

Environmental Issues with Deirdre Chetham (Part 2)

John Major: Now, I remember, actually, since I was just beginning to study China around that time, that in the late 1950s and early 1960s, if you read the literature of development coming out of China, there was very curious rhetoric directed at nature in a very militant language – “Do battle against the Huai River” or “Struggle to overcome the steppe lands” or “Have a new campaign to plant crops in such-and-such an amount” – a very military language directed at nature. What was that about?

Deirdre Chetham: It was part of the whole attempt by the communist government to rally people in a kind of militaristic framework. One of their main slogans was that man must shape and control the environment. It was a way of shaping not only the attitude towards the environment, but towards life in general—to bring people out in campaigns. There were constant campaigns (once again another military word), whether they were political against rightists or against sparrows or against whatever. It was a way of organizing people and a way again of moving. Though it is not that far away from the past, it was part of whole political tide that went on from the mid-1950s through the Cultural Revolution 10 years later. It wasn't until the late 1970s that this way of approaching control over the environment and control over peoples' lives really changed.

Major: But it sounds like treating nature as a military enemy is a recipe for environmental disaster.

Chetham: Well, it turned out to be, in many cases. But at that point, it was more seen as a way of harnessing the strengths of people to conquer land, to use it, and exploit it. Unfortunately, the exploitation often had unexpected consequences. This was true from the totally crazy agricultural policies of the Great Leap Forward to other similar things, such as the campaign against sparrows.

Major: I wanted to ask you about that. Could you describe that more?

Chetham: There were four pests in China in the 1950s and they've actually been revived regularly in various configurations ever since. They were sparrows, mosquitoes, rats, and...

Major: Snails?

Chetham: We'll say snails. I'll remember the fourth, but it wasn't snails. It was bedbugs later, but it wasn't then. All of these had to be exterminated, but sparrows were the most problematic because the idea was that the sparrows ate the grain: you kill the sparrows so the grain doesn't get eaten. People overlooked the fact that the sparrows eat the insects, but the insects eat the grain with the sparrows gone. For a period of months and months, entire villages and cities were required to go out and chase the sparrows and keep them from landing until they died. And families, towns, streets, and schools would go and beat on tin cans and chase sparrows in the air until they died of exhaustion. Some of the descriptions you get from people who did this sound so totally crazy at this point. But they succeeded throughout the entire country of China and pretty much eliminated sparrows for decades. And the result was the sparrows went, the insects came back, and they had much greater problems with insects and problems with bugs eating grain and all types of vegetables and other food materials

Major: Was there ever any indication that this unintended consequence was recognized by the authorities?

Chetham: I think nowadays, but not in the 1950s. Supposedly after a certain point they saw what was happening or were told and said, “Suanle,” which means, “Oh, forget about it,” and the sparrow campaign stopped. Whether that’s true or not, I don’t know but it was certainly lasted for a duration and then stopped and that was the end of it.

Major: All this sounds as ‘un-Daoist’ as it is possible to get. Was it really a mind shift from traditional beliefs to Marxism, or some kind of Marxist version of Daoism?

Chetham: Well, it was the beginning of the communist era, which certainly had very strong elements of Marxism. That was a key part of the development of Chinese communism, and even though Chinese communism now, or what is practiced or what the government lives by now, is a less rigorous kind then [that of] 20, 30, 40 years ago, it certainly has very little to do with Daoism. Today, a lot of [these kinds of] projects...are still going on, with the massive dam-building and other huge infrastructure projects, gas pipeline projects, and other things. The attitude of the government really still is that it’s necessary to exploit nature whatever the cost, to do what is necessary from the government’s point of view, whether it’s transferring water or transferring gas or building reservoirs to create power, without much regard for the consequences for nature, [along] with some attempts, which are pretty feeble, to provide some protection.

Major: Now I want to pursue that, but I first want to ask a little bit about industrialization, because we have been talking mainly about agriculture and forestry. There was a tremendous push for heavy industry in China in the 1950s, and for power generation, as well, which was mostly coal-fired. There must have been significant environmental consequences of that as well.

Chetham: Well, there were, depending on where and when. But, as you mentioned, in the 1950s there was a huge attempt to industrialize, which had different consequences depending on the area. One thing that happened in the early 1960s was that there was a belief, after the split with the Soviet Union, that there would be a war. They [The Chinese government] had a program, called the “third front,” where they intended to move not only ammunition and the kind of industries used for war, but to recreate entire industries that you could use to keep an entire nation going off to the hinterlands, which meant moving heavy industry, all types of steel factories and [other] huge, huge factories, off to places like Guizhou [Province] in the south and Chongqing and other places, but really in the countryside, not even in so much in the cities.¹ This in itself— taking these huge factories, heavy polluting ones, in most cases, and putting them in areas that had been fairly untouched by industry—had enormous consequences that go on right down to the present. They did a great deal of damage in terms of polluting rivers and degrading mountainsides at a huge number of these sites. There also was a period of massive dam-building in the 1950s and 1960s. A lot of these dams were built, again in the 1950s, but even more in the 1960s during the Cultural Revolution, by people who really knew nothing about dam-building or any other kind of engineering. Even for the Gezhou Dam (Gezhou Ba), which is the predecessor to the Three Gorges Dam, there was no head engineer. Many of the dams were built under a policy called “Three Things At Once,” which meant that you designed, built, and planned all at the same time, which most engineers, at least these days, do not think is a very good way to go about building a dam or anything else.

Major: So what we would call project analysis didn’t take place at all?

Chetham: Not exactly, no. Or you analyzed while you were out there with your shovel.

Major: Now, up until the end of the 1970s, China was, I think it is fair to say, economically backward. The economy was relatively small and was growing at a fairly slow rate. That had the paradoxical effect of limiting some of the

¹ This program was intended to protect key industries by moving them deep into the countryside, sometimes even to sites that were kept secret, and away from places that were likely to be targeted in event of a war, such as the coastal areas and major cities.

damage. There is less you can do if your economy is not booming. And now China's economy is booming and China seems to be running up against all kinds of resource limitations and has a lot of mega-projects either in the works or on the drawing-board, as you alluded to before. What is happening now? What are the impacts of this new and more hyper-heated economy?

Chetham: Well, there are a lot of consequences and complications. Many of them have to do with these really huge infrastructure projects, which are in part a result of problems in the environment already. For instance, for reasons that are not entirely understood, the northern part of China has almost run out of water; partly it is simply overpopulation and drilling of deep wells, but from what I understand there are other reasons that are not entirely clear. So there is a massive project underway to divert water from the Yangtze River in the south, using three channels, and send it to the north. This is a project that will take over twenty years and cost billions of dollars and if they ever finish it, certainly on the farthest west canal that they are planning to build, it will go through some of the highest mountains in the world in an area that really has been until now untouched. It is not even clear whether technically that will be possible. But they are also building major high dams, which are generally not considered a good idea by most hydrologists internationally now or by the World Bank or the Asian Development Bank, or other places. Many of the rivers border Thailand, Cambodia, and Vietnam, so there is also a lot of concern internationally about the impact of what China is doing. The Three Rivers Project, as it is called, a massive series of dams underway on the Mekong River, the Salween, and one of the upper tributaries of the Yangtze River, the Jinhua.

Major: So those impact Laos, Vietnam, Cambodia, and Myanmar...

Chetham: And all that area, since they either flow through or are adjacent to those areas. So many of the things that China now does do not just affect China itself, but have an international impact. And simply the whole growth in industry – China's factories have never been known for their adherence to standards of toxic waste or other issues related to industrial safety. But recently there have been a number of problems in particular lately with terrible poisoning of rivers. There was a big problem several months ago in Harbin, on the Songhua River, where benzene was leaked. There was another issue with cadmium on the Yellow River, I believe, and a third problem quite recently, with salt in the Pearl River. There have been major problems where people have....

Major: ...various heavy metal poisonings...mercury, cadmium, chromium....

Chetham: ...whose effects, particularly in children, can cause quite terrible consequences later and in the short term means that people are left for days or weeks without drinking water or any other kind of water in some cases. And China's environmental laws are actually, on the books, quite good, but the problem is enforcement and how that works. That is really the weak part: not that the laws don't exist, but that the compliance or the enforcement is quite weak.

Major: Let's take, for example, the Three Gorges project, which you have studied quite a lot. In the planning of that, was there any explicit requirement that they take environmental impacts into account?

Chetham: When the dam was approved, so to speak, by the National People's Congress, there were objections (it is very rare for people to even raise objections, at least it was in those days in the National People's Congress). Certainly, environmental concerns were raised very early on, particular by Dai Qing, a journalist who had written extensively and very technically (published a collection of essays by hydrologists), which unfortunately for her came out right before Tiananmen [the Tiananmen Incident of June 4, 1989], and she ended up in prison for ten months as a result. These issues were studied very carefully by scientists both within China and outside. Certainly, within the government bureaucracy, an attempt was made to study and acknowledge environmental issues. But how much attention was really

paid to that...on paper, yes, certainly environmental concerns were taken into account to one degree or another. It depends what the degree was and which issues were considered most important.

For instance, in the Yangtze River itself, the riverbed is limestone except in a very few places where it is granite. Since ancient times it has been prone to landslides – there are records going back 2,000 years of avalanches and landslides, some as many as 1800 years ago that completely blocked traffic on the Yangtze. One of the great fears was that the sudden increase in water volume would cause a sudden increase in the number of landslides; that is something Chinese engineers took very seriously because there is no point in creating a dam and having the river blocked and no one being able to go anywhere. It doesn't work with the economic plan, either. So issues that have a direct economic impact certainly are taken very seriously. And to the extent that they can be, issues that, in the eyes of the government, affect people's livelihood also are [taken seriously]. For instance, rare species – the Yangtze has a Yangtze alligator, it has a Yangtze River dolphin, it has a bunch of Yangtze River salamanders that are indigenous to the area – those were not high on the list of the things that the government was paying attention to.

Major: So the kind of litigation that surrounds endangered species in the United States, for instance, the Endangered Species Act, has no effect in China?

Chetham: It has little effect; however, there are a number of NGOs started up in the past decade that have been quite effective in bringing these to the attention of the government – not so much in the Yangtze area, but the Tibetan antelope² and the snub-nosed monkey in central China were the objects of a great deal of interest by environmentalists and one of the major NGOs working on environmental affairs. So it [a campaign] was launched focusing on those two species.

Major: Well, most conspicuously, the Chinese spend millions and millions of dollars on panda conservation. Is that just an aberration, since the panda has become such a symbol of China that it has been singled out for special treatment or is there reason to believe that that is the harbinger of a newer and better environmental consciousness?

Chetham: I think it is a combination. It is certainly a bigger tourist draw than a salamander somewhere in Hubei [Province]. Pandas are cute and thought not plentiful, there are certainly enough around that you can arrange tours for people to go sit in the grass and hope they will see a panda. They are a fairly good source of income in that pandas are exported to zoos around the world – some are given, some are paid for – both as symbol of China's goodwill and for financial gain. But I think there is also a genuine interest in preserving them; I don't think it is all materialistic. I think the actual people involved in panda preservation are very dedicated in most cases—not all, but in many. It is also a handy symbol of China, more so than any of the other endangered species. Many of the problems China has with endangered species is that people want them for Chinese medicine – they want to cut off their ears and other parts of them to sell them to make medicine. The panda in a sense is a good symbol within China because no one is out to cut off its feet to eat them; it is a different kind of symbol that works better within China and is less problematic in many ways.

Major: Yes, there are a lot of so-called medicinal uses of rhino horns, deer antlers, bear gall, tiger bones, and all sorts of other things that have serious environmental impacts.

² The true story of how devastating levels of poaching of the Tibetan antelope (prized for the use of its fur in so-called ring shawls in South Asia) were reversed is a gripping one, and was the subject of a memorable film, *Kekexili*, released in the U.S. as *Mountain Patrol*. Read more about it on the companion National Geographic site <http://nationalgeographic.com/mountainpatrol/> This is a deeply tragic movie but could be very compelling to high school students; it is especially interesting for the portrait it gives of Tibetan society and life in the arduous Qinghai-Tibetan Plateau.

Chetham: In fact, one of my friends in China was involved in the reintroduction of the Pere David deer³, which is a deer native to China (the short deer with long antlers) that survived ultimately only in England after the 19th century. One of the problems they had was that they set up quite a good deer preserve on the outskirts of Beijing, but the caretakers were cutting off the antlers to sell for medicine. So you have the problem between the genuine interest in preservation on some people's part, and [on the part of] others, with a much more practical bent, of using these animals or plant species for immediate human use. This goes back to the basic contradiction of man and nature, in a way.

³ For more information on the situation of this rare mammal, including visuals, see the World Wildlife Fund article at http://www.panda.org/news_facts/newsroom/successes/index.cfm?uNewsID=24017