


Ecological Civilization

 Pulitzer Center





Ecological Civilization

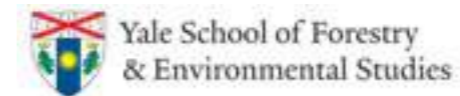
Proceedings

*International Conference
on
Ecological Civilization and Environmental Reporting*

Yale Center Beijing
June 16, 2015

Sponsors

Communication University of China
Pulitzer Center on Crisis Reporting
Yale School of Forestry and Environmental Studies



Introduction

Jon Sawyer
Executive Director
Pulitzer Center

It is easy to assume that China's environmental challenges are China's alone. The bad air or unsafe food or toxic rivers we read about have no effect on us, we might think, and nothing to do with the world's demand for the flood of inexpensive, high-quality consumer goods that has fueled the Chinese economic miracle. But "China is a global factory," says anthropologist Dan Smyer Yu of Yunnan Minzu University. "However you consume, whatever you consume, pay attention to the label 'Made in China.' So each of us has a responsibility for the environmental practices of China. China's environmental issue is a global issue. We have to take responsibility, each of us."

Smyer Yu was among an extraordinarily diverse group of specialists who gathered at Yale Center Beijing in June to engage an issue that is close to home for us all—the state of our environment. But they also addressed a dimension of this topic that is new, and significant—how our diverse religious and cultural

traditions might contribute to assuring a sustainable, healthy world for generations to come.

The conference was co-sponsored by the Pulitzer Center, the Communication University of China, and the Yale School of Forestry and Environmental Studies. Participants included environmental specialists and business people, government officials and religious leaders, journalists and academics. Their presentations, and the notably candid exchanges of views, are excerpted in the pages that follow.

The conference took place just as the Vatican issued the Encyclical on the Environment, Pope Francis's demand that the world address, in an equitable way, the realities of climate change. We are publishing these conference proceedings at another important moment, as the Pope makes his first visit to the United States and as China's President Xi Jinping makes his first state visit to Washington.

Francis's call for renewed environmental stewardship has generated huge public attention. Less noted, and striking, is comparable language from Xi and other senior Chinese leaders. "Ecological civilization" will address China's environmental challenges, they pledge, in part by invoking the religious and cultural touchstones that have informed Chinese society for millennia—traditions such as Confucianism, Daoism, and Buddhism that had been officially suppressed during seven decades of Communist Party rule.

Is the Chinese government's language on "ecological civilization" just rhetoric, a gauzy distraction from the grim statistics on pollution and regulatory indifference and a lengthening list of restrictions on non-government organizations? Earlier this year such concerns were vividly voiced in "Under the Dome," the "Inconvenient Truth"-style documentary produced by a former CCTV presenter—and then underscored again this August by the deadly explosion of a chemical plant in the heart of Tianjin.

If that is your presumption you will be surprised by the proceedings of this conference. Within China, you will see, there are as many views on environmental issues—and sources of inspiration—as in the United States or Europe or beyond. Debate within China on these issues is more open than many of us might suppose. It is connected to a resurgence of public interest in Buddhism, Daoism, and Confucianism (and in "Western" traditions too) that is reshaping Chinese society in myriad ways. And on these issues at the prickly intersections of faith, development and science, the conference made clear, we have a mutual, fundamental interest in charting a common path.

The Pulitzer Center is grateful to our partners in making this conference a reality, especially our co-sponsors: The Communication University of China and the Yale School of Forestry. Dean Liu Chang and his colleagues at CUC's School of Journalism assembled a stellar cast of participants from within China, from senior journalists and academic specialists to the deputy director general of China's Ministry of Environmental Protection. Mary Evelyn Tucker of Yale, a leader in the field of religion and environment for the past quarter century, was tireless in support of this initiative and personally recruited participants from around the world.

Our work on religion and public policy has been supported by the Henry Luce Foundation. The foundation encouraged us to design projects that encompassed not only reporting but also collaborations with universities that served to deepen our expertise while bringing the journalism to new and diverse audiences. The conference proceedings assembled here are a powerful example of just how valuable such collaborations can be.

CHAPTER 1

Welcome and Keynotes



Tiananmen Square. Photo by Chen Yifei. China, 2015.

Welcome and Introduction

Moderator:

Liu Chang

Professor, Deputy Dean, Faculty of Journalism and Communication;
Dean, School of Journalism, Communication University of China

Guest speakers:

Liu Zhiquan

Deputy Director General, Ministry of Environmental Protection

Hu Zhengrong

Professor, Vice President, Communication University of China

Jon Sawyer

Executive Director, Pulitzer Center

Mary Evelyn Tucker

Director, Yale Forum on Religion and Ecology

Liu Chang

Professor, Deputy Dean, Faculty of Journalism and Communication
Director, School of Journalism
Communication University of China



We are delighted to have you here to participate and share in the international conference on Ecological Civilization and Environmental Reporting organized by our School of Journalism at Communication University of China and the Pulitzer Center based in Washington D.C. Thank you for coming, in particular the friends who have traveled long distances to remind us just how important our work is.

Now, let me give the floor to our guest speakers, Professor Hu Zhengrong, vice-president of Communication University of China, and Jon Sawyer from the Pulitzer Center to deliver their welcoming remarks. Welcome. ♦



Hu Zhengrong

Professor, Vice President
Communication University of China

Ladies and gentlemen, good morning, and welcome to Beijing at this moment. The weather today is not clear, but that's okay as it is closely connected with our topic today, of ecological civilization and environmental reporting.

The Communication University of China is the leading university specializing in media, communications, and the arts, and also research into communication education. The university has developed very quickly, especially in the past 30 years, after the Chinese open door policy years ago, and according to the latest formal report of the nation, conducted by the Chinese Ministry of Education, Communication University of China is ranked as the top in journalism and communication in all of China, and also top in fine arts in all of China. So we are very proud of this opportunity to be able to collaborate with Pulitzer Center and also Yale Center, to work on this very significant conference.

Everybody knows that today is the age of media, especially new media and social media. So these topics are very significant for everybody, especially for the Chinese, especially for people living around Beijing, because Beijing and the area around Beijing are heavily influenced by air pollution. We are very keen on our

research and education, not only in general journalism and communication, but on more specific areas, like environmental coverage, environmental communication, and also health communication, and also crisis communication and so on. That will be our task, our chance, to contribute to the hope of Chinese society and the global community.

We are looking forward to our future collaboration with the Pulitzer Center and the Yale Center Beijing, and also the Yale School of Forestry and Environment. We are also looking forward to being able to collaborate with everybody here, to do research, to produce documentaries, and also to provide educational programs for our future journalists and communicators. I noticed that there were some speakers today who are our alumni, and we're also proud to have a guest speaker at the closing ceremony—a very famous guy in China, Chen Xiaoqing, the director of different documentaries including environmental documentaries. So he is also our graduate. We are very proud to be here—proud to be able to collaborate with everybody here. Congratulations to this conference, and we hope you have a nice stay here in Beijing, to experience our environment here. Thank you very much. ♦



Jon Sawyer

Executive Director
Pulitzer Center

Good morning to you all and thank you for being here.

We are grateful to Professor Liu Chang, Vice President Hu Zhengrong, and their colleagues at the Communication University of China; and to Mary Evelyn Tucker and her colleagues at the Yale University School of Forestry and Environmental Studies, our partners in organizing this important gathering. All of us are honored by the presence of His Excellency Liu Zhiqian, deputy director general of the Ministry of Environmental Protection. You and your colleagues are taking the lead in meeting environmental challenges that face not only China but the world—and the world has much to learn from the example you set.

I would like to say a word about the organization of the day and what we hope to accomplish. We have a number of distinguished journalists in the room but this is not a “news event” and should not be reported as such. We also ask that everyone here refrain from reporting the event via social media. We are making a record of the proceedings and hope to make that available later on, if participants agree. This is also not an academic conference, even though we have many distinguished academics in the room from a wide variety of disciplines, from environmental sciences and

cultural studies to communication and economics. You will be hearing from some of the most talented, expert individuals in these diverse fields and I hope that what you hear will spark your interest in learning more.

Our purpose for the day is simple but big—to promote candid conversation, mutual understanding, and an appreciation of our common interest in addressing what it will take to achieve the goals of ecological civilization. China is positioned as no other country to take the lead on this issue—because the stakes are so high for its own people, because it has demonstrated such astonishing vigor and creativity over the past few decades, and because it has built intellectual and cultural assets over the course of millennia that are uniquely suited to the challenges of today.

The Pulitzer Center is an organization devoted to journalism and education as the means of engaging the broadest possible public in the big issues that affect us all. It is in that spirit that we come together in Beijing. We thank you all for being part of this initiative today. Thank you. ♦

Liu Chang (Moderator)

Now, let's welcome Mr. Liu Zhiquan, deputy director general of Ministry of Environmental Protection and Dr. Mary Evelyn Tucker, Yale Forum on Religion and Ecology, to deliver keynote speeches.



Liu Zhiquan

Deputy Director General
Ministry of Environmental Protection

Ladies and gentlemen, good morning. I am very glad to attend the Ecological Civilization and Environmental Reporting International Conference, organized by the Communication University of China and the Pulitzer Center.

I want to discuss three points here with all of you.

First, I want to state that the Party and the Chinese Government are committed to building an ecological civilization. To develop this ecological civilization fits the conditions in China today. Especially now, we are facing growing ecological/environmental issues and resources pressure. To accomplish the plan to build a well-off society is the right decision to make. In the report on the 18th CPC National Congress, and in the 3rd Plenary Session of the 18th

Central Committee of the Communist Party, the development of ecological civilization is among the key tasks. In April [2015] the CPC Central Committee and the State Council released the “Opinions of the CPC Central Committee of Ecological Civilization.” The Opinions are the guidelines and the program of action to promote the construction of ecological civilization. It has very strong guidance, with nine sections and 35 parts. Now everywhere in China these Opinions are being carried out.

Another way to demonstrate the attention the government is giving to ecological civilization is the newly revised Environmental Protection Law. We started to implement this new law in January of this year. The law specifically lists building ecological civilization, and economic and socially sustainable development, as its legislative purpose. It promotes the idea of harmony between humans and nature, the priority to protect the environment as a fundamental principle, and it clearly requires coordination of the economy and social development goals.

Secondly, to promote the development of ecological civilization, the Ministry of Environmental Protection and other related government departments have taken a number of specific actions. One is that laws related to environmental protection now include the language about ecological civilization. For example, the Air Pollution Prevention Law that is subject to ongoing revision and the Soil Pollution Prevention Law that is currently being drafted now include the concepts, requirements and tasks associated with developing ecological civilization. Another example is the practice of strictly observing the eco-protection “red lines—to improve land-development patterns, according to the balance of population and

environmental resources, and to coordinate the economic benefits, social benefits, and eco-benefits. The government is working on promoting the important ecological public division, which includes the key ecological-function areas, ecologically sensitive areas, and vulnerable areas. We will mark off the ecological-protection red lines and implement the project-area planning strategy. As to how to set the red lines, we already have a template for the guidelines. In some provinces and cities, like Jiangsu, Tianjin, and Inner Mongolia, this work has already started. It will be spread nationwide. At the same time, we have started to explore the development of national parks, to enhance the management level of protecting our natural heritage.

Thirdly, we are acting to increase the intensity of our efforts to protect against air pollution and water pollution. The practical plans for preventing and controlling air and water pollution were published by the state department, and we are drafting the practical plan for preventing and controlling soil pollution. This is the war that we have started as to pollution—to use the iron fist and iron rules so as to intensify prevention efforts and to control air and soil pollution. We will give priority to the significant environmental problems that cause damages to human health.

Fourthly, we are launching pilot projects on ecological civilization, so as to have a demonstration effect. Increasingly we want to promote ecological-civilization pilot areas at different levels, from pilot provinces and pilot cities to pilot villages, pilot towns, and also pilot eco-industry areas and new-technology areas. This has already been included in the administrative approval process. We

have already built a group of different-level pilot areas. The techniques employed include social development, environmental education, and science popularization.



Fifthly, we are promoting green manufacture and the green consumer. Ecological civilization is standing on the full process of manufacturing. Green has to be in the producing, the transportation, and the consuming. We need to develop a system that includes environmental taxes, ecological compensation, price reforms, green credits, and regulated permissions to pollute, so as to promote the green development. For example, in the green manufacturing, we are using government procurement methods so



National Centre for the Performing Arts. Photo by Chen Yifei. China, 2015.

as to certify green products, which is formed by more than 100 standards for environment friendly products. The government will make the purchase only after the certificate agency has verified that the product is truly green. The Environmental Protection Ministry and the Ministry of Finance have already published 15 lists of criteria for government procurement. Through the list we want to guide the market to be green consumers, to let all parts of the society join in. Let the government offices and the social organizations join in. This year on June 5th, the environment day, we had the topic of “having a green life.” Everyone should make the effort to consume green products and to build the national system, including the propaganda and education required, so as to enlarge the green supply chain. We have to promote the ecological culture in the society, and the ways of living green, so as to encourage the public involvement.

Sixth, we intend to accelerate the construction of ecological civilization, and to use existing systems so as to protect the

ecological environment. We are establishing economic and social-development evaluation systems that include resource consumption, environmental damage, and ecological benefits. To evaluate the performance of local governments we will establish evaluation methods, target systems and incentive mechanisms. This system will increase research on property management and usage control. We are now working on establishing the liability system for ecological environment and environmental damage.

The last goal is to let environmental science and technology play a role in promoting ecological civilization, especially by spending more on the research and promotion of green technology and green industry. In addition to strengthening ecological security, including biodiversity conservation, we want to promote policy mechanisms for management systems and research to support the development of ecological civilization.

In this conference, there are many journalists and experts participating. I think it is a really good format to promote the

ecological civilization in different ways. I hope the conference will have great participation, and that you will share the results with our government—related departments. I hope that everyone here will make an effort on developing ecological civilization. ♦

Mary Evelyn Tucker

Director
Yale Forum on Religion and Ecology



I would like to welcome you to this conference on behalf of Yale University, in particular the School of Forestry and Environmental Studies and the Yale Forum on Religion and Ecology, of which many members are here. Our School of Environmental Studies is seeking solutions to environmental problems across the disciplines of science, policy, economics, industrial ecology, communications, and, most critically, values and ethics. We are aware that environmental problems require interdisciplinary cooperation, and thus we are delighted to participate in the rich variety of perspectives on display at this conference. We are particularly grateful to the Pulitzer Center and the School of Communications for their partnership with Yale in this enterprise. Indeed, our Dean, Sir Peter Crane, sends his special greetings to this gathering. He is eager to have this partnership continue beyond our discussions today. Dean Crane sends a warm thanks to the deputy minister for

the environment, and he hopes he will find time to spend at Yale, too.

When my teachers, Theodore de Bary and Thomas Berry, came to China together in 1948, no one could have imagined the changes we have seen today. We are all keen to understand more fully the challenges China is facing, in terms of economic development and environmental protection, as the minister spoke of just now. These are not easy to reconcile. Indeed, the international community has been seeking answers since the Earth Summit in Rio in 1992 set forth a framework for sustainable development, and the Earth Charter tried to respond to that as well, with an integrated framework. The world is ever more in need of an "integral ecology" that brings together a fresh understanding that people and the planet are part of one interdependent life community. Such an "integral ecology" affirms the cooperation of science and ethics, knowing that our problems will not be solved without both.

Today's meeting, then, represents a new period of cooperation. In the Yale Forum on Religion and Ecology, we have been working for two decades with hundreds of scholars to identify the cultural and religious grounds for a more diverse environmental ethics for the flourishing of the Earth community. Between 1995 and 2004 we organized ten conferences at Harvard and published ten volumes to examine how the world's religions can contribute to a sustainable future.

In this same spirit, the traditions of China (Confucianism, Daoism, and Buddhism, and the folk traditions) will be explored today, building on the work of academics, environmentalists, policy

makers, journalists, and filmmakers across China and the U.S. and UK. These diverse perspectives are needed in China clearly, but also are a valuable part of global discussions on ecological ethics.

Central to these global discussions is the Pope's Encyclical on the Environment. In two days the world will awaken to a clarion call from Pope Francis to address our environmental and climate problems from within this broader framework of integral ecology, which is his term. The Pope's Encyclical will illustrate that the moral values of Christianity (and all the world's religious traditions) are now in dialogue with ecology. Science and policy alone cannot solve these problems. Instead, we will need the cosmologies and ethics of all the world's religions and cultures to solve these problems. That is the premise of this conference. Clearly, China has unique historical and contemporary perspectives from Chinese religious and cultural traditions to offer this dialogue.

Confucianism speaks to the integration of Heaven, Earth and Human. Daoism evokes a sense of how the microcosm of one's body is part of the macrocosm of the universe. Buddhism deepens our understanding of the interdependence of humans and all life systems. These cosmologies, or world views, have direct implications for the ethics of how we live our lives in relation to nature and other humans.

That is what our academic colleagues are exploring in Chinese texts and traditions while our filmmaker and journalist colleagues are now documenting this "integral ecology" on the ground. This blend of ideas and practice will be a new creative ground for creating

ecological civilization in China and beyond. We look forward to hearing the panels and seeing the films that illustrate this so richly. A warm welcome from Yale to each of you. Thank you. ♦



A Giant Panda in an enclosure at the Chengdu Panda Breeding Center, in southwest China. Photo by Sean Gallagher. China, 2011.

CHAPTER 2

Environmental Perspectives on Ecological Civilization



Photo by Sean Gallagher.

“China is a global factory. However you consume, whatever you consume, pay attention to the label ‘Made in China’. So each of us has a responsibility for the environmental practices in China. China’s environmental issue is a global issue. We have to take responsibility, each of us.”

- Prof. Dan Smyer Yu, anthropologist, Yunnan Minzu University

Environmental Perspective of Ecological Civilization

Moderator:

Yang Mingsen

Editor-in-chief, *China Environmental News*

Panelists:

Sean Gallagher

Freelance Photographer, Pulitzer Center Grantee

Yunhua Liu

Director, Shangri-La Institute for Sustainable Communities

Dan Smyer Yu

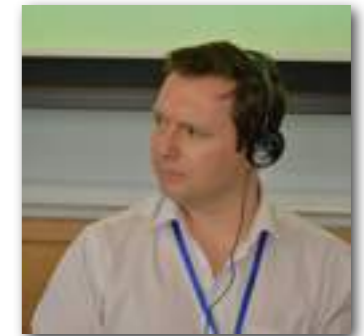
Director, Himalaya Research Center, Yunnan Minzu University

Jennifer Turner

Director, Wilson Center's China Environment Forum

Sean Gallagher

Freelance Photographer
Pulitzer Center Grantee



Good morning everybody. First I'd like to thank the Communication University, the Pulitzer Center and Yale for organizing this event. My name is Sean Gallagher and I'm a photographer and filmmaker. I first came to China in 2005. This year marks my tenth year. My work is focusing on documenting environmental issues in Asia. China has been a very large focus of my work. I also cover issues in the developing countries of India and Indonesia, using photography and video to try and understand the major environmental issues affecting Asia.

Because of China's important role in Asia—some would say the most important role—it's been crucial for me to try to piece together the main environmental challenges that have been facing the country. Now we only have five minutes and I can't squeeze ten years of photos into five minutes but I want to give you a very brief sample of some of the stories that I've been working on over the past few years and not only talk about these issues but also the importance of photography, journalism and the media in communicating these issues.



Flood waters during the summer are channeled through the Dujiangyan Irrigation System. The system is regarded as an "ancient Chinese engineering marvel." By naturally channeling water from the Min River during times of flood, the irrigation system served to protect the local area from flooding and provide water to the Chengdu basin. Sichuan Province. Image by Sean Gallagher. China, 2010.



So just to put things in a little bit of context, let's go back 2,000 years. One of my main approaches is to break down large stories into smaller stories, to use the smaller stories to link the dots and help people understand the larger issues. This story is one that I covered, looking at the ancient irrigation system of Dujiangyan, in Sichuan Province, built over 2,000 years ago as a way to manage

the water that flowed from the Min River into the Sichuan plain, at a time when floods would ravage the plains twice a year with widespread damage. These issues, these major environmental issues, are not new challenges. Many of the issues that faced China 2,000 years ago are facing the country today. However, having the modern influence of issues such as climate change, of modern economic development, pollution, in relation to the story of this dam, which now sits a couple of miles upstream from the ancient system in Dujiangyan, there was a contrast in the modern and ancient ways in which China is responding to the issues surrounding water. As you know China is home to half of the world's dams, major dams, so this is a very contentious issue, from the ecological perspective and also the societal perspective, in terms of human migration that is having an ecological impact.

Coming a bit closer to the present day, going back about 1,500 years ago, we're now in Xinjiang. This is a story I worked on about abandoned cities, resulting from desertification in northwest China. Desertification is an incredibly pressing issue, often an underreported issue. These are the types of stories we really ought to try to cover, and try to understand.

The first images are from the city called Yingpan, near Korle in Xinjiang Province. This was a city that was abandoned 1,500 years ago because of the changing local climate, the drying up of the local river, causing the changing of the ancient Silk Road where this city once sat upon and was a thriving city. It's just an example of the many cities in northwest China that have been abandoned and are slowly disappearing as a result of an issue such as desertification. So even though it was an ancient challenge it's also an issue that is



Human remains in the abandoned city of Yingpan in Xinjiang province. Photo by Sean Gallagher. China, 2009.

• • •

still affecting us today. In inner Mongolia, in Xinjiang, where all these images were taken, these are issues that are affecting China today.

Going on to tree planting efforts, I'm sure something everyone has heard about are ways to try and combat this issue in a modern sense. There's debate whether this is successful or not. This is a contextual way to show you the ancient, or the older, ways of approaching these challenges versus the modern approach.

I focus on climate change issues a lot. Here you see the impact of climate change on the Tibetan plateau, the affect of flooding on local people, the displacement of people from reservoirs behind large dams. Many dams have been built there. The drying of the grasslands. Desertification on the roof of the world. The effect on local people—the Tibetan nomads who have been relocated off the grasslands on the roof of the world because some have blamed



A man walks over rocks near a glacial lake that has formed at the base of the Dagu Glacier which lies at 5,100 meters on the Dagu Snow Mountain, on the southeast edge of the Tibetan Plateau. The glacier has been shrinking in recent years as a result of rising temperatures in the region. Image by Sean Gallagher. China, 2012.

• • •

them for contributing to the deterioration of the land. Again, a contentious issue.

And then we look at the modern effects. This is something that we're very aware of today, the adaptation toward issues like air pollution and local people adapting to these conditions. This is the modern reaction within China to many of these issues.

So I think the media plays a key role in helping to visualize these issues which often to the general public seem complex, difficult to understand, and difficult to get your arms around. Our role, as photographers and journalists and media, is to help people visualize and textualize and understand those issues. ♦



A young couple, Ms. Lu and Mr. Li, hold hands during a walk through Beijing's Olympic Park. "I'm pretty sad about this. It's worse and worse," explains Li. "I think the pollution is bad for our health. The PM2.5 damages our lungs [but] we don't have any choice," he laments. "I left China two and half years ago. Then it wasn't so bad. I've been abroad. I know what's good [air] and what's bad. Young people care more than old people. We have more information. We know how bad it is." PM2.5 reading - 218 - Very Unhealthy. Photo by Sean Gallagher. Beijing, 2015.





Liu Yunhua

Director
Shangri-La Institute for Sustainable
Communities

I'm still struggling with how I should focus and use the five minutes I have. One is talking about values and ethics, but I also want to talk about public participation—how to engage people in the process of learning and action. So I'll try to combine both.

We see a lot of problems—we see a lot of changes taking place in the environment, and also in people's thinking and way of doing things. Sean Gallagher just presented some very good examples. I mean, we've seen a lot more government efforts; we've seen a lot of efforts from scientists and others to try to fix these problems. And in spite of these efforts, we see the problems getting worse and worse, so we're trying to think where we went wrong, how we could do this better. We started a project called the Water School—Water School China, which it's called now—and we have worked with 130,000 people already, students across four river basins. The learning takes place in people, by doing things. And the belief is that it is only when everybody takes action, when everybody starts to think and everybody puts their heart in things—that it is only then that we can see a hope, a change, in the future.

So far, the project has been very successful. I want to use the project to talk about a kind of social movement, people's

movement, and the kinds of social learning required to build a mechanism for people to together reflect on our values, ethics, and deconstruct what we are currently practicing, and maybe construct something new, that's in line with what Mary Evelyn Tucker talked about, an integral ecology. She also very well summarized the kind of ethics you find in Confucianism, Daoism, and Buddhism.

This kind of project can be so powerful and so effective, not only in the learning of the children, in the promoting of a new kind of education in China, but also as a way to really engage people to make a real difference.

It's very complicated, but to summarize: Learning takes place at multiple levels. At the individual level we learn knowledge, which combines human knowledge with nature's knowledge. We also learn skills—how to use the computer, how to use social media, and with traditional practices, how to take care of your grassland, how to take care of your river, your mountains and lakes, forests. We also learn ethics. And this kind of new ethics has some issues, to combine more than ethics with the traditions, with the deep belief systems rooted in the community. All of that is at the individual level.

I also look at learning at an institutional level. These institutions can be community learning centers, community nature reserves, even children's parks. It can be women, forest patrolling and also, at the higher level, what we call social learning. Social learning: How to build partnerships, platforms, and also build a kind of mechanism to explore a new way of thinking, a new kind of value. For example, being more ecologically aware, not having more,

which is a concept deeply rooted in Chinese traditional culture. Again, it comes back to projects with children, with the community, with nature reserves, with monasteries, with government, with businesses. These can be great platforms to engage this kind of learning, to engage a kind of social movement or people's movement. ♦



A young Tibetan girl is held by a female monk in the Amdo region of the Tibetan Plateau. Image by Sean Gallagher. China, 2012.



Dan Smyer Yu

Director
Himalaya Research Center
Yunnan Minzu University



First of all I want to thank the Pulitzer Center, CUC and Yale University for organizing such a wonderful event and particularly for the chance to see all my friends.

Today I'm going to use the five minutes to talk about the fact that China has actually had some achievements in ecological civilization. I know the media view on this is very different. Another point I want to make is that China is a global factory. However you consume, whatever you consume, pay attention to the label "Made in China." So each of us has a responsibility for the environmental practices in China. China's environmental issue is a global issue. We have to take responsibility, each of us.

I want to propose something I call scientific cosmivision. My specialty is religious ecology, as inspired by Mary Evelyn Tucker. Before I get into that I want to say a few words about Yunnan Province. I consider Yunnan Province a role model in building ecological civilization in China because in 2009 Yunnan formally issued a plan respecting ecological civilization. The title of this plan is called "Ecological Health as the Foundation of the Province." So this plan presents the policy interpretation of what ecological civilization means to this province.

I want to elaborate on three points defined by the Yunnan province government. Ecological civilization according to the province incorporates three subsets of civilization. One is “ecological consciousness.” Second is “ecological protection systems.” Third is ecological, or conserving, behavior. These three subsets are elaborated in a set of policy language; however, from a social scientific perspective, the provincial policymakers who drafted the plan are obviously aware of both national and global trends for environmental protection, exploring green development models, and the approach of organizations like the Nature Conservancy. In this respect the province went ahead of other Chinese provinces.



Yunnan Province in China.

In actually implementing the plan Yunnan province emphasizes these ecological facts:

First, it is part of the eastern Himalayan region, one of the 10 biodiversity hotspots of the world. It hosts the most biological species of any province in China and has one tenth of the country’s national forests. It has one of the richest natural genetic pools in the world. Based on these facts Yunnan has implemented an

environmental protection plan. And I want to praise Yunnan Province, where I work and I live.

Another thing linking my proposed scientific cosmo-vision with the Yunnan Province plan for ecological civilization is that it mentions that it is crucial to spread ecological culture and the cultivation of ecological consciousness. This is very, very important. I myself believe in something else—I would call it inner environmentalism, or inner science: To pay attention to how we consume and what kinds of choices we make. So in a sense in Yunnan Province the policy accords with the global trend toward environmental consciousness, in the programs proposed under the environmental program but also under the programs for treatment of indigenous peoples.

Yunnan Province’s accomplishment so far tells me that its envisioned ecological civilization is a singular model responding to the current nation-wide model, one that is based on a growth economy with an emphasis on green development. In this sense, this ecological civilization model is also an economic development model. Given the Province’s ethnic and ecological diversity and from my social scientific perspective, I make two propositions for policymaking and social scientific research.

First, I propose to pluralize the conceptual and policy meanings of ecological civilization by re-identifying and revitalizing the native peoples’ existing ecologically sustainable modes of being which are grounded in their ancient environmental knowledge and practices.

Second, I propose a scientific cosmo-vision as a holistic, empathetic awareness of the living knowledge for sustaining

ecological health from smaller-scale human societies and communities in the contemporary world. This scientific cosmology is committed to relearning and experimenting with new meanings and applications of the eco-spiritual wisdom of both ancient and modern origins in our renewed appreciation of the Earth as a living being. I want to emphasize that we need to treat Earth as a living being. From a physics point of view it's just dirt and matter, but from an indigenous perspective Earth is a living being and is treated as such.

“The world already has so many existing sustainable models, especially among indigenous cultures and first peoples.”

Even if you don't believe in religion you can empathetically understand how other people view Earth as a living being. So the teleology of this scientific cosmology is centered upon the restoration and preservation of diverse ecological worldviews, values, and their culturally embodied practices and subsequently yielded knowledge. These have profound implications for the sustainable health of the Earth, not only in Yunnan but elsewhere in the world. So my personal goal is really to identify these pre-modern sustainable ways of being and then use them at a different scale—to promote them, for the benefit of the well-being of the environment worldwide. ♦

Jennifer Turner

Director
China Environment Forum
Wilson Center



Hello everyone. When Jon Sawyer invited me to come speak at this conference on ecological civilization I said I don't do ecological civilization! But on reflection I do. I work at a think tank in Washington, D.C. I put on meetings, do publications, and multimedia reporting. Today, no multimedia! It's old school today—we're just talking face to face.

What I do is I look at problems in China in terms of environment and energy. I find U.S. and other partners to maybe come together and solve them. But ultimately this is the question: For China to have this ecological civilization it's not just to get the laws and the regulations right but I think what's a really important part of the solution is what's already going on—a lot of cooperation with international organizations. And as a matchmaker that's why I say that is part of the solution.

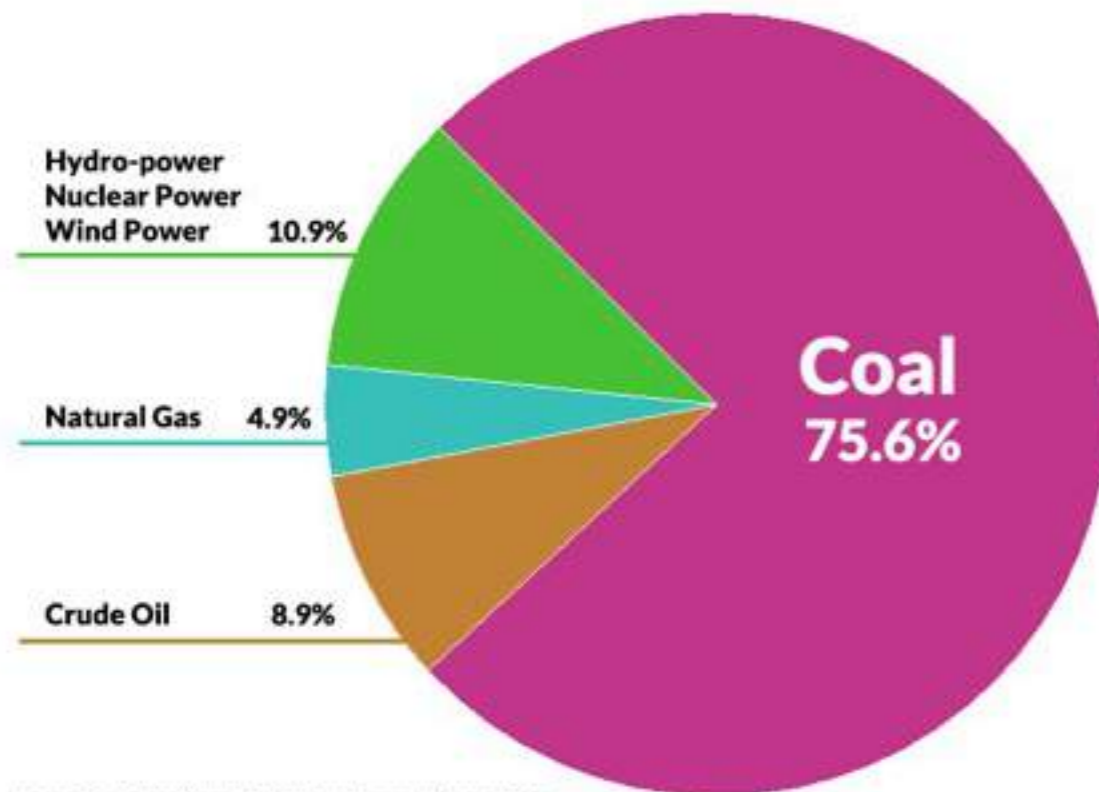
Now I want to tell you a little bit of a story about a project that I've been doing, as an example of not just me but other organizations helping China on this greener, cleaner path. I've been doing a project called Choke Point China, looking at energy-water-food confrontations. Now in my work—and I've been doing it for 15 years—I've done a lot of meetings on energy issues in China, and

water issues, but I never came across anyone looking at both of these together.

In the United States, back around 2007-2008, the issue of water and energy became a very clear problem. About 45 percent of our water is used by the coal and nuclear power sector. So in 2007 when there was a huge drought in southeastern U.S., about 25 nuclear and coal-fired power plants almost had to be turned off. And suddenly the policymakers and researchers said Whoa! Water and energy are connected.

I have some friends at a group called Circle of Blue, some journalists—it's a journalist NGO—that had done multimedia

China's Total Energy Production in 2013



Source: China Statistical Yearbook 2014, National Bureau of Statistics of China
Graphic: Jin Ding

reporting in the U.S. on this looking at this topic, water and energy confrontations in the U.S. And I thought this was such lovely storytelling. I said “Hey guys, let’s get a grant and do this in China.” And that’s what we did. So in 2010, I sent Circle of Blue journalists and researchers to China armed with one question—the journalists in the room know this, that good stories have a good question. And our question was simple: How is energy development impacting water in China? I used my network, my mafia, to give them the connections. And they went and did interviews—at the Ministry of Water Resources, at Tsinghua University, with all of these bigwig people. And you know what the answer was? No one has any idea how energy is impacting water! But what they did was, they thought the question was really intriguing. They gave them some data. They gave them some numbers, on energy and water and coal.

We collected more information. By early 2011 we started publishing our multimedia reports. We were the first organization that actually came out and said, “we estimate that somewhere between 15 and 20 percent of all the water used in China goes to the coal sector.” And then we came back to China and we gave lots of talks and presentations. And we were met with shock by the Chinese government and researchers. They said, “This can’t be true.” But we said, “Hey, you gave us the data.” And through good storytelling, the convenings, and exchanges, our work sparked the Ministry of Water Resources, Greenpeace China, Nanjing University, and others—a whole bunch of other actors here in China—to start researching the issue, realizing that, “Hey, this is water and energy.” Not only is it that coal uses lots of water, but we



all raised the question: How much energy does the water sector use in China? Okay, how many of you have ever thought of that question? Raise your hand. How much electricity does the water sector use? Raise your hand. Oooh.

In the United States, moving, cleaning, and desalinating water uses 14 percent of our electricity. In California 19 percent of the electricity goes to move, clean, and desalinate water. That's a lot. So now, because of our research and reporting, people in China—the government and energy folks—are saying, “Whoa, the water sector is a high energy-intensive sector.” We need to think about this. The reason I bring up this story: It's an example of how—in this case a think tank and journalists working together, with Chinese counterparts as well—to do some good storytelling to link

things together in a unique way. Basically we took the water angle as a way to look at energy—and it's catalyzing new cooperation.

Not only is there now a Chinese five-year plan on energy development, starting to look at water and coal. Last November [2014] the U.S. and Chinese government signed a climate agreement, and within that, the start of a new era of cooperation on water and energy research. Why? Because the United States faces the same problems.

I'm going to close with one example here, on Yunnan, another choke point story, that maybe doesn't make Yunnan look as ecologically civilized as Dan Smyer Yu was just suggesting. But there's hope. So my story is that one of our research interns looked into Yunnan—you know, in Yunnan their hydropower, most of it,

goes to the east coast, right? 40 percent of the electricity produced in Yunnan is consumed along the east coast. So here's Yunnan, putting in hydropower and not using as much of it. Well, there was a proposal that was bandied about in Lijiang. The Yunnan provincial government said, "Hey, let's keep our hydropower in Lijiang. Let's start doing aluminum smelting." And when word got out to the journalists and the public, that there was the idea of smelting taking place in Lijiang—that there would be aluminum smelting, highly polluting, highly energy-intensive, in this beautiful place—there was a big social-media campaign, with a lot of people using Weibo from all over the country saying, We don't like this. ♦



A long chimney stack on the outskirts of Baoding, China's first carbon-positive city. Photo by Sean Gallagher. China, 2009.

Conference Participant:

What we have heard from you guys, it is very shocking for us. The moderator, Mr. Mingsen Yang, is the editor-in-chief from the *China Environmental News*. We haven't heard from you yet.



Yang Mingsen

Editor-in-chief
China Environmental News

I want to summarize these presentations, and also talk about my thoughts. Sean Gallagher specifically mentioned that to build an ecological civilization we need to respect nature, protect nature, and adapt to the nature. There is a logic in this. To protect nature you need to respect it first—and the best respect you could give is to adapt to nature's needs. The examples Sean gave are very current.

When the ancient Chinese built the Dujiangyan water conservancy project they used sustainable ways of dredging. The dam we are building today, upstream of Dujiangyan, is by contrast a very crude way to divert the water. It is against the needs of nature. Of course the local community has reasons to build the dam. But many

people, including myself, have been strongly against building dams like this upstream of Dujiangyan. Sean's attitude on this is meaningful: to respect nature, to protect nature, to adapt to nature's needs.

Professor Dan Smyer Yu said one sentence that I was particularly impressed by—that China has real achievements in building an ecological civilization and environmental protection. Another point he made that I also felt was impressive was that we should promote a diversified ecological civilization, especially, to respect the local and ancient knowledge. Now we usually don't respect the local culture and we don't respect the ancient knowledge. There's a one-sided emphasis on current technology and knowledge. It is not right.

Ms Yunhua Liu said it is important to emphasize actions as well as thoughts. It is promoting a kind of moral living. If a man wants to do something good, in Chinese we call that a good thought. If he puts this thought to practice, it is a good act. If he does not only do it himself, but also asks people to do it together, it is charitable deeds. If he insists on doing it, it is a great goodness in China.

Jennifer Turner:

Can I add, now that he gave me a little entry point to talk about coal (I love talking about coal!)—how, in northern China, where most of this coal is coming from, there's very little water. That was a key point in our Choke Point reporting: that, because coal's thirst is growing so rapidly, there's just not enough water. Inner

Mongolia produces 25 percent of your coal production. It only has about 1.9 percent of your water. That's the kind of confrontation you face: If coal's going to get the water, who's not going to get the water? We have these similar kinds of fights between energy and water in the United States, and guess what? When energy and water come against each other, who wins? Energy. The energy sector will always get the water, before agriculture, or just letting the water stay in the river. That's the big choke point in China. Most of the coal is in the north and that's just not where you have water. So it's another cost of coal: not just air pollution, but also the loss of water.

Also, how much electricity is embedded in the south-north water transfer project? There's a lot of cement, there's pumping, and a lot of waste-water treatment plants. And no one has made that calculation yet. I'm hoping to! But the object of the choke-point exercise is that, when you look at energy through the lens of water, it just makes you evaluate the costs and benefits differently.

Dan Smyer Yu:

I want to respond, Jen, but not to debate you, or disagree with you. I want to clarify what I said about Yunnan province's achievements. I only commented on the policy achievements. The nationwide development model is there as well, and that model actually comes mostly from the United States: the automobile industry, the freeways, consumption, supermarkets, etc. And also, that China is now a factory for the United States and Europe.

Yang Mingsen:

Jennifer Turner is an energy expert. I was particularly interested in how she talked about energy problems. She emphasized that building ecological civilization needs cooperation, needs more good stories. She didn't talk much about China's energy challenge. I want to share with you some numbers: Now, China consumes nearly 4 billion tons of coal each year. Of the 4 billion tons less than 2 billion are used for concentrated burning; the other more than half is used for direct burning. In China's energy structure coal takes more than 70 percent. New energy sources all added up together is less than 10 percent. In 2013 (the most recent numbers we have), Chinese GDP amounted to 12.3 percent of the global total but we used 21 percent of the energy in the world. The GDP energy cost is double the global average. The area of China is less than one fifth of the world but we burned over 40 percent of the coal in the world.

I also want to share another number with you: In China, the combination of the area of Beijing, Tianjin, Hebei, Shandong and Henan provinces, the area of Yangtze Delta, and area of Zhu Delta amounts to just one sixth of the nation, by land mass, yet this region burns 70 percent of the coal used in China. That shows how much we are depending now on coal. So to adjust the structure of energy in China is very difficult; it is facing huge pressure. If we adjust it too quickly it will be risky—and will cost a lot. What I want to share, with everyone here, is the complexity and seriousness of China's energy problem.

Conference Participant:

This question is addressed to Jennifer Turner.

We all agree that coal is a major source of energy in U.S. and China. One problem is the coal ash, one of the residuals that contain a lot of the polluting ingredients—cadmium, etc. How do you treat that issue in the U.S.?

Jennifer Turner:

As to coal ash, no one does it well. No one. Greenpeace China, a few years ago, did a fabulous piece on coal ash. Premier Wen Jiabao was so impressed that he brought them in and said “tell me more,” and then said the Ministry of Environmental Protection was supposed to regulate. After they burn the coal there is this ash left over and it gets put in ponds. They call it irrigating the coal. This is another thirst of coal in China. We just made an estimate of how much water goes to try to keep the coal ash calm. They don't always succeed. So when the dust storms come here to Beijing, well, there could be some coal ash coming in with that, which is also, as you mentioned, quite toxic. The U.S. Environmental Protection Agency is also looking into this, how to regulate. I believe this is an area where the U.S. and China need to put their heads together because no country has come up with a good solution. Except in India: I was just in India, giving some Choke Point talks, and in India they have a very extensive program of turning coal ash into cement,

using it in road construction. I believe there are some pilot projects in China but it seems to be very extensive in India. The experience there reminds us that this is a way of trying to solve a water/coal problem. You know, if you don't do something with this ash you are just using water forever to keep it calm, or putting it in dams that break, like in the United States.

Donald Worster

Honorary Director
Ecological History Research Center
Renmin University
Former President
American Society for Environmental History



I have a question about the meaning of ecological civilization. It's occasioned by several statements here this morning but in particular the way Dan Smyer Yu put this raised the question for me. You talk about "pluralizing the concept" of ecological civilization, meaning bringing in diverse native people's traditions and so forth. The question I have, I'm rather skeptical about pluralizing this word ecology. Ecology is fundamentally a science. Can you pluralize science? How do you bring together native traditions, in a pluralistic way, in the first place, and in the second add those into a scientific concept? If someone is going to tell me whether something is causing damage ecologically or to human

health, can I come up with a pluralistic definition? It seems to me that the danger in that is that somebody's pluralistic definition is to say I don't see any damage there and someone else is going to say I have the facts. I'd like to have some comment on this and it's a question I'd like to follow all through the day.

Dan Smyer Yu:

Wow. You've raised a very challenging question.

Mary Evelyn Tucker:

Dan, I just want to say this is Donald Worster, environmental historian now in residence at Remnin University. He is one of the deans of environmental history, especially environmental history in the U.S.

Dan Smyer Yu:

China is in a very special developing stage. It is not comparable with western developed countries. For example, many western countries bring out the term of "zero emission," or "almost zero emission"—they are all talking about carbon. But in China, we haven't even passed the stage of sulfur pollution. The greatest part of emissions we are aiming to reduce is the pollution related to sulfur. In different stages of development we have different conditions so many things are not comparable. For example, in

China's south/north water project to find a solution for water shortages in the northern regions, we have not yet found better solutions that are more efficient, more convenient, more direct, and cheaper than the options we're pursuing. As of now we don't have other ways; in this stage, China is helpless.

I think there are multiple things we need to clarify when I say "pluralizing ecological civilization." Plurality is the basic evolution of humankind, and also of the natural world. The second point is how we look at "civilization," this word, has to do with western development of civilization, all the way from the ancient Greeks. Civilization, this word, has to do with the Latin "civilis," and also the Greek word "civitas," and that kind of development. Now the Chinese translation of *wenming* is related to the modern concept of Western civilization, which is based on the complex, large state, and that's called civilization.

And another thing about western scholarship on civilization, especially in the discipline of anthropology, this word "civilization" bears a lot of prejudices. Prejudices or discriminations against smaller societies, defined as primitives, barbarous, et cetera. That kind of definition, to me, is totally obsolete and inhumane. "Civilization"—every culture is a civilization, large or small—so in that sense it is plural, not singular. So let's say China has different cultures. I was talking about Greenland as a case in point. It has over 26 ethnic groups, with some groups living on border regions. They all have different mechanisms to maintain their ecological sustainability.

Now, let's talk about "ecology." Yes, ecology is a branch of natural science. But that's not the case in the 21st century because ecology is also going into social sciences, going into humanities. Mary Evelyn Tucker and John Grim and James Miller—we are all a bunch of humanists, interested in redefining ecology. We want to make it a broader sense, including religion, including belief systems, because these belief systems have to do with values—ecological values, ecological practices—and how these values influence our ecological behaviors requires social science to do that research. I am not hesitating to do that, and I'm very much interested. Everything—civilization, ecology—needs to be pluralized.

The last point I want to make is that the world already has so many existing sustainable models, especially among indigenous cultures and first peoples. We see this as smaller-scale societies but it is our modern scientists' responsibility to enlarge this scale. Even our so-called "modern peoples" have ancient memories. We think we're not indigenous but we are. We have memories. We have a pagan history. Americans do. Australians do. It's the combination of indigenous agriculture and other ecological practices. Why can't we emphasize that?

So it is plural. The world is plural. Thank you.

Sean Gallagher:

Just from what I've seen, from my travels, I've witnessed some of the most successful projects that address local communities, trying

to get them to care about the circumstances they live in. What has been successful are the ones that try to tap into local people's beliefs in a way that respects the environment, respects where they live—the forest, the ecosystems in which their culture is based. Tapping into that, emphasizing why these people should care about it, is very weighty. Especially at a local community level—to engage the community, why they should care about these issues, why they should protect it, why they should care about the environment.

Liu Yunhua:

In talking about ecological civilization I think at this point, probably, we can perhaps focus on the limits. We only have one Earth, so all of us have to do something to live within the limits. Perhaps we want to focus more on the fact that we have one Earth, we have to live within the limits, and the approach of how we're going to live within the limits can be plural. And if we tap into the traditional wisdom of different communities and culture, we can achieve that together. Thank you.



Farmers carrying tree saplings into the deserts of Inner Mongolia. Photo by Sean Gallagher. China, 2010.

CHAPTER 3

Cultural and Religious Perspectives

on Ecological Civilization



Forbidden City. Photo by Yifei Chen. Beijing, 2015.

“With the guidance of modernity, people think that people can live better only if they have more knowledge, technology, machines, and material wealth . . . But mass production, mass consumption and mass emissions are not sustainable. Internal transcendence is a much wiser way for people to pursue a better life.”

- Prof. Lu Feng, Tsinghua University Philosophy Department

Cultural and Religious Perspectives On Ecological Civilization

Moderator:

Ian Johnson

Loyola University, Freelance
journalist

Panelists:

Mary Evelyn Tucker

Yale University

James Miller

Queen's University

Lu Feng

Professor, Director of Department
of Philosophy, Tsinghua University

Michael Schuman

Former *TIME* correspondent in
Beijing, author of *Confucius and
The World He Created*

Master Shu Guang

Qixia Temple, Nanjing

Chen Xia

Chinese Academy of Social Sciences

Chen Fang

Chief Journalist, *ifeng.com*



Ian Johnson

Loyola University
Freelance journalist

My name is Ian Johnson and I will be your moderator. We have a very big panel with lots of interesting people. You can see their names up here, and you have a full description of their bios in the books, but I will give a short intro as they stand up. We're going to start first with Mary Evelyn Tucker. She's with the Yale Forum on Religion and Ecology. She will summarize 20 years of work in religion and ecology, including texts and traditions, ideas and practices. Mary Evelyn, take it away. ♦



Mary Evelyn Tucker

Yale University

Thank you. First, you have in your place a talk I would've given, that you can take home and read, on Confucianism and ecology ([text on p. 35](#)). And then there's a lot of material on our website, and that was in your packet. So, I'm going to just give you an overview of this work. Ecological civilization requires new worldviews and ethics that are shaped by religious traditions in their ecological stage. That's the work we're doing in the Yale Forum. There's a need for a new evolutionary narrative, as discussed in the documentary "Journey of the Universe" that we presented last night at the Communication University of China. And climate-change awareness and action is going to require, as we heard this morning, a change of consciousness and conscience.

So, how do we leverage change? Climate science is not communicating this message, and climate policy is deadlocked. But

the world's religions do have values that speak to this, and "Journey of the Universe" has this large integrating story. The problem of religions we know well but there is also promise, in the large numbers of people committed to the moral use of this institutional power. So what we're suggesting is that we scale up a worldwide movement that's already a field in academia and a force in the larger society.

I began thinking about these issues when I went to Japan in 1973. But in China, where I have been visiting since 1985, we now know what has happened with water, food, air, et cetera. So because of that, we said we needed the values of all of the world's cultures for a new environmental ethics, and we did a series of conferences at

Harvard University on world religions and ecology, and we published books. We created a website when we established the forum in 1998. There's a lot of material there, including conferences and seminars, such as one we did with Yu Dan [whose CCTV programs and book on

Confucius were wildly popular]. There's a book from that. There's a joint master's program between the School of Forestry and Environmental Studies at Yale and the Divinity School, and then other initiatives such as this project today, with the Pulitzer Center. On our website you'll find bibliographies and texts and statements by religious leaders, and a whole section on climate science, educational resources, et cetera. We're about to begin online

The ethical challenges of climate change include not just environmental degradation but also injustice—the inequitable treatment of the poor and those most affected by climate change.

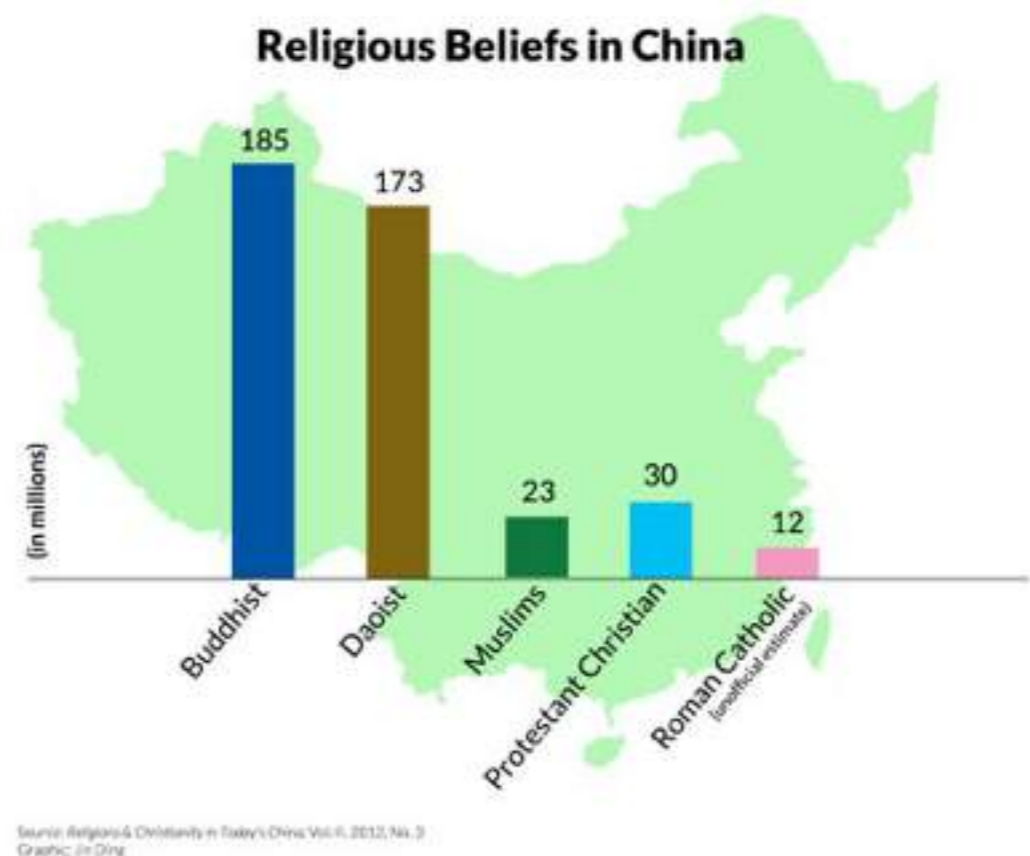
classes but we're happy to circulate our materials online and through the newsletter as well.

So this is a field that has developed in academia, with hundreds of scholars and environmentalists. But there's also a larger public force at work. You saw 400,000 people march earlier this summer in New York for Climate Change Action—and 10,000 of them were from the religious community. That's a new moment. I mentioned earlier that Pope Francis is about to issue an Encyclical on the environment. His very good friend, head of the Greek Orthodox Church, has been active in this for almost 20 years. We had the Tibetan Karmapa come to Yale, Stanford and Princeton Universities this spring. Hundreds of people heard him all across the US. He was talking about Buddhism and ecology, the 55 monasteries involved in climate change and so on. Tu Weiming, one of the great Confucian scholars, here now at Beijing University but for many years at Harvard, has been one of the leading scholars to revive Confucianism in modernity, and especially for ecologists. He has done several conferences at the Songyang Academy in Henan province, an ancient center for the Confucian tradition going back over 1,000 years.

Now, one of the most exciting news stories this week will be the Encyclical, a letter of teaching, from Pope Francis out of Rome. As I mentioned this morning he is going to speak on integral ecology, which means addressing all of people on this planet together. The ethical challenges of climate change include not just environmental degradation but also injustice—the inequitable treatment of the poor and those most affected by climate change. As you know, there are over a billion Catholics in the world. Yet in the Encyclical

he's addressing all the world's people, religious or not, everyone who is concerned about the future. Clearly, religions of the world are going to weigh in on this, but so will the environmental community, and in a strong way the journalist community will be right there, too. He is aiming this for the UN talks in Paris in December. In September, he will come to the U.S., and for the first time he will speak at the United Nations, and he will also speak to our Congress. This is a revolutionary change, I can assure you—environmentally, politically, socially, and spiritually.

In addition to the power of the world's religions, as a field we've been developing in academia, but also as a force in the larger society for change that complements science and economics and technology, this ethical revolution that is happening also needs a



large story—of how we come together as a planet, as a people, as in fact an Earth community. So for 10 years we've worked on the project called "Journey of the Universe." It was inspired by Pierre de Chardin, who lived in China for many years and who was also involved in the discovery of the Peking Man, and also by Thomas Berry, who came to China in 1948-49 and was deeply inspired by Chinese tradition as well. He had this notion that we needed a story that brought science and values together, to further this new flourishing of the Earth community.

So we have a book from Yale, that's going to be in Chinese very soon. We have the film that went on public television in the U.S. Shortly we'll have the subtitles put in, thanks to some of our colleagues here. We're trying to introduce scientists who are saying that from galaxies to the stars, to planetary formations, to the emergence of life, this is a 14-billion-year journey and for the Earth itself 2.6 billion years. And the question: What is the future of a species, ours, that has been on this planet for only about 200,000 years?

I'll conclude with this quote from Albert Einstein, one that summarizes this sense of a new story for our planetary community but also brings in the values of the culture and religions of the world: "A human being is a part of a whole, called by us the universe, a part limited in time and space. He experiences himself, his thoughts and feelings, as something separated from the rest . . . as a kind of optical delusion of his consciousness.

This delusion is a kind of prism for us, restricting us to our personal desires and to affection for a few persons nearest to us.

Our task must be to free ourselves from this prism by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty." ♦

"Confucian Values as a Basis for Ecological Civilization"

Mary Evelyn Tucker

In Confucianism the mutual attraction of things for one another in both the human and natural worlds gives rise to an ethical system of reciprocal relationships. The human is deeply embedded in a network of life-giving and life-sustaining relationships and rituals. Within this organic universe the human is viewed as a microcosm of the macrocosm where one's actions affect the larger whole, like ripples in a pond as expressed in *the Great Learning* (Daxue).

The individual is intrinsically linked to various communities, beginning with the natural bonding of the family and stretching out to include the social-political order and embracing the community of Heaven and Earth or Cosmos and Nature. Humans achieve their fullest identity as members of the great triad with Heaven and Earth. Within this triad Heaven is a guiding moral presence, Earth is a vital moral force, and humans are co-creators of a humane and moral social-political order. (*tianrenheyi*)

The Confucian organic cosmological order is distinguished by the creativity of Heaven as a life-giving force that is ceaselessly self-generating. Similar to Whiteheadian process thought, the Confucian universe is seen as an unfolding, creative process, not

James Miller

Professor
Queen's University



Daoism is the essence of China's intangible cultural heritage. It has inspired poets, artists, military strategists, revolutionaries, kings and emperors. The question for today is: Does Daoism have any relevance for the present world, or is it simply a legacy of the past?

Many young people no longer believe that Daoism has relevance for the modern world. Daoist monks live in high mountains and practice traditional arts. They seem mysterious, ancient, remote and inaccessible.

In the early 20th Century, revolutionaries such as Chen Duxiu argued that such ways had no relevance for the modern world. The modern world requires science, industry, materialism, energy and activity. Of course they were right. In the 20th century, China did require a new direction, a new economics, a new politics, a new industry. And China has indeed experienced extraordinary development as a result of the policy of modernization and opening up and scientific development.

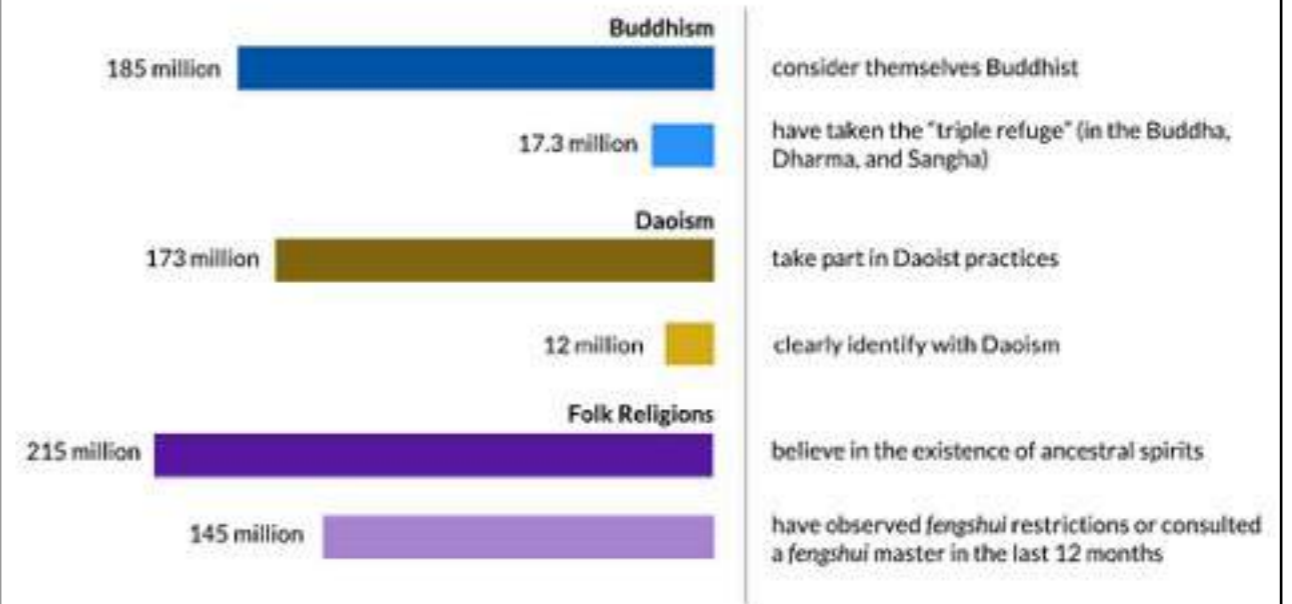
But now the world is in need of a new revolution—an energy revolution and an ethical revolution.

The energy revolution is already under way in China. The use of coal in China dropped for the first time last year and renewable-energy sources are increasing. Scientific and technological development is necessary for new forms of renewable energy to come online.

But scientific development is necessary yet not sufficient to build an ecological civilization. This means new forms of social relation, new forms of political relations, and new ethical standards.

At present rich people in the world are able to insulate themselves from the effects of climate change. Because of globalization the West has been able to export its pollution to China. As a consequence, we in the West enjoy cheap consumer goods while you in China suffer the consequence of manufacturing pollution.

Traditional Religions in China



Source: Religions & Civility in Today's China, Vol. 6, 2011, No. 3
Graphic: Jin Dong

But if this severe environmental, social and cultural inequality continues the people cannot achieve true freedom and the world cannot achieve peace.

This is a profound message for the world. Human equality and social justice can only be achieved when there is harmony in the natural world. Human ethics depend on environmental ethics. Human equality depends on a balance between humans and nature.

The profound insight of the *Dao De Jing* is that the well-being of the human species depends on the well-being of heaven and earth. Social development depends on our natural environment.

Even though Daoism was largely irrelevant to China's social and economic development in the 20th century, I believe that in the 21st century China and the world will face social and environmental chaos if we do not achieve a revolution in our ethics.

An ecological civilization is not another form of humanistic development. It means that our social relations and human ethics must be based on ecological principles and balance with nature.

Confucian thought profoundly influenced the development of humanism in 18th century Europe.

There is no reason why Chinese Daoist thought cannot inspire the development of ecological civilization in China and beyond in the 21st century. ♦



Lu Feng

Professor
Director of Department of Philosophy
Tsinghua University

Ancient Chinese civilization is a kind of eco-civilization. It had continued for over 5,000 years. It was both advanced, in that we had very good literature and philosophers, and sustainable, in that it was guided basically by Confucianism. I think that Confucianism is very important for Chinese civilization.

The transcendence instructed by Confucianism is directly opposed to that instructed by modernity. Confucian transcendence is internal. For a Confucian, the supreme ideal for an individual is to become a sage. It is not a goal outside of human beings but a goal within human beings. To be exact, it is within the personality of an individual, not outside of it. The basic way to become a sage is to cultivate one's virtues and wisdoms, and to transform one's way of being or living. A sage is not godlike, but a person who has a perfect personality by learning and practice and can fulfill his moral ideals and take his social ideals in society.

The supreme ideal for human life is not outside of one's personality—it is not outside of human beings either, but within one's personality and human being. The supreme ideal for human life is not a great object beyond or out of a person or human being, but a perfect personality itself. To fulfill your supreme ideal, the most

important thing for you to do is not to find and gain treasures, wealth, objective knowledge of machines outside of yourself, or try to go to heaven or paradise outside of the human world, but to cultivate your personality and fulfill all the good potentials of yourself.

Generally speaking, Confucian transcendence is internal while the transcendence of Western culture, especially in modernity, is external. According to modernity, if we want to be better, we must try our best to make more and more machines, to get more and more material wealth, to improve the external conditions of human lives. And the fundamental difference between Chinese culture and Western culture is the difference of transcendences they guide. It determines that ancient Chinese civilization is sustainable, but modern Western civilization is not sustainable, judging from the perspective of ecology. It's a great pity that today's China is not traditional China. Instead we are trying our best to learn from the West, especially from the U.S.

Today, influenced by the West, we think that people seek happiness naturally. In this too the way to seek happiness instructed by Confucianism is also opposed to that instructed by modernity.

According to Confucianism, *xiushen* (cultivating one's personality with spiritual exercises) is the fundamental way to live happily. "From an emperor to an ordinary man, all should take *xiushen* as his fundamental way to live." If you have a *jingjie* (a state of life) high enough you will always be happy, whatever you are in reality—poor or rich, low or high in the social rank. What is *jingjie*? One's *jingjie* is an integral state of his life, including his virtues, wisdom

and ability to make right ethical and political decisions. The highest *jingjie* is that of a sage, whose consciousness and actions are completely harmonious with *tianming* (natural laws). A sage's *jingjie* is just the *jingjie* of *Tianrenheyi* (the harmony between human and nature).

With the guidance of modernity, people think that people can live better only if they have more knowledge, technology, machines, and material wealth. Therefore people produce, consume, and discharge more and more. But mass production, mass consumption and mass emissions are not sustainable. Internal transcendence is a much wiser way for people to pursue a better life. ♦



Confucianism is not recognized as a religion in China. It is considered part of the traditional culture.



Master Shuguang

Qixia Temple
Nanjing

Buddha loves living beings, grass, and trees. He teaches all living things.

Buddhism says that human beings and nature have a close relationship. They live together and are born together, as close as the lips and teeth. They are each other's results and reasons. From the many Buddhism classics I want to share content that speaks to environmental protection.

We believe that the world is formed by four major elements, including earth, water, fire and wind. Every one of us, even the flowers, grass and trees, are a combination of those four elements. The bones and blood of human beings are from the earth. Our blood is from the water. Our body temperature is from the fire. Our breath is from the wind. A combination of the four means that we can thrive and be prosperous.

In the *Brahmajala Sutta*, it says, "All earth and water is my predecessor, all fire and wind are my body." Every cell in the human body is in constant metabolism. The exhaust gas and wastes from us are also nourishing the grass, trees, and plants on

the ground. To carve out a clear boundary between the nature and myself is very difficult. The more internal we go, the more micro-level we go, the more hierarchical-nature level we go, it is more difficult to separate.

The living environment is formed by five phases, including metal, wood, water, fire and earth. The five internal organs of humans—the heart, liver, spleen, lung and kidney—all depend on nature one way or another. The forests are the human's lungs; the flowers, grass, and trees are human hair; water is our blood; the Earth is our muscle; the mountain is our bones; the wetland is our kidney.

94.5% of Buddhists live in 10 countries



Source: Pew Research Center's Forum on Religion & Public Life, Global Religion Landscape, December 2012
Graphic: Jin Ding, Tool: AmCharts

The heart is the wide blue sky, as the heart includes the universe. Human beings and nature depend on each other.

“How we live defines the environment in which we live.” This is an important precept in Buddhism. Our living status includes our life and status. The life means our body. The status means the environment we are living in. It means the living environment and our body is as a whole. To protect the environment we are living in, then, is the same as to love our body.

“How we live defines the environment in which we live.” This is to observe the world through the origin principle. “Here has it, so there has it, too; this could live so that could live, too; this one dies so that one would die; this one vanished so that one will, too.” The world is a living construction formed by many conditions that have many layers. In this world, all the phenomena are related and depend on each other. To move one thing is to move the whole body. Buddhism believes, “If you lack of one of the causes, none of the results will happen.” The basic relationships that form the world arise from the five *skandhas*—the aggregate of material body, the aggregate of feelings, the aggregate of perceptions, the aggregate of predispositions, and the aggregate of consciousness. It finally turns on the combination of material and spiritual, or the combine of body, heart, and environment.

In the Buddhist classics the five aggregates combine to form the world. It is like the three bundles of reeds that support each other

Buddhism chants the equality of living beings, teaching Buddhists “to view everything in compassionate eyes.”

to stand. Take away one of the three and the other two would fall. It is an obvious fact. The living among us, human beings, need to take in air, sunlight, water, food, etc. Blue sky, white cloud, green trees and mountains, flowers and birds are the color, sound, smell, taste, and touch that make us healthy and happy. The other living beings and we too are a part of nature, are very closely related to nature. It is impossible to separate us from nature even for one second. Just as fish could not leave the water so, in another way, the world

without us would also be worthless. Without human creation, the world would not look the same.

“How we live defines the environment in which we live.” This says that Buddhism has many similarities with the man and nature theories in Brahmanism, Daoism, Confucianism and other religions. They all view man and nature as a whole. Chinese philosopher Mencius said, “If you bring the ax to the forest anytime you want, then you will not have all the wood you need.”

Cutting the trees has to be seasonal; we can’t do it anytime we want. Daoist philosopher Chuang Tzu said, “The heaven and the earth were born with me; all things are with me as a whole.”

An old saying is still true today—that “in the famous mountains there are always Buddhist temples.” Buddhists have always paid attention to environmental protection. It is a strong proof that many old temples in the famous mountains have very good ecological environments. Mount Emei, which is known as “Emei shows the world,” is representative of how Buddhism cares about

the environment. The forests that line hundreds of miles of trails on Mount Emei are not formed naturally. They are planted by the monks who live on the mountain and near the mountain area. According to *the Book of Emei*, the monks started to plant trees since the Tang Dynasty and still today the monks from the temples around Emei insist on growing and planting trees. It is their tradition.

Now, many people who are interested in Tai-chi, Qigong, and yoga also feel the human body is communicating with heaven and earth, the trees and other environmental elements. Those people can feel that the man and the nature are as a whole. This idea of man and nature as a whole—or “How we live defines the environment in which we live”—makes people understand the integrity of man and nature. It is very good for environmental protection.

All living beings are equal. Buddhists are forbidden to kill, to practice slavery, or to abuse animals. No matter whether you are a monk or you practice Buddhism at home, the ban on killing is a fundamental rule. Those who don't follow this rule will go to hell, will become ghosts, or become animals after death. When the Sakyamuni Buddha practiced to become a Buddha, he was doing meditation in the mountains when a bird made a nest on his head and put eggs in the nest. He was afraid that the nest would fall and the little birds would get hurt, so he sat still until the birds grew old enough. He established a model that humans should care for life.

Everyone has a responsibility and an obligation to respect other species' life in nature. To enjoy nature is not a right only for humans.

The ecologists have demonstrated that the Buddhist classics are true. Animals and human are all in the same ecological system. If a species disappears the whole balance is broken and it will lead to the destruction of the whole system. Biologist Ernst Haeckel pointed out that human beings and animals are in the same food chain, in neighboring levels of the evolutionary process. There are no significant differences fundamentally. Animals all have senses, feelings, and will. They are all afraid to die. Many animals even show higher moral standards than human beings. Many animals are benefiting humans, and are necessary friends and companions for us to live.

From the angle of protecting animals, and maintaining ecological balance, Buddhism is the model to protect animals in human activities. Buddhism chants the equality of living beings, teaching Buddhists “to view everything in compassionate eyes.” In the endless six reincarnations everyone has been an animal. If we don't do good, even

if we are human being now, in the next life there is no guarantee that we will not become an animal. Shurangama Sutra told us, “When a sheep dies, it becomes man. When a man dies, it becomes a sheep.” Animals are the human beings who didn't appreciate life.

Everyone is affecting each other. In Buddhism relationships between humans are based on the origin principle, that “everyone is affecting each other.” If you use the origin principle to observe man and society you will find that the existence of the human is based on the causes and results in the social relationship.



Master Shuguang of Qixia Temple (Nanjing) presents a banner to Jon Sawyer, executive director of the Pulitzer Center. The banner reads, "Human beings and nature share the same birth and body." Photo by Chen Yifei. Beijing, 2015.

“Everyone is affecting each other” means everyone’s life is dependent on others and on the society as a whole. Everyone’s activities will definitely affect others and the society. Everyone has a close relationship with others; they are born in the same status.

The deterioration of ecological civilization is caused by mankind’s growing materialism, and by the drive to make ourselves the center of everything. The pros and cons of the ecological environment are

closely related to our mental activities. To improve the ecological environment we must first clean the mental environment, to change our way of living. Advocate simple concepts of consumption. Draw on mindfulness. Cherish our natural resources. Develop the habit of saving. All of this contributes to protecting the environment.

Now, to wake people's "moral conscience" and "ecological conscience" we need to make people understand that man and nature are close to each other, are affecting each other, are living in harmony with each other. Everyone has a responsibility and an obligation to respect other species' life in nature. To enjoy nature is not a right only for humans. All lives should have the right to enjoy nature. People need to make rational exploitation of nature based on maintaining the ecological balance, to regulate human actions on nature, and to limit production and consumption to the range that the ecosystem can support.

The recent 30 years of development in China created wonders of the world. But in many places, people were eagerly embracing utilitarianism and damaged the ecological environment. There were losses as well as gains. The damage to the ecological environment that has already been caused is a common concern of the whole society. Faced with this grim reality a lot of people who have insight and knowledge are deeply worried. They understand the urgent need to repair the ecological imbalance and the disaster of environmental pollution. They have the courage to explore and seek for solutions.

We could say that human beings are the main causers of the problems in the world. So we need to fix the problems we ourselves have created. If our body became sick we would need to go to the hospital and find the doctors. We would take medicine to make a cure. If it is very bad, to regain health, we would need to have surgery to cut out that diseased part, or to do an organ transplant. It is the same for our damaged eco-environment. We should take

How we live defines the environment in which we live.

the same approaches to a remedy. We should take practical measures, through a long period of conservation, gradually to restore the eco-environment. For the common health of mankind, for the happiness of future generation, people should deeply believe in cause and effect, in the need to purify our minds and protect the eco-environment.

Mountains and rivers could be in different areas, but the wind and moonlight are under the same sky. We live in different regions of the globe, but we are under the same blue sky, facing the same moon, and under the same sunlight. The air flows above us all. Protecting this common home, the Earth, is not a duty of one country or one region. It is a responsibility we all need to assume.

Buddhism is one of the five major religions. It has its own view of the universe, its own view of the world, and its own view of life. It is an important part of Chinese traditional culture for the past thousands of years and today there are more than more than 100 million Buddhists in China. But I think that Buddhism's impact on science, ecological civilization and environmental protection is still weak. If the national and international environmentalists, professors, journalists, and government officers could use Buddhist knowledge on the eco-environment, to make this ancient knowledge usable in the current age, it would be extremely important, an inter-generational benefit for all living beings.

Namo Amitabha Buddha. Homage to the Amitabha Buddha. ♦



Chen Xia

Chinese Academy of Social Sciences

Environmental degradation spurs culture everywhere to reexamine their tradition and rediscover the ecological wisdom of the ancients. Daoism is no exception. My talk today aims to express a Daoist response to environmental degradation, by focusing on the responsibility of humankind.

Daoism talks about the Dao, of course. Dao is the source of all things, a guiding principle of the world. It is that by which all things become one. The Dao itself is not a “thing.” Dao and a thing produced are certainly different, but they are inseparable. They are joined in space under the simultaneous effect of the unifying reality. The connection of the Dao and creatures means that the force of the Dao dwells in these creatures. This transfer of power, from the spiritual principle to the individualized creatures, implies that reality is dynamic, that nature itself organizes, and that things are internally active. This idea of self-organization also implies that nature will always find a way, if left to its own devices. Exerting control is not really necessary. A thing respects the Dao, and the Dao deserves respect. Protecting all things is our duty, and the only type of human intervention Daoism requires. There is a practical reason for this—for it is only when people act in accordance with

the Dao that can we enjoy living together with other things in a peaceful, healthy, and prosperous way.

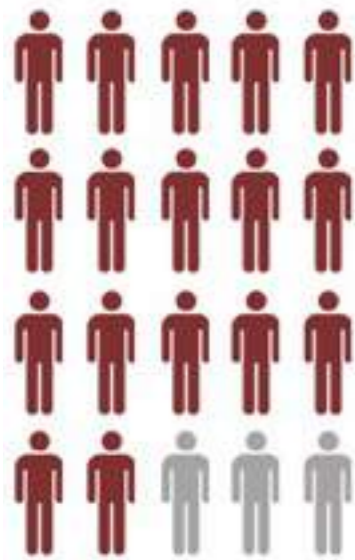
Daoism assumes that all living creatures and human beings maintain a kind of balance, and depend on each other, in the space between heaven and Earth. Human activities should not disrupt natural processes, nor upset biological balance. *Wu-wei*, the Daoist principle of non-action, does not mean “to do nothing.” Lao Tze always sees *wu-wei* as acting in a manner that is as gentle and nonviolent as the Dao. It is the opposite of acting in a compulsive, reckless, and willful way.

For environmental ethics, Daoism accordingly specifies two responsibilities for humankind, one positive and the other negative. On the positive side the Dao invokes life and complexity; humans should do the same. Their first responsibility in a changing environment is to learn to become stewards of the biosphere. On the negative side the Dao acts by non-acting—that is, by acting in harmony with the natural flow. Our responsibility, therefore, is to refrain from further disruptions of the flow, to mitigate environmental degradation, and to soften its impact.

The main difficulty that prevents humans from assuming that responsibility is our unsustainable pattern of production and consumption. For the interests of our descendants, for the survival of contemporary poor people, for the preservation of endangered species, for the stabilization of the environment, and also for our own self-interest, it would be best to change our production and consumption patterns, and to choose voluntarily a simple lifestyle. Daoism provides an alternative model of living in the world, in

contrast with the unsustainable consumerism that shapes our contemporary civilization.

The Daoist alternative is universal. If everyone embraced this alternative as a maxim, turning it into a new pattern of tradition, it would allow us to continue to evolve and flourish as civilization. ♦



85% Chinese hold religious beliefs

Source: Religion & Christianity in Today's China, Vol. II, 2012, No. 3
Graphic by Jin Ding

Chen Fang

Chief Journalist, ifeng.com



I am from Xinjiang. Today I am going to talk about what I have witnessed in South Xinjiang, the challenges we face and my thoughts as a Xinjianger. I will discuss the farmers from South Xinjiang, the relationship between their eco-thoughts and religious beliefs. This morning and just now, many people have talked about the influence of Buddhism, Christianity, Confucianism, and Daoism on ecology and environmental protection. But until now we haven't heard about the discussion of Islam. I am not an expert on Islam but I can talk about what I have witnessed in Xinjiang.

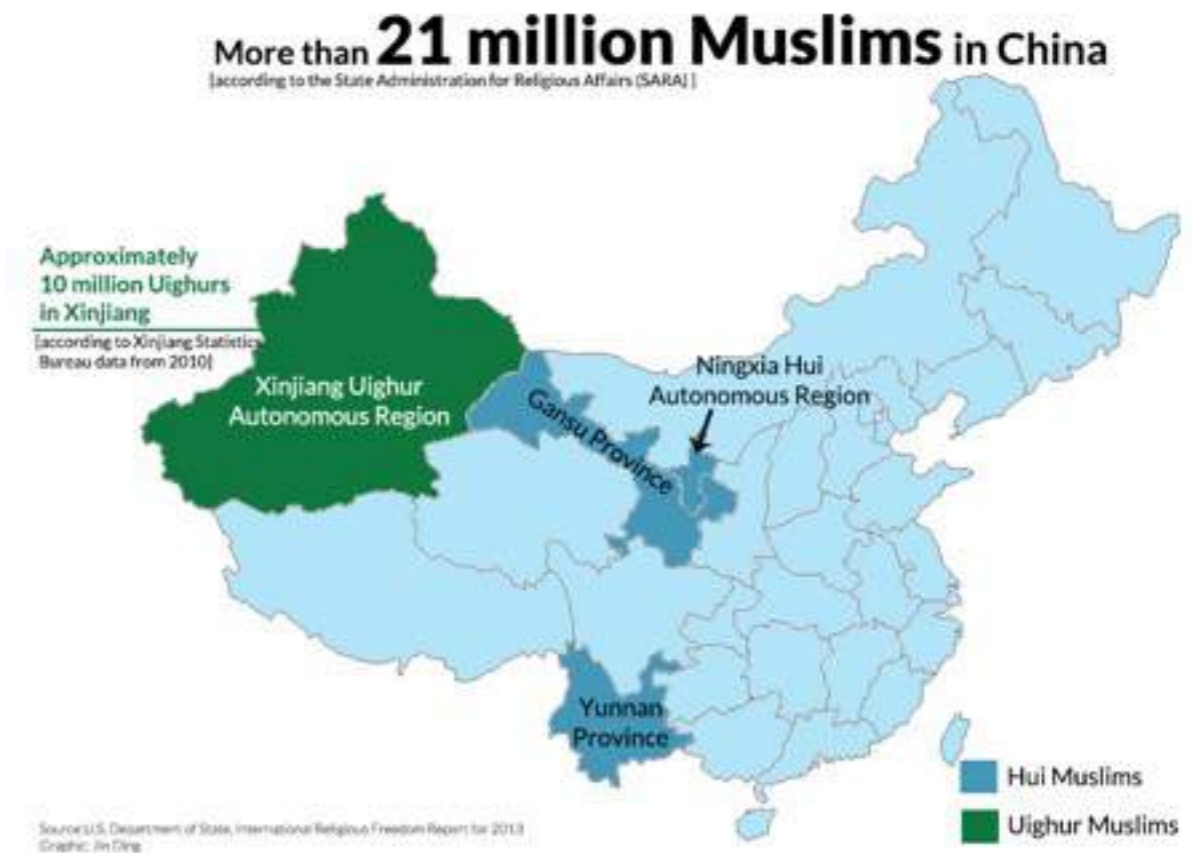
This morning the journalist Sean Gallagher described what he has seen in southern Xinjiang, especially desertification and other environmental challenges. I have the same impression from some of my own travels in the region. This past April, I did interviews in southern Xinjiang. I stayed at Hetian and Kasha for more than ten days. It was the worst time of the sand storms. Because these cities are located at the edge of the desert, they could experience sand storms anytime in the year. But I also saw something that surprised me. Every village has planted a lot of trees. In front of each family's yard, there are two trees. They also plant flowers. I was very surprised. It is a place that has such a harsh environment

and yet their trees were growing very well. In the spring, the trees were turning green. It was a very positive image.

South Xinjiang also impressed me with its farms. They were well-kept and clean, with fruit trees, nut trees, apricot trees and more. It was the time of flowers blossoming and beyond the trees there were also fields of wheat and grapes. In my opinion the environment in the rural area was very good. The water is clean, and you will hard-pressed to find any waste. It is unlike what you typically see in the cities of our east coast, surrounded by the waste. What I found was that the Uighur farmers there have very good habits—and that the southern Xinjiang government worked very hard on these environmental issues, too.

I explored the relationship between the behavior of Uighurs and their religion. We all know that Southern Xinjiang is a mainly Islamic area. But before that, in the early 1000s, Uighurs believed in Shamanism, Manichaeism, Nestorianism, and Buddhism. All of these religious traditions shared the belief that all living beings are sacred. Islam believes that that God created everything, that everything in nature is created by God and created as a resource given to the people. The Quran says that anyone who plants a tree and lets it grow, make it to harvest, will receive a gift from God in the next life.

When people talk about southern Xinjiang most people think about words like terrorism and extremism. These kinds of images are deeply seeded in everyone's heart. Because of terrorism incidents southern Xinjiang, or the whole Xinjiang, is associated with ignorance, backwardness, and even extremism. This perception



ignores many positive things, like the focus on ecology and environmental protection I just described. I recognize that southern Xinjiang is deeply affected by religious extremism. We need to find ways for the greater society, for modern China, to engage constructively with the people of Xinjiang.

The idea of ecological civilization, of addressing together environmental challenges, is a good way to begin that engagement. So is discussion of these issues with the religious leaders of Xinjiang. There are challenges, of course, beginning with the fact that many Uighurs do not speak Mandarin. But a focus on the environment is a point of entry, a way to begin an engagement that will benefit all. ♦

Q&A

Ian Johnson:

I'll just give some observations, and then open the floor to questions. We had different kinds of presentations. We had people talk about the theoretical underpinnings, of especially Daoism, Confucianism, and Buddhism. And then we also had Mary Evelyn Tucker give an overview of this new movement to link spiritual values, including religions, with environmentalism.

In my view the description, especially of Daoism and Confucianism, was highly idealized, and I'm not entirely convinced. Because I think in pre-modern China, there was not really an ecological balance. In the 18th and 19th centuries there were huge population crises in China. There was deforestation. So although I think these ancient thoughts, ideas, and religions could provide ideas for us today, in practice I don't know if the past—however one wants to define the “past”—has really worked out exactly according to a set of ideals.

And some of these problems, including the population pressures we face today, almost came from some of these ideals. In Confucianism, for example, the obsession with carrying on the family line, of having big families, things like that, perhaps also led to population pressures. So I think, as we explore these issues, I think we should also look at downsides of traditional ideas, and not just ideals, for sure.

I was very interested listening to Master Shuguang describe some of the ways that Buddhism was approaching these environmental challenges. One very simplistic idea that occurred to me as I listened was when he talked about the Buddhist emphasis on not killing and what that would mean if we went further on vegetarianism—the impact on China if a lot of people stopped eating meat.

Chen Fang, if I understood correctly, was ascribing some of the interest in environmental protection in Xinjiang to ideas that people had from religion, maybe even pre-Islamic ideas. It occurred to me that a positive way that religion can affect the environment is by providing communities ways for people to organize. I'm thinking in terms of work done by anthropologists such as Jin Jun of Tsinghua University, who's in the audience today, or Lily Tsai at MIT, who showed that villages that have religious communities are often better run and better organized. They can help with things like reforestation. They can provide outlets and ways for people to release counterbalances to the drive for economic growth. And so in a very almost social and political way, religion provides ways for people to be organized in different ways, as well as ideology.

Chen Xia:

Thank you for your comments. You are right. Our scholars, Daoism scholars and Confucianism scholars both, do focus on the ideals of our traditions. I think as human beings we inhabit two worlds. We have a physical world and we also have a spiritual world. The spiritual world helps us with two big questions: What is a good life? What is the meaning of life? So when we keep asking these questions, philosophers generally try to answer these questions. It's necessary to have an idea of an ideal life in your mind. And second, people's actions and people's practices generally are guided by, or are confused by, what they are thinking or what they believe. So even though idealized, if we are trying to direct people's concerns away from physical things, material things, we need to give them something which is more spiritual. So these new ideals may guide people to live differently.

What are the new ideals? Daoism is an ancient religion but it needs new explanations to make it more relevant to environmental challenges. Environmental degradation gives us a chance to reexamine and re-explain our traditions. This tradition has roots in China so when I give lectures about this people relate. They like these ideals. And when I say they like these ideals, I mean that sooner or later, those ideals will influence their lives.

Mary Evelyn Tucker:

Absolutely, it's true: No religion has lived up to its ideals. That's for sure. But what Chen Xia just said, I fully concur with too. If we look at this in an integrated way we see that people's ideas and their lived communities are interwoven. Ethics don't come out of the air; they come out of a worldview. They come out of a whole system. So what we're simply suggesting—and we did, in the Harvard conferences, try to avoid idealization—but we are suggesting that traditions live on in modernity as well, and they are retrieved, reevaluated, and reconstructed, and that's exactly what we're trying to do.

People have sometimes said that science is going to solve climate change, or better policy, and so on. I just want to say that Gus Speth, the former dean of the Yale School of Forestry and Environmental Study and a leading policy person, said that, in 40 years, policy has not solved these problems. Our present dean, the leading scientist Sir Peter Crane, says science is not solving these problems. He insisted that we do a panel at Yale on the Papal Encyclical, and he began by saying, these are no longer science problems alone. They are ethical problems. And finally, the American Association for the Advancement of Science is keen, of course, about ecology as a science, but they are very much also concerned about social ecology, community ecology, and so on. What they're trying to identify is what I would call "cultural ecology": What are the ecological practices from indigenous

peoples and from other cultural perspectives? So scientists are taking these non-scientific perspectives rather seriously. It's an emerging, I would say, fusion of science and the culture of ecology and ethics.

Chen Fang:

I want to add another important point. We are the people who are enjoying the developed society, yet when we go to the border areas, we always think that they should remain in the traditional life, remain living in the original ecological civilization. There is a problem with that. Because we have already experienced the development process, we have a desire to go back to traditional ways. This ignores the fact that the local peoples there also have the right to enjoy the benefits of modern life—and they desire better living conditions than they presently have. So we should not force them to adapt our thoughts. We need to find a way that allows them to enjoy the benefits of modern development while at the same time paying attention to ecology overall and environmental protection.



Wang Lihua

Professor, Deputy Dean
School of History
Nankai University

Several scholars here have mentioned the relationship between Chinese religions and philosophy with the environment. As a historian I want to stress the differences between theory and fact. Our traditional classics, many of them wrote about how to get close with nature, about the harmony between humankind and nature. But if we assume that our traditional civilization was a kind of ecological civilization, then how could our environment get destroyed again and again? This is something we need to think about. It shows the differences between historians and philosophers. Philosophers tend to the abstract—that there were these kinds of thoughts in history and so today we ought to adopt those thoughts. Historians go back to the moment when these thoughts were first expressed. They ask why those people thought in this way in that time and who were these people who thought these things.

We need to know that in history, those who stated these ideals about humankind and nature were the people in society who didn't need to worry about finding money to spend on clothes and food. It is the same today. The people who are talking about environmental protection are the ones who have already taken care of their basic

living needs and who enjoy all the achievements of modern society. And then we make demands of those who still haven't met those basic needs. We ask them to maintain their ancient traditions, and to protect the environment. This may seem unfair. I think that true harmony between humankind and nature depends on harmony within society itself. Social justice is fundamental to achieving the harmony between humankind and nature that we seek. This is true not only within a social group but also among countries. In the world we can't force developing countries that still have basic living and manufacturing problems to take on the responsibility for the global environment.

Lu Feng:

I think the historian is mostly criticizing me. The ancient civilization in China was a kind of ecological civilization. Relatively speaking, I think that is correct. For example, the farming technology was definitely ecologically based. We didn't use fertilizers, for example, or pesticides. We only used human labor and animal strength. Also, it is true those who talked about humankind and nature are the ones that didn't need to worry about what to wear and what to eat; that is correct too. If you didn't go to school, you could not be a thinker. In the ancient time, only people from rich families could become thinkers. It also involves a very important issue. Ancient China was led by the thinkers, not like now where the society is led by the technologists and business leaders. That is one of the reasons that made the ancient society of China sustainable.

Jon Sawyer

Executive Director
Pulitzer Center



I want to turn now to Michael Shuman. Michael is a long time correspondent for TIME magazine who has just published the book Confucius...and this whole gathering today has been about multiple disciplines from east and west, from different countries, from China and outside, and I think we're looking at the role and the lessons that China has to offer to all of us, to the entire world. So I think it's appropriate that Michael, somebody who has spent the better part of his career in Asia, and has just written this book about how important—Confucius, one of the traditions we've been talking about—is to the entire world.



Michael Schuman

Former *TIME* correspondent

Author of *Confucius and The World He Created*

I was at breakfast in Shanghai a few weeks ago with my wife's Chinese-American high-school friend and her parents, and I mentioned I had just written a book on Confucius. Her father immediately complained, "Confucius is to blame for everything wrong with China." He is a retired lawyer, and he criticized Confucius for developing ethical standards without any means of enforcing them beyond self-cultivation, leaving China without a tradition of rule of law.

Such complaints about China's greatest philosopher are, as we know, routine. Writer Lin Yutang, for instance, attacked the primacy Confucius placed on the family for undermining civic spirit in China, causing fraud and graft. "Confucianism" he wrote in the 1930s, "omitted out of the social relationships man's social obligations towards the stranger, and great and catastrophic was the omission."

Those two issues, a lack of rule of law and the pursuit of personal interest over the good of society, are behind the environmental degradation in China today. We have air we can't breathe and water we can't drink because businessmen place profits over people

and the state authorities tasked with correcting such behavior don't enforce the law.

So does that mean China's environmental problems are rooted in its very civilization? And, if so, what does that mean for China's ability to resolve such societal problems today and in the future?

It's all too easy to blame a guy who lived 2,500 years ago for the problems we face today—he's not around to defend himself. For me, using the amorphous category of "culture" is a cop-out, a cheap way to absolve current leaders in government, business and society from responsibility for the problems they cause or fail to resolve. Blaming "culture" also suggests that the nation's heritage has



A heavy haze of air pollution over the Forbidden City. Photo by Sean Gallagher. Beijing.

rendered the people of China helpless to tackle the problems around them.

We know that isn't true, of course, People here in China have proven a willingness to place the public good over themselves again and again, often at great personal risk. That, in fact, is very Confucian. The great sage preached the importance of service to the nation and responsibility to the community.

The question is whether today's authorities will allow the public to participate in solving the problems of society—including as journalists. The indications are that they are not. Too many citizens who expose corruption or demand a cleaner environment are penalized by the state. Zhang Weiwei at Fudan University told *The New York Times* a few days ago that “the China model is about highly positive interactions between society and the state.” I'm not sure many environmental activists or civic-minded journalists here would agree with that. Sadly, the leadership here is using “culture” to justify their actions—they are reviving Confucianism as a way to justify top-down government.

In *The Analects* the Duke of the state of Lu asked Confucius how he could earn the respect of the citizenry. “Raise the straight and set them over the crooked and the common people will look up to you,” Confucius told him. “Raise the crooked and set them over the straight and the common people will not look up to you.”

Perhaps some tradition can help us today after all.



Young boys play in a Daoist temple on the site of the Dujiangyan irrigation system. Image by Sean Gallagher. China, 2010.

CHAPTER 4

Ecological Civilization and Environmental Reporting



Photo by Sim Chi Yin.

“If the reporting we did on environmental problems could get attention from government leaders and the public, to let them make decisions on a practical path, then the problems like traffic, pollution, fog, urban development and others might be preventable, and we could avoid the current situation that appears unsustainable.”

- Hui Zhijun, senior environmental reporter, CCTV

Ecological Civilization and Environmental Reporting

Moderator:

Liu Chang

Professor, Deputy Dean, Faculty of Journalism and Communication; Director, School of Journalism, Communication University of China

Panelists:

David Liu

Professor, Long Island University; former Associated Press Journalist

Yu Hong

Professor, Vice Dean, School of Journalism and Communication, Peking University

Hui Zhijun

Senior Environmental Reporter, CCTV

Sim Chi Yin

Photographer, VII Photo Agency, Pulitzer Center Grantee

David Liu

Professor, Long Island University
former Associated Press Journalist



For the past 35 years I've been giving lectures, doing research, and promoting environmental awareness in the various universities and institutions that I've been engaging and teaching with. At the end of giving my lectures students usually always come to me and ask how to become a good environmental journalist. After some thought, I could come up with three major qualifications needed to be a good environmental journalist.

A person who wants to be a good environmental journalist must, first of all, love nature. A love of nature is one of the basic qualifications needed to be a good environmental journalist. Secondly, a person must have some kind of scientific knowledge. It is very crucial. If you do not have any scientific knowledge, you have no way of getting into the in-depth reporting that is relevant to the environmental issues. Thirdly, and most importantly, in China, on this perspective, you have to have a spirit of investigative reporting.

Environmental reporting is investigative reporting. So in all these concerns I've named, spreading the word around, I say "Look, ladies and gentleman, young students, environmental reporting is a very narrow field in our profession." So therefore, my idea, from the perspective of educators, is that I would

like for the universities in this country to have interdisciplinary training—like a Mary Evelyn Tucker, or a Yale, an interdisciplinary approach. My concern with interdisciplinary approaches is that I can have journalism students go across the campus and then learn more about environmental-related specialties. In return, for those who are environmentalists, who want to spread the word around, who want to engage in environmental reporting, they must start and have the right story. They must have intact interviews, must know how to dig in depth into all these environmental issues. So this is what I consider as most critically important. ♦

Yu Hong

Professor, Vice Dean
School of Journalism and Communication
Peking University



Good morning, everyone. I am very glad to be here to discuss ecological civilization and environmental reporting with you. For many years my team and I have paid attention to the media and environmental problems. Everyone here is from different backgrounds but when we are facing issues that relate to ecological civilization and the environment we have the same identity—as Earth Citizens. As a communication expert I pay more attention to the role that media are playing in eco-protection. We focus on what it is doing, how it should be done, and what impact it has. As a

citizen, I am also trying my best to accomplish the green goals. This double identity also makes for our double view of ecological civilization development.

“What the media should do—to be aggressive and active building toward an ecological civilization.”

Since 2009, the TV studies center at Peking University that I direct has hosted a forum on the Earth Citizen Media. In these seven years we focused on citizen responsibilities, on media responsibilities, and on awareness of the Earth. In each year, we have a different focus. We have focused on the nuclear crisis, water crisis, and the news media itself. This year we focused on urban garbage—how the waste surrounds the city and how we can break through it.

We also host topic discussions with the BBC and CCTV documentary channels on “Counting Down to Save the Earth.” Each year we have different topic selections. A common theme throughout has been to enforce news-media responsibility, to promote citizen environmental awareness, and to encourage young scholars to start working on the protection of the Earth as our common home. When we focus on the news media and environmental problems, we find that the media has played an active positive role but that it also has obvious problems. First, and

this is no surprise, the mass media's focus is not typically on ecological problems; it could change its focus and push directly an eco-problem to be focused on and to be improved.

A direct example is that this past June 5 we hosted an event on urban waste. We invited the filmmaker of the documentary "Beijing Besieged by Waste" to our event. The documentary shows 500 waste grounds all around Beijing; it's a shocking thing to see. According to the filmmaker, since 2010 the Beijing Government has invested 10 billion Yuan to improve the waste grounds near Beijing. So in 2013, when he went back to the places where he shot the film, about 80 percent of them had been improved. So you cannot understate the value of the mass media when it comes to exposing environmental problems. The persistence of journalists is the key to opening the door to a green future for citizens of the Earth.

I also want to talk about the obvious shortcomings of reporting on the environment and ecological civilization in the media. First, there is more negative reporting than positive or constructive. Second, most environmental reporting is presented in a way that doesn't capture the public's attention. The content is very far away from the readers. Third, despite a huge amount of statistical investigations in the media, including on news channels beyond television, only a small part is devoted to environmental issues.

In journalism and communication, we usually separate environmental reporting into two types. One is environmental problem reporting: When the environmental problem shows, especially when the environmental crisis happens, the media follow

up and respond to it. Consider, for example, the Chinese media's response to air pollution. Another type is the media acting as a warning agent, to warn the public before the environmental crisis takes place. This type of reporting is about investigating the problem and finding the cure. It is closer to the public's expectation of what the media should do—to be aggressive and active building toward an ecological civilization.

In my opinion whether to report before the crisis, or to respond after the crisis, is a choice for the media. It is a question of how to present yourself as a journalist. It's like with traditional medicine in China: You focus on the stomach problem to prevent other diseases. We hope we could work in a way that speaks to future challenges—and pay attention to how we present those issues to the public. It is the media's responsibility. It is also what a citizen should do. ♦

Hui Zhijun

Senior Environmental Reporter
CCTV



I work for the CCTV as an environmental reporting journalist. Since today's topic is ecological civilization and environmental reporting, I want to share my feelings and experiences on environmental reporting. My topic is "to view journalism from the environmental perspective, using green theory to interview and to write news."

Since the UN Environment and Development Forum in 1992, I started paying attention to environmental problems. I am the journalist who has worked the longest on environmental reporting at CCTV. In that long period I formed a kind of mindset that uses the environmental perspective to view and analyze when I am facing different news facts, to find the environment values—from urban construction, social development, and energy development and utilization to industrial and agricultural production, economy and trade, culture and tourism, the Olympic Games, the World Expo, and more. In news reporting like that I tend to explore through in-depth analysis their relationship with the environment. I try to find

“Environmental knowledge isn't equal to environmental awareness.”

the environmental issues and seek to identify ways and methods to resolve the problems.

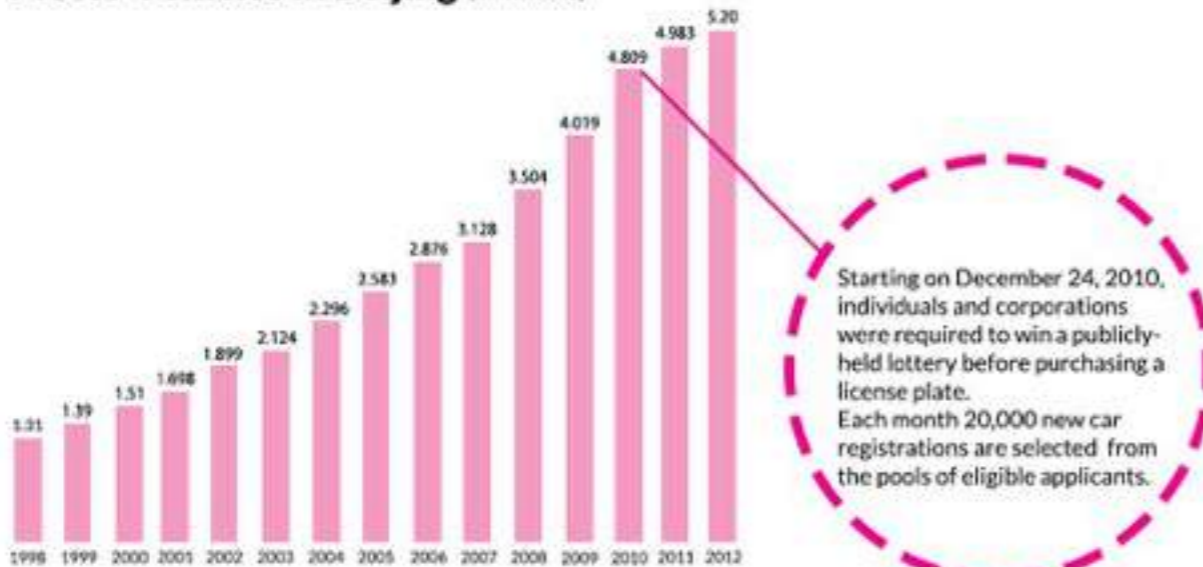
When a new electricity construction project started, for example, if we only reported from an economic perspective we might focus on its generating capacity, the budget, the economic benefits, engineering and technical parameters, and so on. If we explore it from an environmental perspective, we may need to also pay attention to what kind of influence this construction would have on the local ecology, geology, heritage, and on the health of surrounding residents; whether or not it will have pollutant emissions; whether or not its environmental consequences have been evaluated; how to deal with and solve any environmental problems. It will inject the content of environmental protection to the economic news.

The environmental perspective includes the thinking method required to make these connections. It shows the scientific spirit of seeking the truth from the facts. Compared with other news reporting, environmental reporting must reflect the philosophical level of thinking better, and also reflect the concept of ecological civilization consciousness better.

In these 20 years, I have attended many major news events. I have reported along the Huaihe River, Tai Lake, Dianchi Lake, Yangtze River, Yellow River and other distant places on eco-environment issues. I have also made documentaries in America, Japan, Europe, and the South Pacific. I have a deep understanding

and feeling for China's environmental problems. And in the meantime I have interviewed many Chinese or foreigners who are working on environmental protection. The tremendous number of interviews I have done have also had an important impact on my thoughts as to environmental protection. I recall that a decade ago I was reporting on the Chinese Environment and Development International Cooperation Committee's annual meeting. The deputy general secretary of UN then, Mr. Klaus Topfer, who was also the executive director of UNEP and a former environment minister from Germany, told me that he was worried about the fast growth in the number of vehicles in Beijing. He warned that Beijing is different from cities in Germany—that the urban transportation system had to be mostly based on public transportation because the population in the city is so big. Things that happened after the interview confirmed what this German expert had predicted: heavy

Motor Vehicles in Beijing (in millions)



Source: Beijing Transportation Annual Report 2002, Beijing Transportation Annual Report 2007, Beijing Transportation Annual Report 2012.
Beijing Transportation Research Center.
Graphic: An Ding

traffic, air pollution, and a shortage of resources and energy, to the point that environmental problems are endangering the possibilities for sustainable development in this city. The conflict between environmental protection and development has become the main challenge that Beijing and other Chinese cities are eager to solve.

If the environmental reporting we did on the environmental problems could get attention from government leaders and the public, to let them make decisions on a practical path, then the problems like traffic, pollution, fog, urban development and others might be preventable, and we could avoid the current situation that appears unsustainable.

So how can we view the economic, social and other news from an environmental perspective? How do we interview and write the news with environmental protection thoughts? My understanding is that regardless of whether the journalist is specialized in any kind of field, he or she should also have environmental protection sense, and at the same time also needs to have related science knowledge.

In May 2011, the radio and television transmission tower in Henan Province opened to the public. This tower is the world's largest steel tower and is named as "the lucky tower for central China." I followed the news reporting on this but didn't find any that was reported from an environmental perspective. Most of the news only described and introduced the location of the tower, the height, the construction area, the modeling features, the landscape significance, tourism value and so on. No one had mentioned the

power of transmissions, whether or not the electromagnetic wave would affect the surrounding environment, what kind of damage it would cause to human health. Are those questions not important? Or is that information too sensitive to release?

What did this news coverage illustrate? I think, first, the news presenter didn't have knowledge about the electromagnetic radiation of the radio tower. He didn't release the related information to the media and he ignored the citizens' right to know about environmental information. Second, the media didn't ask questions from the environmental perspective. It is the same as the nuclear station's nuclear radiation; the television tower's radiation may affect the surrounding area. It is a science knowledge problem; it is also a science thinking problem. Third, it generally reflects that the public has few common science facts about electromagnetic radiation of the tower. It has relatively weak environmental awareness.

Environmental news is the major funnel for the release of environment information. It is an effective means for supervising the environment. It also is a path to educate the public about ecological civilization. The environmental news should be the most common vehicle for social education and public participation.

In recent years, almost everyone knows the environmental protection words like energy conservation, climate change, carbon emissions, green travel, waste classifications, and so on. But that doesn't mean the public has true environmental awareness. Environmental knowledge isn't equal to environmental awareness. It is the same as "road traffic awareness." Everyone knows to walk

on the crosswalk when you cross the road, but in real life how many people follow the rules themselves? "Cross the road in a Chinese way" is common in daily life. We are getting used to it.

The development of ecological civilization has a long way to go. Our news media, especially in environmental reporting, have a social responsibility to take this on. ♦

Sim Chi Yin

Photographer
VII Photo Agency
Pulitzer Center Grantee



As a photographer covering China, it's inevitable that one has shot many assignments on the environment. I'm not as focused on the environment as Sean Gallagher but I've shot many stories on air pollution, water pollution, and the impact of urbanization on the environment, displacement of communities, and places of worship. I've always been more interested though in the impact of these changes on people. What I'd like to share today is a personal project I've worked on for the past four years supported by grants from the Pulitzer Center. It touches on the human costs of China's economic boom, its massive resource extraction, and environmental exploitation over the past three decades or so. It's

also about where people search for values, for help, and ultimately what they put their faith in. The full story on this project can be seen on National Geographic online as a short film, as a photo and text essay on TenCent and soon in *The New York Times*. I'm showing today a small related video piece here. It was released last week by the Asia Society but we haven't been able to upload it within China yet.



The man I'm going to introduce you to is He Quanguai . He is 43 years old, he's a former gold miner, and he's slowly dying of silicosis, which is a lung disease—preventable but irreversible . He got this from the intense dust from blasting rock inside the mines. Like many rural Chinese he still believes in traditional medicinal cures, and he prays every 1st and 15th of the lunar month to the

local deities. And outside the local temples and in the sacred trees in their remote shanty towns you see kilometer upon kilometer of red fabric, surrounding these temples and trees. Ultimately though, they have more pressing, practical, urgent and very much this-world needs. And it is clear where their fate still lies. ♦

Silicosis-stricken former gold miner He Quanguai died at home at about 6 pm local time, 1 August 2015.



Tap the image to play video.
This video requires WiFi to watch.

Q&A

Liu Chang

Director
School of Journalism
Communication University of China



Ms. Sim's film reminded me that more than a decade ago Chinese journalists have done reporting on this same topic, on silicosis. Silicosis is not only an environmental protection problem; it is also related to labor security. Sometimes these problems are not very much related to ecology, but more related to labor security. No matter how good the environment might be, the miners could still be facing the same problem. In the past ten years more and more people have started to recognize this problem, from China to overseas. I think we are making progress.

As the moderator, I would like to take this opportunity to tell you one point from my observation, and one thought. The thing I've observed is to explain what Professor Yu Hong just said. Professor Yu said that in the current reporting we have done on the environment, too many reports are negative and too few are positive and encouraging. We have very good examples here today.



When we walked in, you saw the banners out front. The photos on the banners are from two different resources. From the foreigners, the Pulitzer Center's photos are all focused on the ecology problems China has. From Communication University the photos are all about the clean sky in Beijing. It shows two different understandings of culture and ecology from different nations. Because other countries have a good ecological environment, they are focusing more on the problems. Because we live in midst of terrible ecology problems, we wish to have a good ecological environment. Otherwise, why did the Beijing Blue [the clear skies of recent weeks] surprise us? Last week, many friends sent me photos and said that Beijing Blue is shining, glaring, and hurting. I

responded that I only wish that the Beijing Blue would not be a surprise but become commonly seen. This is my observation.

My second thought is that today we sit here to discuss all these questions. Professor Yu said that our “earth citizenship” allows us to eliminate the differences between us. I agree with that very much. Our representative from the government just said, “what is ecological protection? Saving coal, saving water, and saving electricity. We need to promote ‘green’.” But how many of us have truly thought about this question. Does “green” always mean environment-friendly? I believe none of you have thought about it. For example, wind power is a major developing energy source in China for the future because it is “green” energy. But does it protect

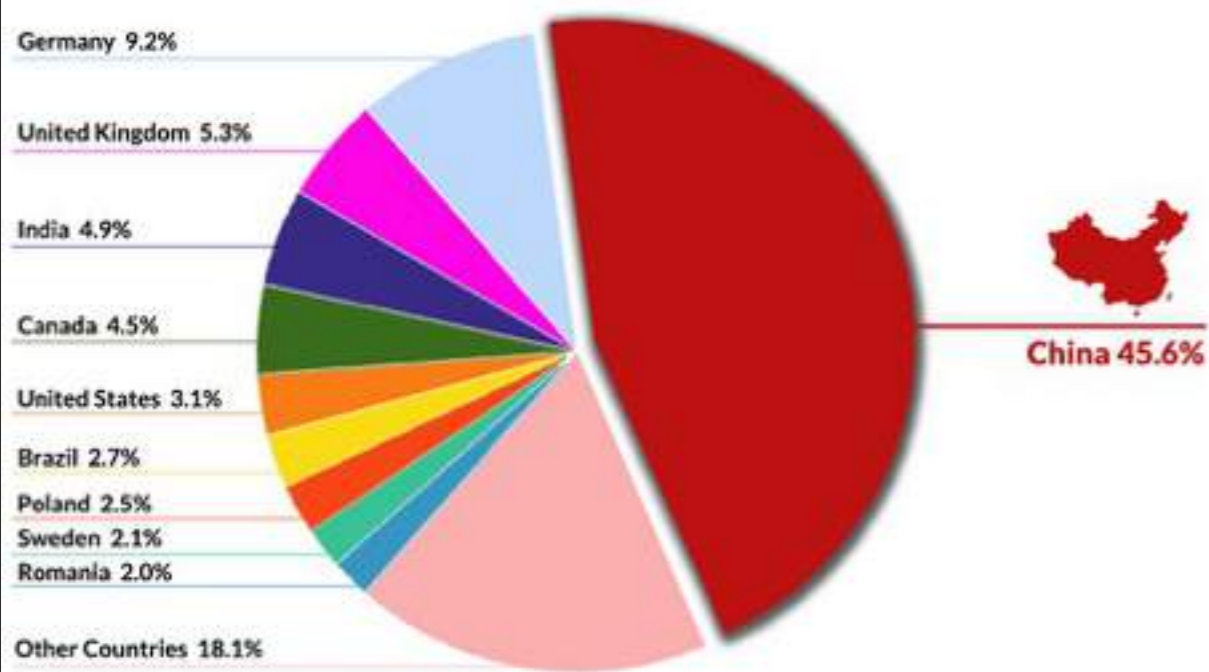
the environment? It does not. It is green, but in some ways it is hurting the environment. Building wind power plants on the plains will cause reductions in the species of birds. Building wind power plants on the ocean will cause the death of fish. I mention this not to discuss this issue in detail but simply to share a thought I have had for many years: Does “green” always mean environmental protection?

Lu Feng

Professor, Director
Department of Philosophy
Tsinghua University



2013: Increase in Wind Energy Generating Capacity



Source: 2013 China Wind Power Review and Outlook, Chinese Renewable Energy Industries Association
Graphic: Im Ding

I want to ask Mr. Hui Zhijun a question. My name is Lu Feng from Tsinghua University, department of philosophy. I spent a long time doing research on environmental philosophy. I think, in the long-term future, our country will have a conflict between economic growth and environmental protection. On the one hand, we value economic development very much; we even think that development is the first priority to consider; on the other hand, we also want to protect the environment. Also, we have very strict political rules on news reporting. Under these circumstances, as an environmental reporter, if you want to maintain a high standard of social responsibility, and also want to actively work on environmental reporting and promote the ecological civilization, how do you do that?

Hui Zhijun:

I heard you (Lu Feng) say that you are doing research in philosophy. I would like to discuss a related philosophy problem with you. In my view philosophy is a guide for how people think in right ways. It is the organizational generalization of natural sciences and social sciences. Yet in considering China's environmental problems and reporting on them we lack a philosophical guide. For example, after the reform and opening of

the 1980s the Chinese economy achieved a lot. Our GDP growing rate was more than 10 percent a year. Economic development was the absolute principle, but how do we view that development? The process of development will cause related effects, including negative effects on the environment. How do we view that development dialectically? How do we make the development plan, and how do we consider the environmental repercussions?



Central Television Tower. Photo by Chen Yifei. Beijing, 2015.

CHAPTER 5

Ecological Civilization and Visual Communication



Image by Li Lei/ Face to Face Media. China, 2014.

“A lot of reporting makes people feel depressed because you feel hopeless thinking about a story you have heard so many, many times. So as an independent filmmaker, I personally want to find inspiring stories like Tashi Sange . . . I think that images themselves have such power to touch people’s hearts.”

- Shi Lihong, co-director, *“Searching for Sacred Mountain”*

Ecological Civilization and Visual Communication

Moderator:

Fred de Sam Lazaro

Saint Mary's University of Minnesota, PBS *NewsHour*

Panelists:

Gary Marcuse

Director of the Documentary *Searching for Sacred Mountain*

Shi Lihong

Co-founder, Wild China Films

Lü Zhi

Professor, Executive Director of Center for Nature and Society, Peking University



Tap the image to play video.
This video requires WiFi to watch.



Fred de Sam Lazaro

Saint Mary's University of Minnesota
PBS *NewsHour*
Pulitzer Center Grantee

One of the themes that has emerged this morning is about engaging the community, especially in this age of social media and new technology. It brings out the inner journalist in every one of us. Can you talk a little bit about using social media and about providing opportunities for members of the community within the Tibetan plateau to tell their own stories? Tell us a little bit about your goals in making this film, “Searching for Sacred Mountain,” and how it all rolled out.

Shi Lihong

Co-founder
Wild China Films
Pulitzer Center Grantee



It’s a tough story to tell. You see in the film that the Buddhist monk Tashi Sange has been making his own films through a program called “Through Their Eyes.” The idea was to train the local Tibetan residents to use cameras to document the changes around their lives, both the environmental changes and the social and economic

changes, and to explore how those two interrelate. As we all know these two issues are inseparable. The cause of environmental degradation is human, human behavior, which is caused in turn by the expectation, the desire, for economic development. So when we talk about eco-civilization, I think that it’s in the context of an ecological perspective in development versus industrial development or agricultural development.

“Ecology” is essentially talking about relationships—relationships between living beings and their environment, among living beings themselves, and also relationships with time, between now and the future, the past, and today. Past present, and future. So the word ecology also reflects the holistic effective interrelationships of all things. So the goal of our film was to look into these relationships and try to bring out what was in people’s minds already, in the traditional culture and in the local settings, because people living on the land still have connections to that land. So basically you re-establish it if it’s lost. As Tashi Sange rightly said, the protectors are essentially the people who live on this land.

Fred de Sam Lazaro:

But when you rely on the use of cameras by ordinary people in the community, who is the target audience? Who are you trying to reach ultimately in the dissemination of these videos?

Shi Lihong:

Two audiences, actually. The audience I'd like? Outsiders like us who do not know what's going on in that land because the land we're talking about in the Tibetan plateau has an important position in the global context. It's relatively intact and it nurtures over a billion people. We want people to recognize the importance of that land and to learn how to maintain the ecosystem of that land. It needs support. It needs outsider support. So for outsiders to understand the importance of the existing system that is deeply-rooted in the culture, it's very important for people like myself to pursue constructive reporting. I think that is hard, to do constructive reporting in a way that helps people sustain their hopes. But on the other hand, local people filming themselves is also self-educational, especially when the film is shown to local villagers. That's a reflection on themselves as well. So it's for both audiences.

Fred de Sam Lazaro:

I was also taken by the notion of constructive reporting, which we heard about earlier from Professor Yu. I think in the United States we refer to it as "solutions-oriented journalism." There is a growing consensus on the value of reporting on models that have worked to address specific problems rather than focusing solely on the problems themselves, that you can draw in an audience by showing examples of solutions.

But my questions for the two filmmakers here are: "Do the images from these remote, beautiful mountains seem somehow irrelevant or distant from a mostly urban population which might tend to react more to media presentations on issues like smog that feel more immediate to their own lives? How do you try and create a greater sense of relevance in an audience?"

Shi Lihong:

There's so much reporting in the media about pollution. A lot of reporting makes people feel depressed because you feel hopeless thinking about a story you have heard so many, many times. So as an independent filmmaker, I personally want to find inspiring stories like Tashi Sange. He is a monk who established an NGO and inspired a local community to protect the wildlife and mountains. I think such a story is very necessary, and also I think that images themselves have such power to touch people's hearts. Once you feel attached to nature that will inspire some action.

“Ecology” is essentially talking about relationships... the protectors are essentially the people who live on this land.

Fred de Sam Lazaro:

Just to ask, as a follow-up, if you showed this film to a primarily urban audience in China, let's say in Beijing, what do you sense the reaction to figures like Tashi Sange would be? How is he perceived? Is he relevant, inspiring, or somehow distant from the reality of urban audiences?

Gary Marcuse

Director of the Documentary
Searching for Sacred Mountain
Pulitzer Center Grantee



We haven't yet been showing this film in Beijing, and it's the first time that we've been here so I couldn't try to answer it in terms of a Chinese audience. The Pulitzer Center sponsored this project and they almost insist that you show it, so it does get circulated. And, of course, you and I worked on making a version of this for PBS television, and it went out to a million or more people in the United States.

But I've had the direct experience of showing it, and you asked, "Is it relevant for people?" I think they feel it and they say that it is. The film is actually part of a larger global project, a global activity in which people are really seeking new answers for their relationships with nature. We feel a little bit stale in the way we relate to the environment with so many problems that we've

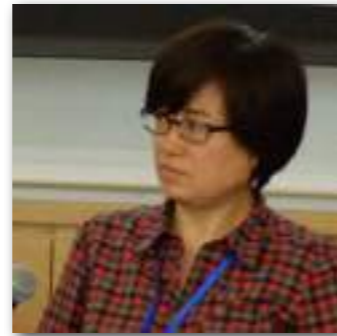
created. Are there other models? Are there other ways of seeing it? First of all, the documentary touches your heart as well as your mind. I think documentaries have the capacity to be compassionate and feeling, and to provide a very complicated message all at once.

It's very non-linear, you see a lot of things going on, a lot of questions being raised: What's a living Buddha? I've done films now in China, Russia and the United States on the history of the environment and in every case we're very interested in ethnic minorities, or the hunter-gatherers, what Dan Smyer Yu was speaking about, the groups that have always lived on the land since the beginning of agriculture. And people are, particularly from Canada where I come from, very into the possibility that these people may have knowledge that has survived despite it all, that gives them greater knowledge and greater access and a better opinion in a way about what constitutes environmental conservation and how to protect the land and relate to it. People are looking and they find this very heartening, and very engaging. And in the case of Tashi Sange it is also kind of humorous. It's such a serious topic and yet it is addressed with such lightness. It makes it really reach a wide audience. So it's effective that way.

From the film Sacred Mountain: Dr. Lü Zhi discusses her work with Tibetans.

Lü Zhi

Executive Director
Center for Nature and Society
Peking University



Narrator: Dr. Lü Zhi is a conservation biologist at Peking University. She has been working with Tibetans in this area for many years.

Lü Zhi: During the 1990s when I went to the Tibetan area for the first time I saw something that really surprised me. There was a lot of logging going on, but in some areas the wild animals were not afraid of people and there were very old trees, 600 to 700 years old. The ancient forest was preserved. I asked the local people, “How is this possible?” People said, “This is our sacred mountain.” This was a big shock to me. Just the concept of 'sacred mountain' was good enough to preserve the resources. It's more powerful than the law or the preaching of scientists.

Today this system is still functioning. In the core area, nothing should be touched. Then in a broader area, killing is not allowed. No living beings should be harmed. We did a survey on birds and



For two years Dr. Lü and her students used GPS to map the sacred mountains in the Ganzi district of western Sichuan province. They found an average of three sacred mountains near each monastery in the district. In the United States the protected area would be about the size of Vermont and New Hampshire combined. Nearly one-third of the land is in sacred areas.

we discovered that wherever the belief of sacred mountains is strong there is greater biodiversity. So this shows scientifically the environmental value of sacred mountains.

Cultural values of Buddhism are very comforting to the scholars of conservation. I felt at last we found a way and I began to gain confidence in humanity. These Tibetan people are not wealthy yet they can still think of other creatures. Not just other people, other creatures. This is altruistic behavior. If they can do it, there's hope that other people can do it as well.

Q&A



Robert Tansey

The Nature Conservancy

I'm not a Tibetan but I've been practicing a different form of Buddhism for 46 years, and that form of Buddhism very much connects the individual to the larger whole, including the environment. So I think we need to realize that although there's graphic, particular things in parts of Chinese culture, that Chinese culture is complex and the philosophical background is very complex. In my work here on nature conservation, I come in contact with very, very successful Chinese who then turn to different strands of Buddhism to inform their lives. That allows them to connect very much to wanting to do something more about nature. I think your story was very, very informative because it has also, including through journalism, allowed people to see how their traditions can be held to but at the same time applied in a little bit different way that has an important positive impact for the environment.

Conference Participant:

I think it's possible for a film to dictate, quite straightforwardly, the way that human beings have an impact upon the natural environment and how we can change our behavior to produce a better outcome. But from a scientific, ecological perspective, we understand that species interaction in a very complex, systemic ways. Do you think that the linear narrative of a documentary film is capable of helping people to grasp the complex, systemic nature of ecological problems?

Gary Marcuse:

I think that absolutely it's part of the equation, and unless you're constructing an entirely linear narrative in the documentary, if in fact you're telling complicated and overlapping stories, I think that at the intersection of those stories, you begin to understand the documentary as well as dwelling in this world of complexity, and that the stories themselves are not simply good guys and bad guys, and that it's not a heroic journey necessarily. I think documentary makers who grasp the complexity of a hard story can do that.

I just wanted to also say that several people have said that there are not enough environmental documentaries, and not enough filmmakers making environmental documentaries in China. And I think part of our message is to really encourage environmental filmmakers and storytellers on a large scale, larger than this, so

that these stories can really be grasped. Yesterday when we were at the Communication University there was a discussion about having an environmental film festival there. I think it's a great way to encourage young filmmakers to start making them by seeing good examples.

It's also a way to start circulating films that didn't wind up on television as well, to have more exposure for more environmental documentaries. That's essential if you're going to develop your craft, and also develop an audience for it.



Conference participants view "Searching for Sacred Mountain." Photo by Jon Sawyer. Beijing, 2015.

CHAPTER 6

Business Perspectives on Ecological Civilization



Photo by Chen Yifei. Beijing, 2015.

“When we talk about environmental problems we always say it is a development issue, that this is the price we have to pay for economic development. You need to develop first, it is said, and then fix it later. As a citizen I don’t accept this kind of thinking. How much are we paying? Is it too much?”

- Jianming Chen, senior director, Motorola China

Business Perspectives on Ecological Civilization

Moderator:

Jim McGregor

Chairman, Communications
Consultancy APCO Worldwide,
Greater China

Panelists:

Robert Tansey

External Affairs & Policy Senior
Advisor for Nature Conservancy,
Northeast Asia and Greater China

Cao Haili

Former business journalist at
Caijing and *Caixin*, Nieman Fellow
at Harvard University

Chen Jianming

Senior Government Relations
Director, Motorola Solutions



Jim McGregor

Chairman

Communications Consultancy APCO Worldwide
Greater China

I guess we're going to be talking about capitalism, mixed with communism, socialism, and China-ism. I'll introduce the panelists as they get up to speak, but I'm going to lay a little perspective here on the business situation in China, because we're kind of taking a turn here away from what the other panels have been talking about.

We're at a time, after 30 years of breakneck growth in China, where all you need to do is look out the window. There's a lot of problems with pollution, there's a lot of problems with food safety, there are ethical challenges with corruption. We have a very strong anti-corruption campaign going on, we have companies that are balancing their sense of responsibility to their shareholders versus responsibility to their home country, and everybody's looking at what is sustainable business.

I can tell you right now that the business community—the foreign business community—in China is quite pessimistic compared to the past, when China was everything and everybody was putting all their eggs into the China basket. I'll just give you a little bit from a recent European Chamber of Commerce survey: 50 percent of the companies are optimistic about growth this year. That's 10 points less than a

year ago, and probably 30 points less than about three or four years ago. Forty percent of them are cutting costs and looking at employee layoffs. Only 56 percent plan to expand their business in China, versus 86 percent two years ago. As to innovation, the critical driver of where China's got to go, two thirds of the European companies that do R&D do not have China R&D centers. Of those that do, it's mostly product globalization.

The economy here is still growing at a fairly strong rate. We don't know the official growth rate, it's seven something, but probably closer to five or so if you talk to some of the economists who look at it in an unofficial way. China's got to address a huge debt problem. Debt was 100 percent of GDP in 2009; now it's 250 percent of GDP. We can't keep pushing that to the future.

China's got some very impressive initiatives going. As you know we've got the one-belt road—you know, the new Silk Road, going into central Asia all the way to Europe—and we've got the belt through maritime, heading through the South China Sea, the South Pacific, and the Indian Ocean. I guess the two meet up in Venice.

China's got this Asia Infrastructure Bank that 57 countries have signed on to. There's all kinds of money that China is putting forward for infrastructure in Asia and to build bridges to the West. And there are also some good openings going on with the U.S. These visas that were just opened—10-year visas—for business and tourists on both sides are very important. So there are also some very positive things, and as you know we've just had the third plan of two years ago, where very impressive economic reform blueprints were laid out, and the fourth plan of a year ago, where

we had very impressive legal reforms laid out. So there's a lot of action happening here that business has to deal with.

But I want to get back to the main point, and get some of our speakers talking. So, without further ado, let's start out with Bob Tansey. Nice to see you again—I knew you in the nineties, when you were in the embassy. He's currently the head of external affairs and a policy advisor for the Nature Conservancy, a long-time China hand who speaks great Chinese and if I'm not mistaken you're a Buddhist, too. ♦



A man walks amongst the dunes of the Tennger desert, near the Shapotou desert resort in Ningxia Province. Photo by Sean Gallagher. China, 2009.



Robert Tansey

External Affairs & Policy Senior Advisor
The Nature Conservancy
Northeast Asia and Greater China

Thanks Jim. You've made a long list of issues to consider but you left off modernism. So maybe we pick up from the previous panel and discuss how to apply traditions, in this case, in the sense of business. In any case, I am very pleased to participate in today's conference on behalf of The Nature Conservancy or "TNC."

TNC's mission is to protect the lands and waters on which all life depends. The Conservancy is focused on five big goal areas: oceans, lands, fresh water, climate change and sustainable cities. We have been working in China since 1998. We are very pleased with the emphasis of China's leaders and the Chinese people on EcoCivilization and Beautiful China. On a personal level, I have been a Buddhist all my adult life. Buddhism teaches the interconnectedness of human life and the natural environment, so my work with TNC and China's efforts for sustainability are very motivating for me. My family and I lived in China from 1992 to 1999 when I was an American diplomat, and we have seen the tremendous economic growth that has lifted so many out of poverty and makes China an important economic player across the world.

China has more people than any other country; it also has limited arable land and freshwater resources. So, finding the balance between economic growth and conserving natural ecosystems is inherently challenging. The Nature Conservancy China Program is supported by a board of trustees, largely comprised of successful private entrepreneurs. The Board came together just as I was joining TNC in 2009 and preparing to return to China. At that juncture our new Board Members noted that the past 30 years had been focused on rapid economic growth. They pledged to spend the next 30 taking care of the environment.

Business leaders are people too, and people in China care deeply about the state of China's natural environment. I've noticed that many successful businesspeople have turned to Buddhism or other spiritual paths to inform the deeper meaning of their lives beyond enterprise, success, and the accumulation of wealth. Philanthropy is also growing in China.

“If I can change an industry, if I can change a business sector, I can change something more meaningful about the country where I live and that I love.”

But there are also “first bottom line” motivations for business to be more sustainable. Concerns about air, water, and soil quality and safe food are widespread. Reputation is a growing business factor. Chinese investment is increasingly “going out” and whether

Chinese firms focus on the second and third bottom lines (social and environmental) affects whether they can win major infrastructure projects. Recognizing that Chinese interests are building and financing most of the new hydropower construction globally, the Conservancy has just launched a Sustainable Hydropower Center to help ensure that such projects begin from whole river-basin planning so that ecosystems and their essential services are there for the long-term.

I predict that the Chinese business emphasis on EcoCivilization can only grow in the coming years. It will be smart business for firms, whether Chinese or foreign, to work with the government and other stakeholders for increasing sustainability. ♦

Jim McGregor:

Now I'm going to introduce another old friend, who is one of the pioneering journalists of China. I knew her way back in *Caijing* magazine days. She was one of the early reporters with *Caijing*, and of course she worked with *Caijing*'s founder Hu Shuli, and most recently she's been a managing editor of *The New York Times* Chinese-language website. She was a Nieman fellow at Harvard, she's got a journalism degree from Berkeley, and your bio in the program here says that you're spending time in Anhui province, looking to write a book about the link between local space and values. So I want to hear about that after you've said your prepared remarks. ♦



Cao Haili

Former business journalist
Caijing and *Caixin*
Nieman Fellow
Harvard University

Well, currently, I'm out of a job, taking infinite gap years trying to figure out what to do next. But I have bought a house, in a village called Bishan in Anhui province. I just started the renovation process so I'm just doing my part, contributing to ecology civilization by moving to the countryside. You know, it's a little bit strange for me to be on this panel, because it's all about business, but you know, I'm kind of anti-business. The journalists and these business people are on two different sides. I'm on my side, right? But anyway, I'm being environmentally conscious by not printing out my notes, but I put my notes on my cell phone.

Well, now I am a former journalist, but I've covered business and environmental issues. We can talk about the role of business meeting the challenge of China's environmental issues but I think it's largely constrained by the political system, government policies, and the absence of rule of law. We all know that China has a history of giving business priority over environmental protection. The majority of businesses are still, consciously or unconsciously, actively pursuing profit at the expense of environment and health. We are too familiar with stories about companies selling us

poisonous products, or discharge polluting to rivers and the air. It's disheartening to read the news but it's reality.

Independent freelancers can actually do a lot more than professional filmmakers...we should be open to different opportunities.

So, you'd think that businesses are aware of the problems—I think they are. The problem is that the punishment is too light, or too easy to escape, or too much red tape is involved, so businesses don't take this seriously. And also, there is a lot of corruption involved. The bureaucracy and the lack of checks and balances, AKA no freedom of the press and no freedom of expression, also make it hard to implement very strict measurements. This morning we had a high-level official from the Environmental Protection Ministry here talking about the policies, and you know, it all looks good on paper, but in reality, it is very hard to make it happen. So we all know what the problems are, and what the solution could be, but in reality it's just very hard to make it happen because there is too much vested interest, too much greed, and too much desire.

In the past thousands of years, China has been defined by agricultural civilization and way of life, but with the modern commercial and financial system coming in, the old system and way of life, of course, has collapsed, as of one and a half centuries ago. With that collapse, China has since struggled to redefine its

own identity, and so it's a process with a lot of difficulties. That's why we see the revival of religion and traditional culture, as a consequence of longtime suppression. It's a complicated issue. In my opinion, environmental change has to be part of the political and cultural revolution. But fortunately we see efforts, not only by business NGOs but also by individuals. One thing I would like to point out is the awakening of public awareness. No matter what their motivations are, at least we see regular people coming into the street, to protest against the government, or to defend their rights for a better home.

I do think each of us has a responsibility to make the environment better, to make a better home, but again, the greater responsibility I think needs to rest on the government. So as a journalist, our job is to make sure that we do our part to criticize the government, to make sure that the right policies are in place, and, when things go wrong, to let the public know what's going on. So each of us has our own responsibility, but at the end, the biggest problem in effecting good policies rests on something else. Thank you. ♦

Jim McGregor:

Next we have Mr. Chen Jianming, who is a senior director for Motorola. ♦

Chen Jianming

Senior Government
Relationship Director
Motorola Solutions



I am very happy to attend the conference today. Throughout the day I have learned a lot. I am not a researcher, and I am not a specialist in environmental protection, but I am very interested in this topic. My understanding and thinking on environmental protection issues comes from my wife. She entered college to study environmental issues in 1978 and has worked on it for decades since. Yesterday, I told her I am coming to this event. She has lost her hope of achieving true environmental protection. But after I listened to today's conference, I think we should have hope. There are still so many people who are passionate and brave, doing research and discussion on this issue. We are using that wisdom to find solutions for the common problems of the Earth.

By the way, I have to talk about what social media can do. Today we are talking about communication. In the morning someone mentioned Chai Jing. Her video "Under the Dome," on air pollution in China, reached more than 150 million people in three days (on the social-media site Tencent.) So when we talk about communication, we have to use the new media, we have to get to the ground, to communicate with the public.

My wife sent me two articles that were published in 1971 by the *People's Daily*, each of them critical of American environmental pollution. The first story was about how air pollution hurts residents, the dirty water that was everywhere, the rivers that were toxic. The second *People's Daily* story was about how American imperialism was getting worse, the social crisis deeper and deeper, the air and river pollution is in critical condition. That was 1971. I don't know if the condition in America was that bad or not but I know that some places in China today are even worse. It is our river and our air. When we talk about environmental protection, when we talk about the problems like this, we always say it is a development issue, that this is the price we have to pay for economic development. You need to develop first, it is said, and then fix it later. As a citizen I don't accept this kind of thinking. How much are we paying? Is it too much? Comparing what we have paid and what we are gaining, is it a fair trade?

I majored in science, I know that some of the emissions are not reversible. It is impossible to fix it after the pollution has taken place or, if it is fixable, it will take us decades to achieve. As we say in China, this is simply a method by which to kill your sons and grandsons. So we should never say that the environmental problem

is too big to address. This is how I feel as an ordinary person. I am not doing this kind of research, in my present work, but when I look into those problems I feel it is very bad.

Speaking of business and ecology, what do we mean by ecology? It is environmental protection, it is sustainable development, it is the wish for better air and cleaner water. Those are the fundamentals of living. When we were looking for a better life, we polluted the fundamentals. We need to worry about the fundamentals. Is this kind of development costing too much? Speaking from a business angle, this morning Deputy General Director Liu said, environmental protection should start from the beginning. Where is the beginning? It is at the factories.

So today I represent Motorola to talk about how, as a producing company, do we face the environmental challenges? This is the responsibility report we published for 2014. In this 60-page report there are more than 20 pages about ecology, environment, and sustainable development. As to ecological civilization, all companies should take more responsibility. We need to consider the environment from the beginning—from operations to the product design to the life circle of the product. Going into details, it includes the four R's: Reduce, recycle, reuse, and renew. The Motorola report details how we address each point. ♦



Hebei province, rich with iron ore and coal, produces ten percent of the world's steel, but also includes seven of China's top ten most polluted cities, including Handan. Photo by Sim Chi Yin. China, 2013.

Q&A

Jim McGregor:

Well, we've gone right into the environment. I guess that's not surprising, since we're sitting here in Beijing. I know that earlier in the day you did a panel about environmental reporting. You know, I'm like one of those storm chasers who goes after hurricanes, I've always lived in highly polluted places. I was born in McClean,

Minnesota. I lived in Los Angeles when it was polluted, I lived in Taiwan when it was polluted, I've lived in Beijing when it was polluted. So if you hear about me moving somewhere else, you'd better worry about the new place.

But all of the places where I used to live have cleaned up. How did they clean up and why did they clean up? I mean, you go to Taiwan now and the water is clean, the air is clean, the taxis are Priuses. When I was there the place was totally polluted. I want to ask Haili about environmental reporting. I mean, business will worry about its profits. So I'm a reporter-turned-businessman, but I still have the mentality of a reporter.

How do you get business to actually follow the rules? I think a lot of it's got to do with journalism. Do you think journalism here is going to open up in that direction? I mean, I know journalism here is getting tighter and tighter these days, and we all saw what happened with "Under the Dome," that documentary that was viewed 150 million times within a couple days and then disappeared. Do you foresee any progress in allowing journalists to have more openings as to covering not only ecological pollution but also food safety and all these other issues?

Cao Haili:

Well, frankly I don't know. I think it depends a lot on personal efforts, like we did in *Caijing*. We talk about personal effort, it's pushing the envelope, and doing something that seems to be impossible, and maybe we can step that up. It's a game, it's really

what the regulators allows, what the government allows, what's behind each door. You just need courage, and to do smart work. Generally speaking, I think the whole media environment is getting tighter and tighter.

But even with that, I think there's still space and room for some kinds of new media and personal advocacy. When I say personal efforts, I mean, a lot of journalists have left journalism. And they have their own startups. So I see new media as a way—like what Chai Jing has done with "Under the Dome." We talked about Chai Jing earlier. She is no longer a CCTV broadcast journalist; she is a citizen, like me, but her work is incredible. If you look at the effect that it has created, it really shows the way forward. Independent freelancers can actually do a lot more than professional filmmakers. So maybe we should rely more on nonprofessionals. I think we should be open to different opportunities.

Jim McGregor:

They might have more of an opening because they don't have an editor censoring them.

Cao Haili:

Well, that's one thing. I mean, there's no fact checking. If you want to do investigative reporting, of course, you need to have an editor working with you. But other than that, I think we should be open to new forms. ♦

Jim McGregor:

I'd like to ask a bit about what used to be called spiritual pollution. I work with a number of companies that have to do with food safety issues, and other things, and I'm always appalled at the ethical values of some of the companies here, that they will just put this poisoned stuff in food, to fake the protein content. What are they thinking? How is that done? I want to ask you about that.

Bob Tansey:

Well, I was thinking about something related, while you, Haili, were speaking. I'm not a journalist and I'm not sure that journalism is going to be the answer to change things. But I've now lived in China for 13 years, and I often run into people who haven't lived in China, and they would say, "Oh, China's number-one priority is economic growth, right?" And I would say, "No. Their number one priority is stability." And to bring about stability in the world's most populous country is a hard job. And I think that in China we've seen a big change in people realizing what's outside the window, and that that's a concern, and that there are things that can be done about that concern. I think people are realizing what you're talking about, Jim, that you have irresponsible producers and that as a result you have food that is unsafe. The government here has its own unique form of governance, but it has to respond to those things. Because the public's awareness about the state of the air, the state of the water, the state of the soil, the

state of the food—that is all growing all the time. So I believe there's going to be some kind of rolling response there.

The other point I'd like to make is that right now local NGOs and international NGOs are concerned about changes in the law governing NGOs. The Nature Conservancy is a science-based organization. We have around 700 scientists—we have a lot of capability. We're not confrontational; we're very pragmatic. And what I'm seeing is, across those five goal areas that I mentioned, we now have more openings to work with China for the environment, for ecological civilization if you will, than we've ever had in the past. And I think that's a kind of response, that you can see all kinds of judgments being made, whether it's the rule of law, or it's the market, or it's other ways that people's dissatisfaction with poisoned food comes to bear. You're going to see the government having to respond to that, if only to maintain the stability they seek.

Conference participant:

My question is to Robert Tansey. I think it's an interesting topic to connect business and the ecology, because business has to make money, make a profit, and more consumption drives more production. And just now the gentleman from Motorola said that most of the pollution is generated at production. I quite disagree. Because there is more consumption, like in a country that has a GDP of \$60,000 per year, than you would have in a country with GDP of \$6,000. So other countries have to produce these goods worth \$60,000 dollars that are going to be consumed by this rich

country. But now we are focused on production, and these producing countries, manufacturing countries. So in my view, a country like China that has a GDP of \$6,000 a year is consuming \$6,000 worth of natural resources but the other country, with a GDP of \$60,000 per year, is consuming a much larger amount of natural resources.

We talk about Buddhism, how in Buddhism there is one single society, there is one life, and each of us should seek to have a clear mind, to desire less, to spend less. So my question to you is, can the rich countries and rich people spend less, so as to become a lesser burden on the poorer countries?

Bob Tansey:

Well, it's a fascinating question. I'm sure it's discussed by many of the Ph.D.s in this room. As you were speaking I was thinking that your question reaches from the individual to the company, to the society or the nation or the world. I was on a sustainable-China panel, thinking about what does "sustainable China" mean. And ultimately, you get to the point where, if the Chinese GDP per person was \$60,000—I'm not sure there's a country where the average is \$60,000—but if China's per-capita GDP were to reach that of the United States, with several times as many people, then is that sustainable in terms of resources we take out of the Earth

and the pollution that inevitably results from the processing of those resources?

The answer may be that it's not, even if you have all the technology and law in the world. So when we talk about China and eco-civilization, in effect we're talking about, can the world have eco-civilization, can humankind have eco-civilization? Personally, when the religion and culture panelists were speaking, I was thinking that "No, those philosophies are not in the past, they are

not distant from today." But can they help Chinese consumers to be happy with less?

When I lived here before, I rode my bicycle with my friend Paul. We were very happy. We were exercising, it was very pleasant, there were other people around us on their bicycles, and Paul and I got to talk to each other. It was great. Well, now I don't have a car here, and I cross the street, and everyone in their vehicles ignores me. They must be

richer than I, so they have rights that I don't, right? They have the right to run me over. Except sometimes I get stopped and I point at my green light, and their red light. [Laughter]

But anyhow, I really believe that if you're going to handle this kind of problem, that the things that we have touched on here today actually have to become alive and work. I think, short of people having different motivations or desires, we are really in deep

I've noticed that many successful businesspeople have turned to Buddhism or other spiritual paths to inform the deeper meaning of their lives beyond enterprise, success, and the accumulation of wealth.

trouble. It could well be like that every single day, not on and off. But at the same time I think there are other business motivations, I think there are other business opportunities. I reuse, I recycle. On the sustainable-China panel that I chaired there was a guy who was a recycling expert, and he explained that 52 percent of the copper being used in China in the last year came from recycling. So that was great. But then the government got involved to restructure the industry, and it kind of fell apart. But I think you're talking exactly to the global issue as being addressed here in the context of China. If we don't have a change in what satisfies people, it's going to be really hard to reach any long-term sustainability.

Conference participant:

It seems to me that there are some businesspeople in China who have an interest in, or at least are practicing, some sort of religion. One encounters people like this more and more, people who are interested also in traditional culture and values. I wonder if any of you have any thoughts on whether that changes their behavior? For example, the Soho China business couple, Zhang Xin and Pan Shiyi, are practicing Bah'ai, and I've met people in other parts of China who also have factories and companies and are practicing different religions—Buddhism, Daoism, and so on. I wonder whether it's just for their own personal growth, for their own salvation, or whether it has an effect on how they run their company. I wondered if anybody on the panel had any thoughts on that?

Jim McGregor:

I do. Actually I've seen a lot of that in different businesses here, I mean, the number of people who are Christians in this country exceeds Communist Party members at this point, and so many people who have worked for me over the years have gone on to become religious. But you also see it all the time—companies here where the *laoban*, the boss, has a religious bent. At SMIC, the semi-conductor company down in Shanghai, Richard Chang, the guy who founded that, is a born-again Christian. He had a church on the premises and when the first chips came off the line everybody knelt down and prayed. He had all these born-again Christian Taiwanese engineers running the place. I was shocked when I saw that, and the party didn't seem to mind. There's a lot of *qigong* masters these days who are advising senior officials. One of them just got sentenced the other day for telling his *qigong* master too much. I think that religion is permeating this society. It's just too bad that it can't come above ground.

Bob Tansey:

I would totally agree with that. In recent years at the Nature Conservancy China program, we've received most of our financial support from private donors. Our board of trustees includes the founders of companies like Alibaba and Tencent and what I've seen there is a very dramatic change in thinking. You have people come together as individual leaders, not just as individual leaders of a

company but as a group of influencers, and then they decide to commit both individually and collectively, in multiple ways, to the environment. You also see this change in thinking from, “Oh, I’m going to Africa on a trip so I’m going to buy some ivory” to being exposed to what that means in terms of the welfare of the elephants—and then turning around and becoming a major opinion leader on that issue.

Jim McGregor:

That’s been a big initiative at the Nature Conservancy, hasn’t it? The ivory trade? You guys have had a lot of influence.

Bob Tansey:

Well, there are various groups that are involved. Recently our CEO signed an agreement with Tencent aimed at weeding out the illegal ivory trading. But I’ve spoken with folks on this issue, and also with a very successful artist who supports us, and I will say very frankly that I turn to Buddhism to inform my life. Or when I talk about life and death, I talk about nature. It’s something where they say, “Okay, if I can change an industry, if I can change a business sector, I can change something more meaningful about the country where I live and that I love.”



Travis Klingberg

University of Colorado

Early this morning, the point was made that ecology is a science. And we know from daily news coverage here that “ecological civilization” is a cultural attribute that is ascribed to just about everything. Just take a drive down a major street in China and we can probably find something ecological. One thing that’s been missing today, surprisingly, considering this group, is an exploration of the role of the state. Even the title of this conference, *Sheng-tai Wenming* (“ecological civilization”) carries with it hints of a government project, a state project—except that we’re missing the verb, *jianshe* (“let’s build”) that is part of the government’s phrase.

So the question that’s been floating through each of the sessions today is, “Who’s responsible for building ecological civilization? And who’s responsible for determining the standards by which that ecological civilization is measured? Who evaluates that?”

We haven’t talked too much about the state, or the role of the state, in that ecological civilization. It’s a ghost, and I think we’d have great fun writing down what we think it is, each one of us, and sharing them. I think it’s somewhat of an amorphous topic. But I’d like to put that question out there. Is “ecological civilization” a

political strategy that we are all now complicit in, because we're using these terms and talking about these terms? I think that we can begin to separate out, "What is a state project?" and "What is the Chinese state involved in producing?" and "What is our position in regard to that project?" How are we complicit in that, and how are we able to develop somewhat of a critical distance to that?

Jim McGregor:

Well the good news is, he's asked about the government, but we only have one minute left, so you're all pretty safe. So who wants to grab that question? What is the government's role in all this?

Cao Haili:

Well, in this country, the government is everything. It's all over. That's a reality we have to deal with. But I agree with you, all kinds of new concepts are created maybe for some political strategy or purposes, but the concept itself carries meaning to everyone. So no matter what the political agenda behind it, I think for us, we have to do our own part. Of course, the concept itself could be very vague. Like, we have all kinds of concepts: eco-cities, low-carbon cities. Some NGOs or businesses play some role in creating this concept because they have just an interest in creating it. But I do think the whole world is connected, one way or another. We just

have to be careful where we go, and what we are talking about, to make sure we don't mess up things.

Jim McGregor:

As a foreigner, I'll have one final comment. As you know, in China right now the central government is gathering more and more power, and civil society is being pushed back. I think that trend is not sustainable. I mean, look at America: We can be very dysfunctional. Our Congress hasn't worked in 10 years, and yet our country is fine, because we have a lot of different entities that all have a part in civil society—business associations, local governments, and so on. I think China will learn that over time you can trust your people and that you're going to need help from all members of society in order to solve all these problems. I think we'll see China going in that direction, I just don't know when. I think it's inevitable.

Conference participant:

America is fine? I mean, come on. You better go home for a little while.

Jim McGregor:

Well, I live here, so America looks pretty damn good.

CHAPTER 7

Educational Perspectives

Educating Journalists and the Public



Image provided by Liu Ling, Beijing, 2015.

“Is ‘Under the Dome’ the Chinese version of America’s *Silent Spring*? Is Chai Jing China’s Rachel Carson? The answer is probably ‘no.’ Journalist educators should be thinking about how to raise up the standard of environmental journalism and cultivate a true Rachel Carson for China’s future.”

- Prof. Shi Anbin, Tsinghua University School of Journalism and Communication

Educating Journalists and the Public

Moderator:

Jon Sawyer

Executive Director, Pulitzer Center

Panelists:

Shi Anbin

Professor, Vice Dean, School of Journalism and Communication, Tsinghua University

Kem Knapp Sawyer

Contributing Editor, Pulitzer Center

Lang Jinsong

Professor, School of Journalism, Faculty of Journalism and Communication, Communication University of China

Liu Ling

Beijing Academy of Education Sciences



Jon Sawyer

Executive Director
Pulitzer Center

I want to continue where we left off with Travis Klingberg's comments at the end of the last round, about this whole idea of "ecological civilization" and what terminology we're accepting. He asked what is the role of the state in defining that, or of journalists, educators, religious and cultural leaders, or business. Of course that's the point of this conference, to bring us together so that we can talk about this. In my own view I don't see that as being co-opted in any way. I see it as an opening, an opportunity to take what the government has said, and then for all of us to talk about it, as members of civil society. I see that more as seizing an opening than I do as conforming to any set interpretation. I think one of the things that is incumbent on all of us is the point that Haili Cao was making: for us to step up, take responsibility, and make our views known, and not get caught up in some exercise of "what is the meaning" of a particular term, but to stand up and make the case for the view that we think is most important.

I mentioned this morning that the Pulitzer Center is an organization devoted to journalism and education, a dual focus that sets us apart from many news-media outlets but one that we consider essential to accomplishing the goal of a truly informed public. In that spirit I think it's fitting to

conclude the rich conversations we've heard today with a discussion of how best to take the principles of "ecological civilization," however we might define it, out to the broadest possible public.

We'll hear about how this works at the university level, with presentations by Shi Anbin of Tsinghua University and Lang Jinsong of Communication University of China. Kem Knapp Sawyer will describe the Pulitzer Center's approach in this regard and then we will hear from Liu Ling about how ecological civilization is being introduced at the primary and secondary level here in Beijing. With that, let me turn to Professor Shi Anbin. ♦



Songyue Pagoda (6th Century AD), Henan Province. Image by Jon Sawyer. China. 2013.

Shi Anbin

Professor, Vice Dean
School of Journalism and Communication
Tsinghua University



My thanks to the conference organizers for inviting me to share some thoughts about the implications of ecological civilization for journalism education. My qualification for speaking about this topic stems from the work of my institution, the Tsinghua School of Journalism and Communication. We are one of the most internationalized schools of journalism in China, recruiting students from around 50 nations around the globe. Our master's program in global business journalism is the first postgraduate degree program in journalism recruiting international students to the Chinese mainland. All course work is done in English anchored by both Chinese and international faculty, with professional support from the International Center for Journalists (ICFJ) and Bloomberg. It is also noteworthy that Prof. Chen Jining, the former president of Tsinghua and one of the leading authorities in environmental science, is now the Minister of Environmental Protection, and will surely situate Tsinghua in the forefront for promoting environmental journalism.



Photo by Sean Gallagher

I want to raise three points for consideration.

First, do we really have quality environmental reporting in China? Chai Jing and her documentary “Under the Dome” has perhaps become a buzzword for today’s conference, as the most recent exemplar of China’s environmental journalism. However, the official mainstream media’s promotion and the WeChat circulation of the news and images about the “Beijing Blue” in the past few weeks should be also worthy of our attention. In the eyes of most journalism professors, however, both “Under the Dome” and “Beijing Blue” reports are either gray or white propaganda, more “infotainment” than quality environmental journalism. Is “Under the Dome” the Chinese version of America’s “Silent Spring?” Is Chai Jing China’s Rachel Carson? The answer is probably “no.” Journalist educators should be thinking about how to raise up the standard of environmental journalism and cultivate a true Rachel Carson for China’s future.

Second, as journalism professors, “how can we respond to the growing public needs of the environmental reporting?” No matter how we define income levels we know that the middle class in China is growing by tens thousands each year. It is a fact that cannot be debated. Another fact that we cannot ignore is the growing disparity of wealth. These social changes contribute to our environmental problems and lead to disparate demands. Some people seek green mountains and clean water; they are demanding that the government close the small coal mines. But there are also many people trying to make a living through these small-scale mines. So you’ve got the middle class in China joining the global “not-in-my-backyard” movement, viewing environmental issues as part of the fight for Western-style democracy and freedom and freedom of speech. But we’ve also got miners suffering from pneumoconiosis and similar work-related diseases, and in our journalism we have to address their suffering, too. These are the challenges we need to face as Chinese journalism educators. The journalism schools should aim not only for the training of professional journalists but also take responsibility for enhancing

the media literary and communication abilities of all stakeholders in society. This includes government officials, members of the rising middle class, and those in the grassroots. Journalism schools should actively create platforms for the government, companies, media and the public to have conversations about environmental issues. We must “manage the knowledge,” ensuring in these public conversation participants are driven not by self-serving wild speculations but by an informed awareness of ecological civilization and environment knowledge.

Last but not the least, how will Chinese and international journalism educators collaborate to construct a model for dialogue and related curriculum on “ecological civilization and environmental literacy?” This question deserves another conference to discuss in full detail. I will end by quoting from the speech by Harvard President Drew Gilpin Faust at Tsinghua University this past March. President Faust addressed the importance of facing the challenges of climate change by way of collaboration among global universities, particularly leading institutions like Harvard and Tsinghua. The university’s primary task, she said, is how to think differently about how we inhabit the Earth. And where better to meet this challenge than in Beijing and Boston?

That is our task, as journalism schools: to focus on how to build up ecological awareness and environmental literacy—for the government, corporations, media and the public—and then to facilitate the related dialogues and communication on these topics, from the global and national stage down to individual regions and communities and individuals. ♦



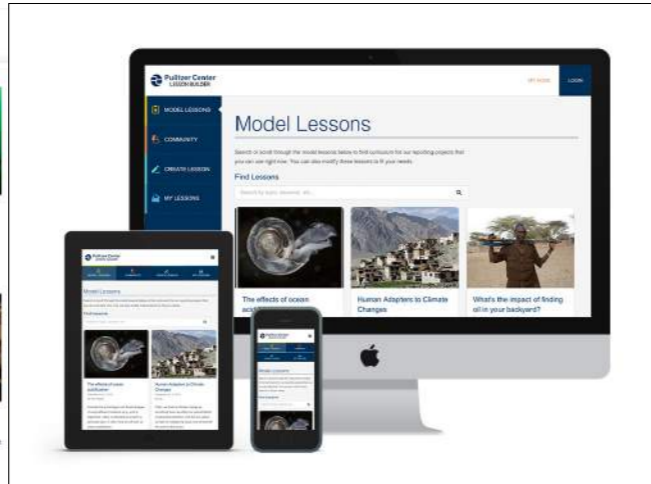
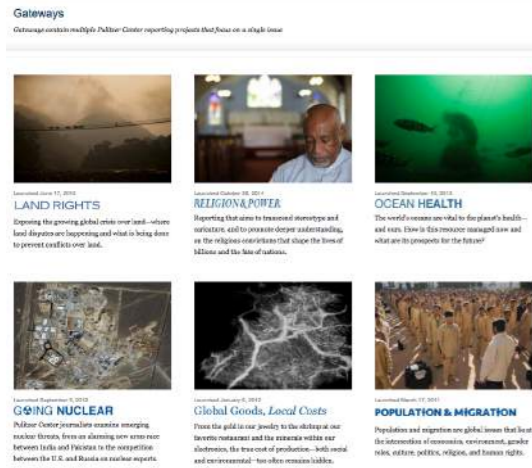
Kem Knapp Sawyer

Contributing Editor
Pulitzer Center

You have heard today that the mission of the Pulitzer Center is to support international journalism on what we consider “issues that matter”—global health, women and children’s issues, regional conflict, and—most importantly for today’s conference— the environment.

Our goal is not only to help journalists do the reporting but to promote their work and extend its reach, to the largest possible audience. We do this through social media and the creation of e-books and through hundreds of presentations each year at schools, university and public events.

We have launched an extensive education program in the U.S., also in Europe and now in China. Larry C. Price, a photographer and Pulitzer Center grantee, recently visited Sun Yat-sen University, Tsinghua University, and Communication University campuses in Nanjing and Beijing, to discuss his work on child labor in gold mines around the world.



We are promoting personal contact with journalists through lectures and workshops—we are also developing curriculum that can be used by teachers and professors throughout the world. Our website features multiple projects on environmental issues—these are grouped by subject area, called “Gateways.” Projects on our Ocean Health Gateway range from global warming in the Arctic to ocean acidification in the Pacific. Our Climate Change Gateway includes stories on the protection of birds in the Amazon, desertification in China, and deforestation in Cambodia. And with a new digital tool called “a lesson builder,” now on our website, teachers can create their own curricula using this rich array of journalism resources.

We encourage students to do their own international reporting projects. This year we have 30 students from our partner universities covering a range of topics, from climate change in India to water safety in Tanzania.

Our grantee Paul Salopek is a National Geographic Fellow who has set out on a rather ambitious project: A 21,000 mile journey by foot

around the world. It’s a walk that will take seven years (or more)—Paul is walking from the Horn of Africa, across the Middle East, into China, over the Bering Strait and down through the Americas, ending his journey in Tierra del Fuego. He is an adventurer and a dreamer, an old-fashioned trekker and a modern-day explorer.

Thanks in part to modern technology such as Skype, Instagram and video, he has captured the hearts and minds of people everywhere—including educators who want to teach the value of “slow journalism” by encouraging students to take the time to see and understand the world’s inhabitants, to treasure their environment, and to seek to preserve it.

Twenty-two thousand scouts are gathering at Philmont camp in the mountains of New Mexico this summer for 100-mile hikes. They will be using Paul Salopek’s lessons as a guide—and then, with notebook and pen in hand, they will record, reflect, share stories, and partake in “slow journalism.”

It is through educational initiatives such as this that we hope to deepen understanding of environmental issues and foster growing awareness and concern for the protection of our land, water and air. Resourceful journalists, interactive media, and creative educators make all this possible.

The impact on students has been and will continue to be transformative. Today’s conference speaks to the importance of engaging them in these issues. It is our children, the next generation, who will inherit this earth—and with it great

responsibility. It is our job, as journalists and as educators, to lighten the load. ♦



Tap the image to play video.
This video requires WiFi to watch.

Lang Jinsong

Professor
School of Journalism
Communication University of China



In 2000, when I was a PHD candidate at Renmin University, I participated in the creation of the science-education program “Green Space” on CCTV, interviewing the early pioneers of environmental protection in China. In 2005 I worked in the CUC School of Journalism and Communication, mentoring students who did the reports on the Songhua River chemical spill. In 2008, after the earthquake, I led a student group to Sichuan province to witness the consequences of that catastrophe first-hand. In 2010, I helped lead coverage of the first national-level conference on ecological civilization, in Guiyang, and in more recent years I mentored CUC graduate students on coverage of air pollution, heavy rain, and other eco-environmental topics.

I could say that in these 10 or more years as a media educator and journalist, I tried to practice and explore how to do environmental reporting and to raise the level of journalism education. In my remarks today I want to specifically address three key terms: scientific spirit, humanities, and journalism literacy.

Scientific spirit is the starting point for educating journalists on environmental reporting. The core of scientific spirit is searching for facts and truth. This is not only based on the news sensitivity

and the timing and place of where certain events happened. It needs to draw on information resources that are intellectual, professional and reliable. So some level of scientific background and scientific spirit is essential. BA or MA students without this grounding would find it hard to observe, judge, and make rationally based conclusions. Interdisciplinary training is key. Students who have a science background should also take journalism and communication courses. Dual-degree programs are especially useful—environment science, chemistry, or biology paired, for example, with a journalism and communication major. Embracing the scientific spirit also helps to train students for in-depth investigations. They learn that they can't believe whatever they hear and they can't trust everyone else's thoughts. Only those who never stop chasing the truth, in fact, will become good environment journalists.

Humanities: Ecological civilization represents a higher stage of development, after society has been through the agricultural civilization and industrial civilization. It is based on understanding that mankind has a common destiny, that we need to take responsibility for the sustainable development of the Earth, the environment, and society. This means that environmental journalists need to have a view of the whole world, an international outlook and global thinking. Learning to pay attention to the common destiny of mankind is the externalizing result of international studies and the humanities. In higher education it is important to focus on a wider breadth of knowledge for future environmental journalists, with a basic understanding of multiple subjects—from the history of human development to civilization,



Students from Communication University of China receive training to use the 4K-broadcasting system at the TV station on campus. Photo by Chen Yifei. Beijing, 2015.

anthropology, and cultural studies. This will also affect their storytelling, leading to a personalized style and a sense of characters that will make it easy for readers to follow and understand. To spread the understanding of ecological civilization, to tell the stories of environmental protection, it is necessary for journalists to have this background in the humanities.

Journalism literacy is the methodology for raising the standards for environmental journalism. I've mentioned my personal experiences, most of them related to journalism literacy. This kind of journalism literacy has to emphasize social responsibility, the importance of balance in reporting, the accuracy of facts, and the

professionalism of investigation. On the other hand, journalism reporting must also be practical. It must address the development problems of the country and the employment challenges. It must seek to protect the environment within China, and across the globe. In this particular period of history it must also stay balanced and clear-minded in the game of politics, economics, and society. It must address the needs of the current time, but also keep the future in mind, while looking not just to national interests but also international obligations. ♦



Photo by Chen Yifei. Communication University of China, 2015.

Liu Ling

Beijing Academy of Education Sciences



It is my honor to speak to you today about how the Beijing Academy of Educational Sciences (BAES), with the support of Beijing municipal, is contributing to the development of EcoCivilization.

Since 2008 we began using a curriculum that Dongcheng district had been testing. This new curriculum has begun to slowly revitalize education here. This is an experiential-based, cross-curricular or practical-applications education that takes full advantage of the tremendous resources here in Beijing for both primary and secondary schools. Now, in 2014, a new municipal policy has been added that will further education reform. Ten percent of all classes are being taught outside of the classroom, in special classrooms or in museums, environmental centers, laboratories, enterprises and institutes.

There are two important objectives: The first is to show that the oneness of human beings and nature, a core concept of any ecological society, is at the foundation of our new system. Second, to teach the oneness of cognition and practice, that students can

put what they learn into daily life, into how to use their potential, and to help build a better and healthy city for all.

Teachers are the essential force of change in our new curriculum. In light of this we have set up an Institute of Research, consisting of master teachers, teachers and resource directors from both city-wide and district-specific resources. This school year we had an activity in November at Olympic Forest Park. We had a U.S./China exchange around the Five Senses and Sustainable Lifestyles. Both lessons were deeply inspiring. Chaoyang District has created a yearlong case study of the exploration of the senses through art, music, science and poetry. One interesting example was the music students' ability to create a musical performance playing with water.

In May, BAES had another professional development activity, this time at the lovely grounds of Chinese Museum of Agriculture. Thirty teachers from the different districts, acting as "students", participated in learning in cross-curricular ways, to observe and discuss collaboratively, and to work together to create presentations that will inspire other students to be both innovative and skilled. The "Soil Exhibit" will be of particular interest to this conference. The teachers acting as students realized that soil is the beginning of everything and did a presentation that was both moving and showed critical thinking. An American, an outside observer, said that soil deserves to be more firmly rooted in human hands and hearts. "These teachers," she said, "showed me the relevance of something as simple and as mind-blowing as soil in my daily life."

Beijing has a wealth of natural and human resources. We want to open the school gates and integrate the resources within and without. We want to help nature and society work together, to integrate knowledge with real living experiences, and, in so doing, to lay a strong foundation for their future. ♦



At the Chinese Museum of Agriculture, teachers work together to design activities for an experiential learning course. Photo provided by Liu Ling. Beijing, 2015.



Q&A

Conference participant:

We have come through a lot of changes and reforms in the educational system here but we still need some help—and I think environmental education could be a big vehicle for promoting change. I truly believe that environmental education is just good education. And that we need to be a little more proactive, not just waiting on our government for policy reforms, but pushing a little more actively.

Jon Sawyer:

How much freedom is there, how much opportunity, to push the envelope on the types of environmental education that could be offered in the school systems and universities here?

Lang Jinsong:

My sense is that it is still based on the teachers' personal interest and willingness to take this on. In the Communication University of China, there is not yet a specific course on environmental reporting. The journalism school still works on training news reporters as generalists. We focus more on the skills-training for interviewing, writing, editing, and commenting, for example, but not on specific content areas. The university is exploring whether

or not the next step should be to offer specific instruction on environmental news reporting, financial news reporting, sport news reporting, and so on. It shouldn't be a problem to train the students on the basic theories and basic skills but to connect with current reporting practices, we may need to bring in some journalists from the field to teach and communicate with the students.

Secondly, we just heard about environmental education in the primary schools and middle schools, how from that young age we should teach kids environmental knowledge. If our educational system could achieve that then at the college level all students would begin with a basic environmental knowledge. But at this point we are still at the starting point, still at the period of exploring what is possible.

Kem Sawyer:

I can't speak to Chinese university students, obviously, but at the Pulitzer Center last year we invited all of our university students who had done international reporting projects for a weekend of workshops and we asked, "What would you like to hear? What is the most important issue on your mind?" The vast majority said they wanted to know how to do science journalism, because they want to be able to explain difficult issues clearly.

Stephanie Tansey

Founder
Earth Charter Communities Network



We are so focused on the environment that we forget that we have to build a society that wants to be ecological, that wants to be part of this ecocivilization or this global environmental society that we need to have in order to survive in the world. There was a study done by UNESCO, saying that everybody knows that the world is in trouble. The kids know that the world is in trouble. There's no reason to tell them anymore that the world is in trouble, because they already know that the world is in trouble.

The question is what are we going to do about it? How do you give them the hope and the ability to make a difference, to really make a difference? And where do they make that difference? That's the question that they really want to know because they really want to know how to make it through the world and how to save the world because they still feel that they can.

So I think we have to look at this a little bit differently from the idea just that education gives people knowledge. And the thing that I so admire about the BAES program is that it's public education that is focused on experiential learning. In my teaching on sustainability here in China and in the rest of the world, I've seen that experience creates engagement in a way that knowledge alone does not.



CHAPTER 8

Conference Participants



Photo by Chen Yifei. Beijing, 2015.

Cao Haili

Cao Haili is a founding reporter at *Caijing* and *Caixin* and was also a Nieman Fellow at Harvard University. She is currently living in Anhui, where she is rebuilding an old traditional home and writing a book about the link between local space and values.

Chen Fang

Chen Fang is chief journalist at ifeng.com and previously worked for Xinhua News Agency. Her reporting has been awarded China News Prizes and National Prize for High Quality News on environmental issues. Some of her reports include “Why China Municipal Housing Prize Cannot Recover from Fever,” “China Education Encounters Mad for Mathematical Olympiad.” As an investigative journalist, she is devoted to public interest and people’s economic welfare.

Chen Xia

Dr. Chen Xia is a [research fellow at the Institute of Philosophy, China Academy of Social Sciences \(CASS\)](#) in Beijing. Her specialty is Chinese philosophy and religion. She is the author of *Studies of Daoist Moral Tracts*, the co-chief editor and contributor of *Principles in the Study of Religion*, and chief editor and contributor for *Study of Daoist Ecological Thoughts*.

Chen Xiaoqing

[Chen Xiaoqing](#) is senior editor at China Central Television (CCTV), documentary director and producer of TV program “Witnessing in Photos.” He has directed various documentary films such as *Forest China* and *A Bite of China*. He once received the “National Award for Best Works,” first prize of “National TV Programs on Society Education,” Starlight Awards for TV programs, and Top Prize for Documentary at Sichuan International Television Festival.

Fred de Sam Lazaro

Fred de Sam Lazaro is director of the Project for [Under-Told Stories](#), a program that combines international journalism and teaching, and a Senior Distinguished Fellow at the Hendrickson Institute for Ethical Leadership at Saint Mary's University of Minnesota. He has reported for *PBS NewsHour* since 1985 and is a regular contributor and substitute anchor for [PBS' Religion and Ethics Newsweekly](#).

Kay de Sam Lazaro

Kay de Sam Lazaro is an elementary teacher in the St Paul (Minnesota) Public Schools. A specialist in gifted education, she has developed curricular materials geared to young learners about environmental issues, such as the decline in Monarch butterfly populations and deformities in frogs.

Ding Bangjie

Ding Bangjie has been named “one of the 100 Best Journalism Workers of China” and the “Young and Middle-age Expert for Outstanding Contributions in Jiangsu Province.” He was the editor-in-chief at *Jiangsu Business News*, deputy chief editor at *Jinling Evening News*, and director at *Nanjing Daily*. He is the author of several books including *Strategies to Handle Journalism Disputes*, *PR-Media Guide in Corporate Crisis*, and *Write the History*.

Jin Ding

[Jin Ding](#) is a special projects coordinator at the [Pulitzer Center](#). She received master degrees in international sports management from State University of New York, College at Cortland, and London Metropolitan University. Before coming to the Pulitzer Center, she interned with the marketing strategy department at NBC Sports in New York City.

E-mail: jding@pulitzercenter.org

Ding Mai

Dr. Ding Mai, professor and doctoral supervisor in communication, is [vice director of the School of Journalism](#), Faculty of Journalism and Communication, Communication University of China. She also

serves as deputy director of Survey Statistics Institute at Communication University of China, and vice chair of Visual Communication Committee under the National Discourse Research Society. Her research focuses on applied statistics, communication psychological measurement, sampling survey and precision journalism.

Brian Drout

Brian Drout is an education professional teaching spoken English at the high school affiliated with Shenzhen University. He graduated with honors from the University of Wisconsin-Madison, having majored in political science and earning a certificate in environmental studies. He is interested in the identities Chinese students hold and how these interface with the notion of an ecological civilization in China.

Sean Gallagher

[Sean Gallagher](#) is a British photographer and filmmaker who has been based in Asia for almost a decade. Gallagher is a 6-time recipient of [Pulitzer Center reporting grants](#). He is represented by National Geographic Creative and is a Fellow of the Royal Geographical Society (with IBG). Gallagher's multimedia projects highlight individual stories from communities affected by environment issues. His work has appeared in *The New York*

Times, National Geographic News, CNN, The Atlantic and BBC News.

Gao Xiaohong

Dr. Gao Xiaohong, professor, is dean of the [Faculty of Journalism and Communication](#), Communication University of China. She chaired the Committee of Radio & Television under the Chinese Journalism Education Society. Her research focuses on theories and practices of radio & television journalism. She directed the academic project “Study on Teaching and Curriculum for Radio & Television Journalism in the 21st Century” and was awarded the title of “National Renowned Teacher” in 2010.

Richard Gilmore

Dr. Richard Gilmore is president and chief executive officer at [GIC Group](#). He is the founder and president of the [Global Food Safety Forum](#) and a former U.S. government official who has taught at Johns Hopkins University’s School of Advanced International Studies (SAIS).

Han Yunrong

[Dr. Han Yunrong](#) is professor and masters’ supervisor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. She got her Ph.D in 2003

from Renmin University of China. Her research interests are public opinion, communication and media economy.

Hou Shen

[Dr. Hou Shen](#) is the deputy director of the Ecological History Research Center at Renmin University of China. She was a visiting scholar at the Rachel Carson Center for Environment and Society, Ludwig Maximilian University of Munich. Hou’s recent research project is “Old Land, New Nature: The Journey of the Ideas and Practices of Nature Conservation from the United States to Modern China.”

Richard Herzfelder

Richard Herzfelder is a food and agriculture consultant in Beijing. Formerly he was the Chinese Business Director for the Associated Press (AP) in Beijing and the vice president of China Food and Agriculture Services (CFAS) in Shanghai. Herzfelder spent 18 years as a journalist, starting out on the AP baseball desk, and later working in Mexico, Central America, Pakistan, South Korea, and China.

Hu Zhengrong

[Dr. Hu Zhengrong](#), professor and doctoral supervisor, is director of National Center for Radio and Television Studies (NCRTS) and

vice-president of Communication University of China. His research focuses on communication theory, broadcasting, media systems, political economy of communications and emerging media. He has lectured in the U.K, U.S., Canada and Korea as a visiting scholar.

Hui Zhijun

HUI Zhijun is a well-known reporter on environmental issues at China Central Television (CCTV). He specializes in environmental reporting and has written more than 1,500 news reports on environmental issues. He received the Earth Award, China Environment Prize, China Ozone Layer Protection Contribution Award, [Prize of Green Chinese Person of the Year in 2009](#), and China's Environmental Reporter Award. He was selected as "Chinese Icon" at the 60th anniversary of foundation of P.R.C.

Jin Jun

Dr. Jin Jun is [associate professor and deputy director](#) of the Department of Sociology at Tsinghua University. His research focuses on environmental sociology, transformation sociology, political sociology and social movement. In 2007, Jin received his PhD from the University of Minnesota.

Ian Johnson

[Ian Johnson](#) is a Pulitzer-Prize winning correspondent, writing for *The New York Times*, *The New York Review of Books*, *The New Yorker* and other publications. He is also an advising editor of *the Journal of Asian Studies* and a senior policy fellow at Merics, a Berlin foundation specializing in China. He has been a Nieman fellow at Harvard. Johnson has published *Wild Glass*, a book on civil society and grassroots protest in China. He is affiliated with Loyola University of Chicago.

Travis Klingberg

[Travis Klingberg](#) wrote his PhD dissertation at the University of Colorado on the link between tourism and values, with a strong ecological component. His thesis explores how independent tourism is changing ordinary Chinese views of the environment. He is currently in Beijing revising his PhD thesis for publication.

Lang Jinsong

Dr. Lang Jinsong is professor, doctoral supervisor, and vice director at Video Creativity and Media Management Research and Development Centre at Communication University of China. Her research interests are journalism and communication theory, media policy, governmental communication and visual-audio communication. She once worked as deputy director of Guizhou TV Station and director of Guizhou Satellite TV Channel.

Christina Larson

[Christina Larson](#) is an award-winning journalist in Beijing who writes about the environment and the human side of China's economic boom. She is a contributing correspondent for *Science* magazine and for Bloomberg *Businessweek*. Her reporting from Asia on the environment, climate change, science, technology, and culture has also appeared in *The New York Times*, *The Atlantic Monthly*, *The New Republic*, *TIME* and other leading outlets. Larson was previously a staff editor at *Foreign Policy* and managing editor at *Washington Monthly*.

Jennifer Lemche

[Jennifer Lemche](#) received her MA from the School of Religion at Queen's University with specialization in Daoism and Ecology. She is now pursuing a PhD in the Cultural Studies program at Queen's under the supervision of Dr. James Miller. Her research engages the role Daoism is playing in promoting environmental activism in China and how environmental concerns are reshaping modern Daoism. Her dissertation focuses on the environmental practices of several Daoist temples and their surrounding communities and seeks to investigate how Daoism is constructing an environmental ethic.

Li Jiangan

Dr. Li Jiangan is associate professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. His research focuses on information design, content production and emerging media communication, especially multi-media journalism and photographic designs. He has published several academic books such as *Technology Innovation and Broadcast Media Transformation*, *Broadcast Programming*, and created the website "ChinaTopChem" which offers platforms for exploring new media products.

Liu Chang

Dr. Liu Chang, professor and doctoral supervisor in communication, is deputy dean of Faculty of Journalism and Communication, director of the [School of Journalism](#) and director of the European Media Research Center at Communication University of China. He once worked for French radio stations, TV stations and newspapers during his residence in France for 22 years. His research focuses on international journalism, journalists and mass communication and international relations.

David Liu

David Liu is professor at [Long Island University](#) and former Associated Press (AP) journalist. He once worked for AP for more than 37 years. He is also a columnist for the *Wen Hui Bao* in Shanghai, China. During his long residence in the United States he held faculty and director positions at several universities and institutes. He obtained the “National Award for Media Research and Teaching” offered by Poynter Institute in United States.

Liu Ling

Liu Ling is an associate researcher at the [Beijing Academy of Educational Sciences](#). She is a Ph.D candidate in the Graduate School of Education at Peking University, with a focus on educational leadership and management. Her research field is problem-solving and learning, design, including learning, and nature education at the primary and middle-school levels.

Liu Nianhui

Dr. Liu Nianhui is associate professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. He received his Ph.D from Chinese Academy of Social Sciences and completed his post-doctoral research at Tsinghua University. His research areas are journalism, media operation and management. His books include *The Core Competitiveness of Newspaper Industry: Theory and Case* and

[*Research on Core Competitiveness of China's Newspaper Cooperation: Innovative Strategy and Advancing Path.*](#)

Liu Yunhua

Liu Yunhua is founder and director of the [Shangri-la Institute for Sustainable Communities](#). She previously served as director of the World Wildlife Fund (WWF) China Education Program for over 10 years. As part of the national Education for Sustainable Development program she initiated the community education program on the Tibetan Plateau in 1994. Yunhua studied environmental science at Bard College and earned a Masters from St. John's University in New York.

Lu Feng

[Dr. Lu Feng](#) is professor and director of Department of Philosophy at Tsinghua University. His research fields cover applied ethics, environmental philosophy, and the philosophy of science and technology. He has been a visiting scholar at Harvard University, the University of St. Andrews, and Yonsei University. He has published four books, including *The Home of Human Beings: Philosophical Reflection on Contradictions of Modern Culture*.

Lu Jiayi

Dr. Lu Jiayi is assistant professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. Her research interests are public diplomacy, media diplomacy and international communication, and she teaches Media and Public Diplomacy. Her papers have been published by *Public Relations Review*, *Chinese Journal of Communication* and *Chinese Journal of Journalism & Communication*. She has presented several papers at the annual conferences of International Communication Association and National Communication Association.

Luo Lin

Dr. Luo Lin is associate professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. His research areas are photography and images creativity. He wrote and compiled books including *Photography Basics and Creativity of Graphics*. He has published several papers in academic journals such as *Contemporary Cinema*, *Contemporary Communications*, *Film Art* and *Front Studies of Journalism and Communication*.

Lü Zhi

Dr. Lü Zhi is a Professor of Conservation Biology at Peking University and the Executive Director of Peking University Center

for Nature and Society, which promotes better environmental policies and builds environmental leadership in China. She founded Shan Shui Conservation Center, a Chinese NGO devoted to finding effective solutions for Chinese society to live in balance with nature.

Gary Marcuse

Documentary filmmaker Gary Marcuse is based in Vancouver, Canada. He was a programming executive for CBC Television and founded Face-to-Face Media in 1988. An earlier film, *Nuclear Dynamite* (2000) won the Beijing Gold Dragon for Best Environmental Film at the Beijing International Scientific Film Festival. His recent documentary, *Waking the Green Tiger* (2012), winner of the Green China Film Award, traces the rise of an environmental movement in China.

James McGregor

Jim McGregor is an American author, journalist and businessman who has lived in China for more than 25 years. McGregor is chairman of the communications consultancy APCO Worldwide, Greater China, and the author of *No Ancient Wisdom, No Followers: The Challenges of Chinese Authoritarian Capitalism* and *One Billion Customers: Lessons from the Front Lines of Doing Business in China*. He is the former CEO of Dow Jones & Company

in China and was *Wall Street Journal* bureau chief in China and Taiwan.

James Miller

[Dr. James Miller](#) is a Professor of Chinese Studies in the School of Religion at Queen's University, Canada and Director of the Interdisciplinary Graduate Program in Cultural Studies. He has published five books on Chinese religions and has become established as a key scholar of religion and ecology in China. His focus is on the development of a Chinese ethic of ecological sustainability.

Qiu Yunxi

[Dr. Qiu Yunxi](#) is assistant professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. Her research interests are the Internet and social change and news sociology. Her papers have been published by several CSSCI journals. Her paper *Micro-blogging and social change in China* was awarded the Best Paper by the Association of Chinese Communication Studies at the 2012 Annual Conference of National Communication Association.

Jon Sawyer

[Jon Sawyer](#) is founding director of the [Pulitzer Center](#), a journalism organization that supports independent reporting on global affairs and promotes a broad range of educational initiatives. His work has been featured in *the Los Angeles Times*, *The Atlantic*, *The Washington Post*, *al Jazeera English*, *Nieman Reports*, *To the Point*, *PBS NewsHour*, and *the St. Louis Post-Dispatch*. He was executive producer of [LiveHopeLove.com](#), the Center's Emmy-award-winning website on HIV in Jamaica. Sawyer was selected three years in a row for the National Press Club's award for best foreign reporting.

E-mail: jsawyer@pulitzercenter.org

Kem Knapp Sawyer

[Kem Knapp Sawyer](#) is a contributing editor at the Pulitzer Center. Her reporting has focused on children at risk in the Democratic Republic of Congo, India, Bangladesh, and Haiti. She is an adviser to university students on international reporting projects and an editor of the [Pulitzer Center e-books](#). She is also the author of several books for young readers, including biographies of Anne Frank, Eleanor Roosevelt and Harriet Tubman. Her most recent book is *Grace Akallo and the Pursuit of Justice for Child Soldiers*.

E-mail: ksawyer@pulitzercenter.org

Michael Schuman

Michael Schuman has written about Asia and global economic issues as a correspondent for [TIME](#) in Beijing. In his 16 years as a journalist in Asia, he has reported from a dozen countries, including China, India, Japan and Indonesia. Schuman is the author of [The Miracle: The Epic Story of Asia's Quest for Wealth](#). Before joining TIME in 2002, he was a correspondent for the *Wall Street Journal* and a staff writer for *Forbes*. He recently published [Confucius and the World He Created](#).

Shi Anbin

[Dr. Shi Anbin](#) is vice dean of the School of Journalism and Communication, Tsinghua University. His research focuses on media cultural study, global communication, crisis communication, journalism and politics. He received his Ph.D in comparative culture and communication from Pennsylvania State University in 2001, and once taught and did research at University of Minnesota. He serves as member of many expert committees at the ministerial level.

Shi Lihong

Shi Lihong is a co-founder of [Wild China Films](#). Trained as a journalist, she wrote for the English Language China Daily before studying filmmaking at the University of California, Berkeley. Her first documentary, made with her husband Xi Zhinong, focused on

the endangered snub-nosed monkeys in the mountains of Yunnan province. The film launched the first of a series of national campaigns to protect endangered wildlife. Shi was the assistant director of [Waking the Green Tiger](#) and now lives in Dali, Yunnan Province, China.

Master Shuguang

Master Shuguang is the chief monk of [Qixia Temple](#) in Nanjing, one of the four famous Buddhism Temples in China. He is the vice president of the Buddhist Association of Nanjing.

Sim Chi Yin

[Sim Chi Yin](#) is a photographer based in Beijing and a member of [VII Photo Agency](#). Her work features social issues in the region and has been published in *TIME*, *The New York Times*, *The New Yorker*, *National Geographic*, *Le Monde*, *Newsweek*, *Vogue USA*, *GQ France*, and *Financial Times Weekend Magazine*. In 2010 she was awarded a Magnum Foundation “Photography and Human Rights” fellowship at New York University. Chi Yin was born and raised in Singapore, and worked as a journalist and foreign correspondent for *The Straits Times*, Singapore’s national English language daily.

Deborah Sommer

[Dr. Deborah Sommer](#) is Associate Professor, Department of Religious Studies, at Gettysburg College. Her main field of research is pre-modern Chinese intellectual history, and her major areas of interest are the ritual, visual, and somatic aspects of the Confucian tradition. Currently she is completing a book project titled “The Afterlife of Confucius: Depictions of the Sage Beyond the Analects,” which explores the religious and philosophical significance of constructed imaginings of the body of Confucius.

Robert Tansey

Robert Tansey became external affairs & policy senior advisor at [The Nature Conservancy](#), Northeast Asia and Greater China region after a long career in the U.S. Foreign service. He works in areas related to urban planning, freshwater conservation, and invasive species.

Stephanie Tansey

Stephanie Tansey is founder of [Earth Charter Communities Network](#) (ECCN), an organization that teaches individuals and small groups communication skills to help build a sustainable society. ECCN has held events to foster dialogue skills in Olympic Forest Park in Beijing, in rural and urban schools, and at universities. Tansey has published the book *Recovery of the Heart, Dialogues with People Working towards a Sustainable Beijing*.

Mary Evelyn Tucker

[Dr. Mary Evelyn Tucker](#) is a Research Scholar at Yale University. She directs the [Forum on Religion and Ecology](#) at Yale with her husband, John Grim. Their concern for the growing environmental crisis, especially in Asia, led them to organize a series of 10 conferences on World Religions and Ecology at the Center for the Study of World Religions at Harvard University. Tucker is the author of [Worldly Wonder: Religions Enter Their Ecological Phase](#). In 2011, Tucker and Grim released a multimedia project called [Journey of the Universe](#), a book from Yale University Press and an Emmy-award winning film shown on PBS.

Jennifer Turner

[Dr. Jennifer Turner](#) has been the director of the Wilson Center's China Environment Forum (CEF) for 15 years. *The New York Times* listed the China Environment Forum as one of the top resources on China and the environment. In 2010, Turner established and now manages the Wilson Center's Global Choke Point, an initiative in partnership with the science and media organization Circle of Blue. CEF and Circle of Blue have researched and produced extensive multimedia reports on water, energy and food issues in China, India, and the United States. Dr. Turner also leads the CEF Cooperative Competitors initiative that explores opportunities for U.S.-China energy and climate collaboration.

Wang Lihua

Dr. Wang Lihua is professor at the Key Research Institute of Social History of China and deputy dean of the School of History at [Nankai University](#). He has been a research fellow at China's Agricultural Heritage Research Center, Chinese Academy of Agricultural Sciences, and a visiting scholar at Sungkyunkwan University, Korea, and at Heidelberg University, Germany. His research focuses on the history of China's ecological environment, agriculture history, family history and social life history.

Donald Worster

[Professor Donald Worster](#) is the honorary director of the Ecological History Research Center at the School of History, Renmin University. He has published several books, including *A Passion for Nature: The Life of John Muir*, *A River Running West*, and *The Wealth of Nature*. He is the former president of the American Society for Environmental History and a member of the American Academy of Arts and Sciences.

Dan Smyer Yu

[Dr. Dan Smyer Yu](#) is an anthropologist specializing in the study of religious revitalizations, charismatic communities, commercialization of religious spirituality, and the relationship

between eco-religious practices and place-making in contemporary China. Currently he is writing his second book on the intersections of religion, the nation, and nationalism in the context of modern Sino-Tibetan interactions. It addresses how land, place-making, nostalgia, modernity, imagination, and representation are entwined in both rural and urban settings of contemporary China.

Yu Hong

[Dr. Yu Hong](#) is professor, director of Television Research Center, and vice dean of the School of Journalism and Communication, Peking University. She is also vice chair of China Television Broadcaster Association. Her research interests are visual-audio communication arts and media effects.

Yu Xinzhong

Dr. Yu Xinzhong is a professor at History College of Nankai University, deputy director of Chinese Social History Research Center, and the deputy general secretary of the Institution of Chinese Social History. His research focuses on the history of medical and social culture and the social history of the Ming and Qing Dynasty.

Yu Zhongguang

Dr. Yu Zhongguang is assistant professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. He is also a senior producer and director. He once worked for Economic News Center and Science and Education News Center at China Central Television (CCTV). His research interests are news interviews and writing, television news and documentary production.

Lily Zeng

Lily Zeng (BSc, Environmental Biology, Queen's University, Canada; MSc, Environmental Science, Yale University, U.S.) is a doctoral candidate at Yale's School of Forestry and Environmental Studies. Her research on biodiversity conservation in sacred forests traditionally protected by indigenous communities has received awards from the National Science Foundation of America, the Natural Sciences and Engineering Research Council of Canada, the U.S. Fulbright Program, and National Geographic.

Zeng Qingxiang

Dr. Zeng Qingxiang is professor and masters' supervisor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. She has published three books and more than 40 papers. She received the Third Prize for "Chinese Universities Humanities and Social Sciences Outstanding

Achievement" awarded by Ministry of Education. Her research areas are communication theory, public opinion, journalism discourse and social mobilization.

Zhan Qian

Dr. Zhan Qian is associate professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. She received her M.A. in Engineering from Huazhong University of Science and Technology and Ph.D in Communication from Communication University of China. She teaches courses including Introduction to New Media, Introduction to Creative Media and Introduction to Graduation Thesis Writing.

Zhang Xiaohui

Dr. Zhang Xiaohui is associate professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. She is also the general secretary of the Communication Psychology Committee under China Social Psychological Society. Her research areas are media and social change, communication psychology and media sociology. She published several papers in *Modern Communication* and *Chinese Journal of Journalism and Communication*.

Zhang Zhihua

Dr. Zhang Zhihua is associate professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. He was a visiting scholar to the City University of New York, and he is one of the first Chinese scholars who undertook communication research in Latin America. His research interest is the political economy of communication. He teaches several core courses including Introduction to Communication Theory and English for Communication Majors.

Zhao Ruhan

Dr. Zhao Ruhan got two Ph.Ds from Vrije Universiteit Brussel and Communication University of China. She is assistant professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. Her research interests are communication theory and emerging media communication. Now she teaches several courses, including Introduction to Emerging Media Communication and Introduction to Internet News Communication.

Zou Xin

Dr. Zou Xin is assistant professor at the School of Journalism, Faculty of Journalism and Communication, Communication University of China. Her research interests are television news interview, photograph and television program production. She

once worked for China Central Television (CCTV), Netherlands Broadcasting Service (NOS) Beijing Bureau and Television South (TVS). Her papers were published by *Modern Communication*, *China Radio & TV Academic Journal* and *Youth Journalist*. She also took part in several research projects.



Reception after the conference at Yale Center Beijing. Photo by Kem Knapp Sawyer. China, 2015.



CHAPTER 9

Further Reading



Photo by Sean Gallagher. China, 2010.

- [Communication University of China](#)
- [Face to Face Media](#)
- [The Forum on Religion and Ecology at Yale](#)
- [The Henry Luce Foundation](#)
- [Shangri-la Institute for Sustainable Communities](#)
- [Under-told Stories Project](#)
- [Wild China Film](#)
- [Woodrow Wilson International Center for Scholars, China Environment Forum](#)
- [Yale Environment 360](#)



Beijing's 'Rat Tribe'

Sim Chi Yin

Living beneath Beijing's skyscrapers and residential blocks are an estimated 1 million migrant workers. Dubbed the "Rat Tribe", these low-wage workers make a home in windowless basement cubicles.



Can Chinese Culture Save China's Environment?

Gary Marcuse, Shi Lihong

The Chinese government and people, confronted with colossal environmental challenges, are turning to cultural traditions that under Communism had long been suppressed.



China's Disappearing Wetlands

Sean Gallagher

China has more wetlands than any country in Asia, and 10 percent of the global total. They are crucial to life and environment -- and rapidly disappearing.

Pulitzer Center Links to Related Topics:



China: Dying to Breathe

Sim Chi Yin

China's deadly mining accidents hit the international news headlines frequently. But the country's top occupational disease, pneumoconiosis, kills three times as many miners each year.



China's Fragile Forests

Sean Gallagher

Natural forests cover about 10 percent of China's surface area, but large swathes of China's forests have been destroyed as a result of logging, mining, wood and plant collection.



Desertification in China

Sean Gallagher

In China, nearly 20% of land area is desert. As a result of a combination of poor farming practices, drought and increased demand for groundwater, desertification has become arguably China's most important environmental challenge.



Meltdown: Climate Change and Environmental Degradation on the Tibetan Plateau

Sean Gallagher

Rising temperatures on the Tibetan Plateau in western China are causing melting glaciers and environmental degradation, threatening the vulnerable communities that inhabit the roof of the world.



Pulitzer Center E-books draw from our reporting projects, with a rich array of writing, photography and video on topics that range from environment and global health to statelessness.



The Pulitzer Center's Lesson Builder is a digital tool that makes creating and sharing lesson plans around Pulitzer Center reporting easy. Design your own or adapt from Model Lessons posted from our community of educators.

CREDITS

editor and producer
Jon Sawyer

translation, design, graphics, research and photo editing
Jin Ding

photography
Chen Yifei, Sean Gallagher, Li Lei, Liu Ling,
Sim Chi Yin, Jon Sawyer, Kem Knapp Sawyer

Transcription
Elizabeth Adetiba, Akela Lacy, Jessica Obert, Anna Ziv

The Pulitzer Center's work on religion and public policy is made possible through the support of the Henry Luce Foundation and other generous donors.



The Pulitzer Center, a non-profit organization, promotes in-depth engagement with global affairs through its sponsorship of quality international journalism across all media platforms and an innovative program of outreach and education.

Photographs and text © named journalists, 2015. All rights reserved. No part of this book may be reproduced in any form whatsoever without written permission from the publisher.

ISBN 978-0-9856745-9-5



