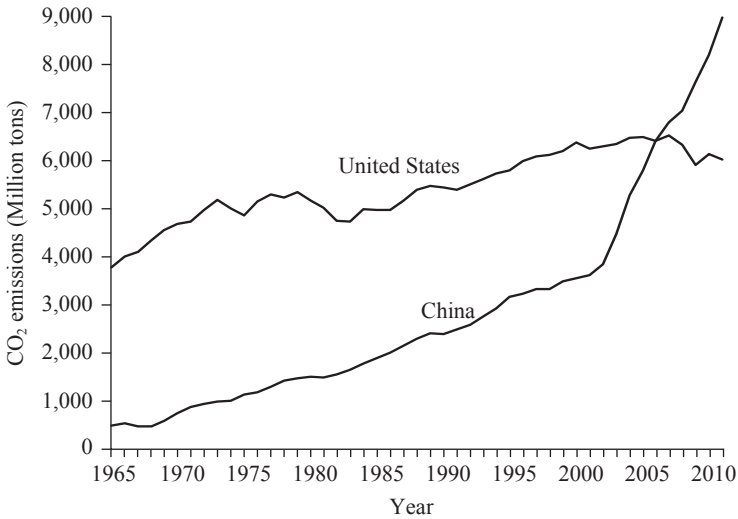
²²Aaron M. McCright and Riley E. Dunlap, “Defeating Kyoto: The Conservative Movement’s Impact on U.S. Climate Change Policy,” *Social Problems* 50, no. 3 (2003): 348-73.

²³George W. Bush, “A Letter from the President to Senators Hagel, Helms, Craig, and Roberts,” March 13, 2001, <http://georgewbush-whitehouse.archives.gov/news/releases/2001/03/20010314.html>.

²⁴Hongyuan Yu, “Global Environment Regime and Climate Policy Coordination in China,” *Journal of Chinese Political Science* 9, no. 2 (Fall 2004): 63-77.

²⁵International Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*,

Figure 1
CO₂ Emissions from China and the United States



Source: BP, *BP Statistical Review of World Energy* 2012.

of the U.S. and having become the world's largest, and its per capita emissions above the world average (figure 1), China announced that it would reduce its CO₂ emissions per unit of GDP by 40~45% from the 2005 level in 2009.²⁶

Despite slow progress in international climate negotiations, global markets of new, clean and renewable energy, such as wind, solar, biomass and shale gas, are emerging and developing rapidly. In 2010 alone, the world added 37,600 MW of wind capacity, and the monetary value of the market reached a level of \$100 billion.²⁷ Both China and the U.S.

http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm.

²⁶Edward Wong and Keith Bradsher, "China Joins U.S. in Pledge of Hard Targets on Emissions," *New York Times*, November 26, 2009.

²⁷World Wind Energy Association, *World Wind Energy Report 2010* (Bonn: World Wind Energy Association, 2011).

recognize the business potential here and aim to capture a lead. China takes it as a great opportunity to catch up with developed countries, for it has gained significant manufacturing capability but remains far behind in technological innovation. However, while the U.S. has advanced technologies and strong innovation systems, its manufacturing sector is losing its competitive edge. The evolution of the global markets for new and renewable energy will deeply affect the pair's economic and trade relationships in the long run.

However, unlike the situation in conventional markets in the past, it is harder for China to use labor or natural resources to compensate for its lagging behind the U.S. in technology, innovation and position in the global market. Recent events in the wind and solar markets can help us to understand the complex structures of the global markets for new energies and new trends in Sino-U.S. trade relations. The first case is wind energy and the market trajectory of GE Energy in China.²⁸ In 2006, China added 1,337 MW of new wind capacity in the country, and GE Energy took 10% of the market. However, by 2010, the Chinese market for wind energy per year had been enlarged to 18,928 MW, yet GE Energy's share shrank to less than 1.2%. Moreover, Chinese companies have not only grown stronger and have dominated the domestic market, but have also started investing in the U.S. market.²⁹ In responding to such an alarming situation, President Obama issued an order to forbid any Chinese company from acquiring wind farms in September 2012.³⁰ The other case involves the trade disputes between the two over solar panels. China is a significant market for U.S. exports of polysilicon, a key material for making

²⁸Joanne I. Lewis, "Technology Acquisition and Innovation in the Developing World: Wind Turbine Development in China and India," *Studies in Comparative International Development* 42, no. 3-4 (December 2007): 208-32; Li Junfeng et al., *Zhongguo fengdian fazhan baogao* (China wind power outlook 2011) (Beijing: China Environmental Science Press, 2011).

²⁹American Wind Energy Association, *U.S. Wind Industry Annual Market Report 2010*, http://awea.files.cms-plus.com/FileDownloads/pdfs/AWEA%20U.S.%20Wind%20Industry%20Annual%20Market%20Report%20Year%20Ending%202010_FINAL.pdf.

³⁰Helene Cooper, "Obama Orders Chinese Company to End Investment at Sites Near Drone Base," *New York Times*, September 28, 2012.

solar panels, and the U.S. also imports about the same amount of solar panels from China in monetary terms. However, this trade relationship has become increasingly tense in recent years. In October 2012, after nearly one year of deliberation, the U.S. finally imposed punitive tariffs of 24%-36% on most imports of solar panels from China. In response, China planned to retaliate by placing restrictions against U.S. polysilicon exports.³¹ The structures of the global solar market differ from those of the wind sector, and Chinese companies' positions also change. Compared with companies in the wind industry, which largely focus on the domestic market, China's solar companies are global competitors. In 2010, Chinese companies already produced 48% of solar panels globally, with 90% of China-made panels being exported to OECD countries.³² The American government's decision to battle with China over the solar business will have different kinds of global ramifications than in the case of wind power.

No global climate treaty could be successful without the close involvement of both China and the U.S., the two largest carbon emitters. The idea of "A Group of Two" has been proposed, yet it faces many long-lasting obstacles as other articles in this volume also explain. As the Obama administration is gradually leaning towards the option of establishing the Major Economies Forum on Energy and Climate (MEF)³³ instead of the UNFCCC to discuss the future of global climate change, it seems plausible that China and the U.S. will discuss the issue within a limited and defined multilateral setting. The case of U.S.-led international cooperation as regards SO₂ mitigation in China can offer valuable insights for practitioners to deliberate a Sino-U.S. centered carbon emission

³¹Diane Cardwell and Keith Bradsher, "U.S. Will Place Tariffs on Chinese Solar Panels," *New York Times*, October 10, 2012.

³²Li et al., *Zhongguo fengdian fazhan baogao*.

³³Established in March 2009, the MEF is a successor to the Major Economies Meetings set up by then-U.S. President Bush. Its current participants include Australia, Brazil, Canada, China, the European Union, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, South Africa, the United Kingdom, and the United States. For more details, see: <http://www.majoreconomiesforum.org>.

framework. In the early 1990s, China surpassed the U.S. and became the world's largest SO₂ emitter. At that time, China did not have a key technology to remove most SO₂ from coal-fired power plants, known as flue gas desulfurization (FGD) systems. Many American and foreign companies decided to license FGD technology to Chinese companies, to be later paid back by the revenues generated in the Chinese market. As a result, China built a large domestic industry based on foreign technologies and sought to keep SO₂ emissions under control.³⁴ China's overall geopolitical position has changed drastically since the 1990s, and so has America's China policy. Besides remarkable differences across industries, high levels of political wisdom and mutual trust between the two will be required to replicate the successful story of SO₂ mitigation. Otherwise, the current trade frictions in the wind, solar and renewable energy markets will only delay and constrain bilateral collaboration under the outlook of "strategicalization."

Parallel Politics:

American Environmental NGOs and Charities Going to China

This section will examine the other dimension of environmental politics between China and the U.S. and the increasingly visible role played by non-state actors, particularly NGOs, charities and transnational advocacy networks. Against the background of official bilateral environmental cooperation, American charities and NGOs have been among the most active and innovative external actors in enhancing environmental governance in China since the end of the 1970s. There are between 50 and 60 international NGOs and private foundations currently working in various fields related to environmental protection in China, including air pollution control, environmental management, energy efficiency, and nature

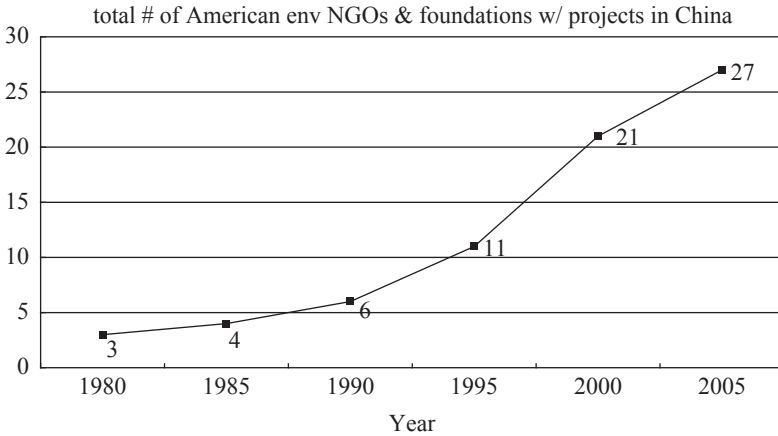
³⁴Yuan Xu, "China's Functioning Market for Sulfur Dioxide Scrubbing Technologies," *Environmental Science and Technology* 45, no. 21 (2011): 9161-167.

conservation. Furthermore, 27 are founded in the U.S. (see the appendix). If one includes university affiliated programs and other types of non-state initiatives from the U.S., the number is over 60.³⁵ Some NGOs are single species-focused or specific goal-oriented such as the International Snow Leopard Trust and the Wild Camel Protection Foundation. Others work on multiple fronts with comprehensive goals including the Ford Foundation, The Nature Conservancy, Conservation International and the Energy Foundation. Some donors including the Rockefeller Brothers Fund, the Global Greengrants and the Blue Moon Fund have tried proactive strategies of grant-making in China, and their support of environmental activism has gone beyond monetary funds. Even though most parts of trans-societal interactions for the environmental cause have been driven by American NGOs and foundations, Chinese environmentalists and NGOs are speedily gaining self-capacity and have recently started to initiate trans-societal networks for policy advocacy in various environmental fields including water, energy, GM food and more.³⁶

A handful of committed American environmental NGOs and charities started working with the Chinese government in nature conservation and environmental protection in the late 1970s, and included the International Crane Foundation and the Ford Foundation. Shown in figure 2, the total number of American NGOs working in environment-related fields in China has continuously increased in the past three decades, in spite of the ups and downs in the official bilateral relationship. As more American environmental NGOs arrived in China, they gradually built up wide connections and began to provide direct support to local conservation initiatives. After the U.S. Congress lifted the ban on assistance to China, more non-state actors including business associations, universities and research institutions from America have launched independent environmental projects in China. NGOs and other advocacy actors affect the overall Sino-American environ-

³⁵Baldinger and Turner, *Crouching Suspicions, Hidden Potential*, 50.

³⁶Ibid.; Linden J. Ellis and Jennifer L. Turner, *Sowing the Seeds: Opportunities for U.S.-China Cooperation on Food Safety* (Washington, D.C.: Woodrow Wilson International Center, 2008).

Figure 2**Growth of American NGOs and Private Foundations Working in Environmental Protection in China**

Source: China Development Brief, online database, available at <http://www.chinadevelopmentbrief.cn>; Jennifer L. Turner, ed. "Inventory of Environmental and Energy Projects in China," *China Environment Series*, no. 5 (2008): 137-227, <http://www.wilsoncenter.org/program-publications/China%20Environment%20Forum>.

mental relations in at least three ways: firstly, American NGOs and research institutions participate in implementing U.S. official environment-related assistance to China; secondly, American environmental NGOs provide support for improved environmental governance in China at various levels. This is the most common form of American NGOs' involvement in Chinese environmental politics; and, thirdly, American NGOs and foundations directly support Chinese environmentalists and grassroots NGOs in public education, pollution prevention and policy advocacy. The last type of NGO-driven mobilization and politics has only emerged since the mid-1990s as a result of significant changes in state-society relations in China. The potential impact on bilateral relations of transnational advocacy networks will be further discussed in detail in the next section.³⁷

³⁷Transnational advocacy networks are conceptualized as fluid yet committed horizontal

In between 2006 and 2011, the U.S. Agency for International Development (USAID) included the environmental component in the official development assistance (ODA) to China provided by the U.S. Congress. The total funding available for the environment is not particularly substantial, and was implemented together with the “rule of law” component (see table 1). Compared with other bilateral and multilateral funding agencies, USAID is keener to enhance environmental legal reform and law enforcement in China.³⁸ The American Bar Association (ABA)’s environmental law initiative since the early 2000s was among the first batch of NGO projects that obtained public funding from the U.S. government to be implemented in China. They have collaborated with various Chinese partners, both governmental and non-governmental, to run training programs for environmental journalists, lawyers and judges. ABA training programs may seem to be quite common nowadays, but at the time were rare opportunities for international learning for many Chinese journalists and legal professionals to build up their specialty in environmental protection. In 2006, Vermont University Law School and Zhongshan University won a three-year grant of US\$1.8 million in environmental law from USAID. This and similar projects have supported curriculum development in environmental law, trained environmental lawyers and judges, funded policy studies for new environmental law-making, and strengthened environmental litigation at local levels.³⁹ The participation of American NGOs in official environmental assistance has located a new

connections among knowledgeable non-state actors—particularly experts, activists and NGOs—working in specialized issue areas such as environmental protection. Such networks push for local and national policy changes by utilizing first-hand information, staging symbolic public educational acts and leveraging a powerful external agency/state. See: Margaret E. Keck and Kathryn Sikkink, *Activists beyond Borders: Advocacy Networks in International Politics* (Ithaca, N.Y.: Cornell University Press, 1998); Khagram, Riker, and Sikkink, eds., *Restructuring World Politics*.

³⁸Japan has always been interested in environmental technology transfer and governing capacity building, and EU countries have expanded support in public participation and environmental rights advocacy more recently.

³⁹Rachel E. Stern, “Running on Hope: International Soft Support for Environmental Litigation in China” (paper presented at the Association for Asian Studies Annual Conference in Philadelphia, March 25-28, 2010).

niche in cooperation and established different kinds of working partnerships that are beyond conventional inter-bureaucratic channels.

Unlike regular ODA grantees, NGOs are affected, yet not totally constrained, by the immediate status of the bilateral relationship. The types of American NGOs that go abroad and fund projects overseas are primarily driven by independent organizational missions, and not U.S. diplomatic policies. Thus, they can maintain working networks without being completely interrupted by the shifts in either American or Chinese politics.⁴⁰ These private foundations and NGOs such as the Ford Foundation started funding and supporting local staff of nature conservation sites in different parts of China years before the U.S. government. Their efforts were affected, but mostly not abruptly or fundamentally discontinued, by the events in 1989 and afterwards.⁴¹ In November 1979, International Crane Foundation (ICF) Co-founder George Archibald traveled to China as one of the earliest guests of the Chinese government and the National Academy of Science after 1949. During his six-day visit to Beijing, Archibald met with prominent Chinese ornithologists and discussed collaboration in crane conservation between the ICF and the Institute of Zoology of the Academy. These initial discussions laid the foundations for the ICF's China Program. In the following 25 years, the ICF has worked with various governmental agencies associated with environmental protection, agriculture, and forestry, and research institutions such as the National Bird Banding Center and the China Ornithological Society to conserve the wetlands and grassland ecosystems upon which specific cranes depend. In addition to introducing methods and expertise so as to enhance local governmental capacity in conservation, the ICF has also worked with village authorities to develop income generating programs for local farmers

⁴⁰In the long-run, trans-societal linkage will certainly suffer if official bilateral relations deteriorate severely or domestic policy towards foreign organizations changes drastically. For instance, after the establishment of the P.R. China in 1949, all foreign charities, associations and religious groups were gradually driven out by the mid-1950s.

⁴¹Interviews with Peter Geithner and Tony Saich, who consecutively directed the Ford Foundation's work in China from the late 1980s until 1992 and afterwards until the early 2000s, in Boston, May 21-22, 2009.

to alleviate the pressure on natural resources such as in the case of Caohai Nature Reserve, Guizhou province.⁴²

The freshwater Caohai Lake (草海) located in western Guizhou province (bordering Yunnan province) is one of the most vital winter sites for many migratory birds in China, including the IUCN-listed endangered species—the black-necked crane (*Grus nigricollis*). Despite its wildness and rich biodiversity, there are over 25,000 people living around the lake. The struggle between economic development for human basic needs and nature conservation has been a long-lasting problem in Caohai, especially in the past 50 years.⁴³ Inconsistent policies on the issue of how to utilize the natural resources around the lake led to deep mistrust and sometimes tense resistance from local communities, who went so far as to throw reserve staff into the lake. They boycotted the idea of the nature reserve by continuing to hunt and fish; and, the reserve staff, equally spirited, replied by burning their nets and catches.⁴⁴ Such drama continued until the early 1990s, when the situation finally caught the attention of international organizations working in China, including the ICF.⁴⁵ The ICF launched its Caohai Lake project in 1993, with funding from the Ford Foundation and partnership with the Trickle Up Program (a U.S. NGO specializing in community-based poverty relief). The ICF/Trickle Up team, working with the local government, first established a micro-credit system to offer

⁴²Melinda Herrold-Menzies, "Integrating Conservation and Development: What We Can Learn from Caohai, China," *Journal of Environment & Development* 15, no. 4 (December 2006): 382-406.

⁴³The lake was partially drained and converted to farmland during the Great Leap Forward period to increase the region's agricultural productivity. By 1972, this 45 km² lake ceased to exist. Recognizing the ecological consequences, the Guizhou provincial forestry authority decided to restore the Caohai Lake in the early 1980s and declared the lake and the surrounding areas a nature reserve in 1985. At the same time, however, the county government, implementing land tenure reforms initiated by the central government, began to contract the land in the region to individual families.

⁴⁴David Newbart, "China's Crane Experiment," *International Wildlife* 31, no. 1 (January-February 2001): 20.

⁴⁵Other international organizations that have supported conservation work in Caohai include the Ford Foundation, MacArthur Foundation, Keidanren Nature Conservation Fund, Liz Claiborne Art Ortenberg Foundation, and Oxfam International.

100 USD grants to groups of three to five local villagers to set up small businesses. By 2000, a volunteer-based farmers' association emerged and started to take charge of sustainable development around the lake with endorsement from local authorities. From micro-loans to the development of the farmers' association, Caohai people have gradually taken over the central role in local conservation projects after a decade of efforts by a transnationalized group of concerned NGOs and individuals. The Caohai experience has been well received by the Chinese government and public, and it is now recognized as a model for nature reserves in the country. According to Deng Yi (鄧儀), a former local governmental official and later a consultant for many internationally sponsored sustainable conservation programs in Caohai, the reason that the ICF was able to successfully promote its principles on the ground was that local farmers were truly mobilized to participate in conservation activities based on their own will instead of having to obey orders from either governments or external organizations.⁴⁶

Another more recent example of the contribution of American NGOs to the improvement in environmental governance in China is the annual report of the Pollution Information Transparency Index (PITI), first published in 2009. PITI was initiated by the China Environmental Law Project of the National Resource Defense Council, one of America's most effective and respected non-profit environmental groups, and jointly researched by the Institute for Public and Environment, the first independent environmental research institute in China based in Beijing and led by a renowned environmentalist Ma Jun (馬軍).⁴⁷ The PITI project selects, surveys and compares 113 cities across the country with regard to the municipal environmental protection bureaus' (EPBs') implementation of the *Environmental Information Disclosure Measures* on an annual basis. Since its first publication, the Chinese government, particularly the MEP, has endorsed and even used the results in official settings, which has generated an indirect, yet evident, influence on the EPBs' behavior in

⁴⁶Interview with Deng Yi in Beijing, May 2004.

⁴⁷Ma Jun was awarded the Goldman Environmental Prize in 2012.

releasing environmental data and allowing public access to environmental information.

Staffed by professionals, ecologists and experts, NGOs displayed a politically neutral outlook in front of the Chinese leaders and bureaucrats when they first arrived in the country and won the trust to work together against environmental degradation. These NGOs operated with relatively low bureaucratic costs, independent missions and flexible strategies, and were not completely constrained by the political obstacles in official bilateral relations. Since the end of the 1970s, American NGOs have channeled expertise and technological support in different forms from outside to hands-on local government staff, have delivered services, experimented with solutions and taken part in policy implementation in various locations in China. Such an advantage of political neutrality and practical flexibility enjoyed by the American NGOs who were to some degree welcomed by the Chinese authorities gradually came to an end when they started to work directly with grassroots environmentalists. Furthermore, transnational NGO cooperation in environmental protection began to experience more political pressure in the wake of the “Color Revolution.”

NGO Networks and Deepening Trans-societal Linkages

It is not an exaggeration to argue that the rise of environmental activism in China is substantially influenced by and embedded in the development of global environmental politics. Scholars have documented the growth of transnational NGOs and civil society actors focusing on environmental degradation in China in the past two decades, and have found that these external actors have played a critical role in raising resources and public awareness for Chinese environmentalists.⁴⁸ American

⁴⁸Katherine Morton, “The Emergence of NGOs in China and Their Transnational Linkages: Implications for Domestic Reform,” *Australian Journal of International Affairs* 59, no. 4 (2005): 519-32; Fengshi Wu, “Double-Mobilization: Transnational Advocacy Networks for China’s Environment and Public Health” (Ph.D. dissertation, University of Maryland,

NGOs and foundations have been among the most active in this respect, and have consistently supported grassroots environmental activism with funds, expertise and other resources since the 1990s.⁴⁹

Prior to the 1990s, only a dozen foreign NGOs and foundations were granted legal status and allowed to operate openly in China, and their activities were highly limited to working with Chinese governmental agencies, government-organized NGOs (GONGOs), universities and other quasi-official entities, due to both restricted rules regulating foreign organizations and the under-development of a domestic civil society sector. After the Tiananmen Square Protests, China experienced a significant setback in foreign assistance and NGO activities, and the development of domestic civil society as well. The overall institutional environment for foreign organizations, including yet not limited to NGOs and foundations, was gradually loosened up by the mid-1990s. Around the same time, the first generation of volunteer-based, activist-driven environmental NGOs emerged in Beijing marked by the establishment of the Friends of Nature and Global Village of Beijing, and quickly spread to Sichuan, Shanghai and a few economically more advanced provinces.⁵⁰ With the positive developments in both regulations over foreign organizations and

2005), chapter 3; Jie Chen, "Transnational Environmental Movement: Impacts on the Green Civil Society in China," *Journal of Contemporary China* 19, no. 65 (June 2010): 503-23.

⁴⁹In his recent commentary "US Foundations Boost Chinese Government, Not NGOs" published via YaleGlobal (March 28, 2012), Anthony J. Spires pointed out the statistical fact that most American donors gave most of their funding to state affiliated entities in China during the period 2002-2009. Based on the foundations' published archives, he criticized such a trend and called the Ford Foundation hypocritical as it has helped maintain "the world's largest authoritarian state" by channeling its grants to organizations linked to or controlled by the government. However, such an interpretation of data cannot be considered equally accurate in explaining the rationales and activities of foreign donors in China in the 1990s. See: Anthony J. Spires, "US Foundations Boost Chinese Government, Not NGOs," *YaleGlobal*, March 28, 2012, <http://yaleglobal.yale.edu/content/us-foundations-boost-chinese-government-not-ngos>.

⁵⁰Elizabeth Knup, "Environmental NGOs in China: An Overview," *China Environment Series* 1 (1997): 9-15; Fengshi Wu, "Environmental Activism and Civil Society Development in China" (Working Paper Series, Harvard-Yenching Institute, 2009), http://www.harvard-yenching.org/sites/harvard-yenching.org/files/featurefiles/WU%20Fengshi_Environmental%20Civil%20Society%20in%20China2.pdf.

domestic environmental activism, American and international NGOs began to send direct support to Chinese environmentalists and their NGOs. Furthermore, within the international NGO community based in Beijing or overseas but with a focus on China, there rose a genuine interest and enthusiasm in searching for civil society partners in the country.⁵¹ A study on 12 of the most active environmental NGOs in Beijing by the year 2000 showed that all of them were receiving funds and other forms of support from American and international donors and NGOs.⁵² As Jim Harkness, then Director of the World Wildlife Fund China office, put it in an interview, American professionals and NGOs based in Beijing in the 1990s were among the most keen and supportive of the first group of Chinese environmental activists.⁵³

The American government and foreign policy related think tanks at the time embraced the idea of promoting the development of genuine environmental NGOs in China in the context of bilateral relations. The Working Group on the Environment in U.S.-China Relations in April 1998 discussed in depth the prospect of financing environmental protection in China and the role of foundations and NGOs.⁵⁴ During his visit to China in July 1998, then U.S. President Bill Clinton made a special re-

⁵¹Nick Young, "Introduction: Searching for Civil Society," in *250 NGOs in China: A Special Report from Chinese Development Brief*, ed. Nick Young (Beijing: China Development Brief, 2001), 9-19. In an interview conducted in New York on May 20, 2009, Young reflected upon the initial thoughts of establishing the China Development Brief, an independent reporting and research organization, to be based in Beijing and focus on all matters related to the development of civil society in China, and confirmed that most of the people he knew who were involved in international development assistance to China in the late 1990s were intrigued and excited about the possibility of working directly with grassroots, independent and activist-driven NGOs in the country.

⁵²Fengshi Wu, "The China Side of Global Environment Activism" (paper presented at the International Studies Association Annual Convention, Chicago, February 22, 2001).

⁵³Interviewed in Beijing, August 2000. Harkness used some of his own organization's experiences to explain that American donors felt almost morally compelled to engage, collaborate with and support newly-established grassroots NGOs in spite of the fact that they were poorly staffed, and with a very low capacity to implement projects at that time.

⁵⁴This Working Group was at the time chaired by Elizabeth Economy, of the U.S. Council on Foreign Relations, and P. J. Simmons, of the Carnegie Endowment for International Peace. "Financing Environmental Protection in China: The Role of Foundations and NGOs," *China Environment Series*, no. 2 (1998): 71-74.

quest to meet with Chinese NGO leaders, and eventually spoke in person to Liang Congjie (梁從誠), co-founder of the Friends of Nature, and Liao Xiaoyi (廖曉義), founder of the Global Village of Beijing. The American Embassy in Beijing engaged with environmental activists in and beyond Beijing, and published a survey report on grassroots NGOs, the majority of which were environmental groups, in early 2000.⁵⁵

The Chinese government's attitude towards international NGOs and charities was similar to that towards foreign companies in the 1980s. The authorities have become more cautious over time, policies in the field have remained vague and inconsistent, and there has been a lack of co-ordination from the central to the local levels. For example, except for a handful of international NGOs and charities with long historic ties with China, some of which can be traced to the beginning of the 20th century, the Chinese government has been very reluctant to further grant official non-profit status and has practically forced some newcomers to compromise by registering as a country branch of an overseas company. After 1998 and the protests by Falun Gong practitioners, the Chinese government delayed the process of reforming the sector of civil affairs and the regulations over social organizations, particularly international NGOs. In 2012, Guangdong province became the first province that relinquished the requirement of a "professional supervisory body" for social organizations to obtain legal status. However, there is still no separate regulation that clearly defines the status and operations of international NGOs in China. With the rise of the Arab Spring and incidents indicating the potential spread of the Jasmine Revolution to China, the government has become more vigilant towards international NGOs, particularly the ones that are specialized in policy advocacy and public monitoring.⁵⁶

⁵⁵"Birth of an NGO? Development of Grassroots Organizations in the Land of Big Brother," U.S. Embassy in Beijing, 2000.

⁵⁶In February 2012, the *Global Times*, a leading state affiliated magazine specializing in international affairs, published an article referring to American NGOs as the "black hand" behind the turbulences in many developing countries.

Despite obstacles caused by both general politics and specific policies, the influence of American NGOs on environmental activism in China has been both evident and continuous. They achieve such influence mainly by supporting Chinese environmentalists and NGOs with not only financial resources, but more importantly expertise, information and knowledge and mentorship. Besides large foundations and NGOs such as the Ford Foundation and the Nature Conservancy, there are a few smaller organizations that are worth highlighting for they are even more proactive and innovative in allocating resources to the most needed local projects and incubating grassroots NGOs beyond Beijing or major cities and in less economically developed regions. ECOLOGIA—Ecologists Linked for Organizing Grassroots Initiatives and Action, for example, was one of the earliest American NGOs to provide micro-grants directly to Chinese environmental activists, student groups, and grassroots NGOs, without an intermediate state agency. In 1997, the Green SOS Small Grant project was initiated by ECOLOGIA and implemented by an environmentalist and college teacher in Sichuan—Lu Hongyan (盧紅雁).⁵⁷ Through this project, ECOLOGIA transferred financial resources from the U.S. and allocated them to a large number of grassroots environmental protection projects in China's south-western provinces, which were among the poorest in terms of economic development while also the richest in the country in terms of biodiversity.⁵⁸

In a similar manner, the Global Greengrants Fund (GGF) has delivered small grants (100-5,000 USD) directly to Chinese environmental

⁵⁷Lu founded the Environmental Volunteers Association (EVA) at Sichuan University in the early 1990s, and developed the Association into one of the best-established student green groups in the country. The opportunity to administrate the Green SOS project greatly improved EVA's self-capacity. During each funding cycle, EVA collects and reviews grant applications from dozens of colleges and universities in the western provinces. They have created a set of criteria to evaluate the practical effects and the organizational credibility to allocate the grants. This unique experience has provided EVA with the chance to form a broad view of the environmental activism among the youth in China. EVA and Green SOS have since gradually become the hub of environmental activism in the entire southwest region of China.

⁵⁸The Green SOS project is entering its 15th year following its launch and now enjoys more organizational autonomy with leadership fully staffed by local young environmentalists. Interview with Green SOS project staff in Chengdu, Sichuan province, in May 2012.

NGOs and student groups since 1998.⁵⁹ A total of US\$1,868,535 (in 344 grants) was distributed to around 149 grantees between 1998 and 2011. Since its first grant to China, the GGF has been consistent in focusing on genuine grassroots NGOs and student green groups in China. Owing to its responsive and efficient grant-making methods, many leading Chinese activists and NGOs obtained financial support from the GGF when they were in great need of it, such as the Tibetan Antelope Information Center which sustained the fruit of the first public campaign for wildlife conservation in post-Mao China, the China River Network which has been the backbone of the Nu River anti-dam movement, the Green Watershed and the Green Earth Volunteers, all of which have won high respect from the global environmental community.⁶⁰ The GGF has also consistently supported Chinese student environmental organizations and the regional umbrella forums of these student groups including the China Green Student Forum in Beijing (since 1998), the Guizhou Student Network in Guiyang (since 2001), the Green Stone Fund in Nanjing (since 2003), and the Shanghai Green Student Forum (since 2004). These student groups have supplied the Chinese environmental movement with fresh and necessary human resources over the years.

What distinguishes the GGF from other American donors is the emphasis on maintaining personal and strong connections with local

⁵⁹In over 70 countries, the GGF provides small grants to local environmental protection initiatives by inviting local environmental activists to form a country Advisory Board and identify most needy grantees. Information about the GGF's work in China is drawn from the review report "China Program Evaluation (1998-2010), Global Greengrants Fund" conducted by the Centre for Civil Society Studies, Chinese University of Hong Kong, in 2012. One of the authors of this article participated in the researching and writing of this external review.

⁶⁰Hu Jia (胡佳), coordinator of the Tibetan Antelope Information Network (1999-2001), later became a prominent human rights activist and was awarded the Sakharov Prize for Freedom of Thought by the European Parliament in 2008. Yu Xiaogang (于晓刚), founder and director of the Green Watershed, was awarded the Goldman Environmental Prize in 2006 for his efforts in "creating groundbreaking watershed management programs while researching and documenting the socioeconomic impact dams had on local Chinese communities," and was among the six winners of the 2009 Ramon Magsaysay Awards. Wang Yongchen (王永晨), co-founder of the Green Earth Volunteers and China River Network, won the Condé Nast Traveler Environmental Award in 2004 and the Earth Award in 2011.

grassroots environmentalists in addition to small grants. Such has been achieved not necessarily by the funding or material resources, but by the long-term trust, partnership and mentorship established between the members of the China Advisory Board and local activists and NGOs. The GGF's initial China advisors have included Wen Bo (溫波)—recognized by Time magazine as an “Asia Eco Hero” in 2006, Li Hao (李郝)—founder of the Beijing Earthview Environmental Education and Communication Center, and Lü Zhi (呂植)—a world-known expert on the giant panda and the first director of the China office of Conservation International, all of whom were influential figures in the emergence of the environmental movement in the country and had a passion in supporting more grassroots environmental groups. Many of the GGF grantees in China have received support from the very first stage of organizational development, such as the Green Camel Bell in Gansu province, Green Longjiang in Heilongjiang province, Green Eyes in Zhejiang province and Xinjiang Conservation Fund in the Xinjiang autonomous region. GGF China advisors have almost hand-picked the initial ideas, watched these grassroots groups grow, mentored their leaders via personal communications and supported them with international connections and educational opportunities until they can move on and obtain resources from other channels on their own.

In addition to supporting individual projects, activists and NGOs, some American NGOs and foundations have made a specific effort to facilitate networking among grant recipients and platform building for the entire community of environmental activism in China.⁶¹ Compared with other issue areas, the environmental field has reached a higher level of inter-organizational connectivity, partly because of the specific efforts made by external NGOs to facilitate NGO networking.⁶² Having entered the 21st century, the world is connected more than ever by Web 2.0, and social media, NGO networks and coalitions are becoming more visible in environmental politics, from the local to the global levels. In the context

⁶¹Chen, “Transnational Environmental Movement.”

⁶²Wu, “Environmental Activism.”

of Sino-American relations, such transnational advocacy networks consisting of both American and Chinese activists are emerging, and they have caught the attention of high-level politicians. The Nu River anti-dam movement is a most illustrative case here.

In September 2003, after receiving a message leaked by an official of the MEP about the construction of a 13-tier dam over the Nu River (known as the Salween River outside of China), Wang Yongchen (汪永晨), a veteran environmental activist, contacted all her environmentalist and journalist contacts in Beijing and started the Nu River anti-dam movement. At the same time, local environmentalists and NGOs in Yunnan, particularly the Green Watershed led by Yu Xiaogang (于晓刚), organized farmers from the Nu River dam site to visit existing dam sites and relocated communities in the province in order to better inform them about the ecological and social consequences of large dams. The two finally met late that year and converged their efforts, and the movement grew substantially stronger. Both Conservation International (CI) and the International River Network (IRN) sponsored Wang, Yu and other 20 activists, scientists and journalists to conduct a comprehensive field investigation of the Nu River dam site during February 16-24, 2005. The trip led to the submission of a policy recommendation letter to the Office of Premier Wen Jiabao (温家宝). Finally, Premier Wen called for the suspension of the project and a new round of environmental assessment. A few American environmental NGOs including CI, GGF, and IRN have continued to support anti-dam activists to strengthen campaign visibility both in and outside China.⁶³

As this anti-dam movement has shown, the flow of information within the networks of activists and NGOs across the Pacific has gradually changed from one-way to mutually empowering. The IRN has received detailed reports from Chinese environmentalists that it has disseminated widely via the Internet and to environmental activists in other parts of the developing world. One of the goals is to conserve the Mekong River Basin

⁶³Interview with Wang Yongchen in Beijing, August 2012.

and support sustainable development in rural communities in Cambodia, Thailand and Vietnam.⁶⁴ Networks are no longer established only for donors to channel funds and information, but by local activists to gather more international support and to link the struggle in China with a broader global environmental cause. Although transnational NGO networks such as the anti-dam case are still rare in the Sino-American context and Chinese environmental NGOs are still struggling with self-capacity development, their impact is already evident and their potential contribution to politics in general can be significant as the literature has suggested. Not only do these networks introduce new norms and make changes to local practices bypassing existing official bilateral frameworks, but they are also capable of mobilizing resources and information simultaneously at the local and global levels to exert pressure on national policy-makers and conventional political agencies.⁶⁵

Conclusion

Environmental protection is a compound policy area, and thus bilateral cooperation in this field cannot be separated from other aspects of inter-governmental relations. On the one hand, whether or not the governments of the U.S. and China can build up mutual trust in security, trade and other policy fields affects the possibility of a cooperative atmosphere for environmental protection. On the other hand, progress in environmental cooperation can offer learning in return for cooperation in other fields. Even though the environment has not been the field that has attracted the highest political attention in the general record of Sino-American bilateral relations, the situation has been changing rapidly in recent years. Bilateral cooperation in renewable energy, energy efficiency and climate change has great potential to become a major link that would keep the two parties

⁶⁴<http://www.internationalrivers.org/2012-southeast-asia> (accessed March 25, 2013).

⁶⁵Keck and Sikkink, *Activists beyond Borders*.

closely bonded together. However, interaction does not necessarily promise cooperation. Incorporating environmental topics into energy and economic negotiations may or may not provide the awaited political commitment in water, sustainable agriculture, forestry and other important fields related to the environment. The complex structures of the global markets in new energies may bring unintended obstacles into the bilateral climate negotiations.

When official environmental cooperation is not expected to achieve a major breakthrough in the short run, the successful experiences of American NGOs assisting in the reform of environmental governance and the development of a green civil society in China may offer valuable insights to policy-makers from both countries. Over two dozen American NGOs and foundations have funded, supported and implemented various kinds of environmental projects in China even prior to the establishment of official frameworks for bilateral environmental cooperation. They have built up solid networks with Chinese environmental activists, professionals, local EPBs and youth groups across the country, and have worked in a variety of environment-related issue areas. In general, transnational civic networks driven by NGOs and charities promote environmental awareness and gradual changes in practices over the long term. While the scope and volume of their work may not be as visible as that of ODA-sponsored projects or official initiatives, their impact may be more sustainable and not easily interrupted by political shifts in either country.

Nevertheless, there are two areas where disagreements over opinions may arise with the growth of both American and Chinese NGO networks in recent years. Such networks mobilize resources beyond conventional political channels through social media, opportunities offered by global governance agencies and the strategies of new social movements. Because some of the goals that these advocacy networks target are related to policy failures or state misbehavior, they have a tendency to mobilize the populace, instead of engaging in a dialogue with government agencies. Their intention is to increase international media exposure and pressure from a third party, for example, either the U.N. or the American government, which could inevitably trigger the Chinese government's mistrust of

foreign NGOs. To further complicate the bilateral efforts in environmental cooperation, the principles promoted by transnational NGO networks, such as participatory conservation, generational justice, the precautionary principle and sustainable development, do not coincide well with the neo-liberalism embedded in international trade regimes or Sino-American economic agreements. As both transnational NGO networks and renewable energy-related business networks develop along with Sino-U.S. bilateral talks in the coming years, the clash in principles and normative commitments will become more apparent and pose new challenges for environmental cooperation. For NGOs from both China and America, to play a more constructive role in bilateral environmental relations, activists and diplomats will have to establish innovative ways to lessen these two kinds of contention resulting from normative differences.

Appendix

American NGOs and foundations included in this research (in alphabetical order of organizational names).

Blue Moon Fund, Conservation International, David and Lucile Packard Foundation, Ecolinx Foundation, ECOLOGIA, Energy Foundation, Environmental Defense, Ford Foundation, Future Generations, Global Greengrants Fund, International Crane Foundation, International Fund for China's Environment, International Rivers Network, Jane Goodall Institute (Roots and Shoots), John D. and Catherine T. MacArthur Foundation, Mountain Institute, Natural Resources Defense Council, Pacific Environment, RARE, Rockefeller Brothers Fund, Starr Foundation, Nature Conservancy, Trickle Up, U.S.-China Environmental Fund, WildAid, Wildlife Conservation Society, Winrock International.

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