

# Drought, Floods and Thirst: China's Control of Water

Anna Spitz

Water is the first of the ancient Chinese elements. The control of water has always been a major concern of China's people – central to civilization, to art, to farming, to transportation and industry, to health and life. The inhabitants of China have been very successful in controlling water for many uses but even today struggle to make the water resources work for a large population. China faces problems similar to many areas of the world – even similar to our droughts and floods here in the southwest. Water has deep historical links to the rise of China's civilization and now plays a critical role in China's modernization.

The veneration of nature is an ancient part of Chinese civilization. But this attitude has not prevented large-scale environmental destruction over the centuries. In *The Retreat of the Elephants*, Mark Elvin details the deforestation and extinction of fauna and flora for the sake of people's immediate needs for land to farm and live on. This ongoing quest to make more use of the land for human needs has led to the degradation of ecosystems – water shortages, soil erosion, salinization and waterlogging of farmland, overgrazing and pest infestation of grasslands and disappearance of the remaining mature forests. Estimates indicate that China's environmental pollution and ecosystem degradation today are equivalent to at least ten percent of the country's annual gross domestic output. It is a long history of brilliant efforts in water control and immense problems arising from that control.

## Inventions



One of the inventions that allowed the Chinese to make use of water was the square-pallet chain pump. It consists of an endless circulating chain bearing square pallets, which hold water, soil or sand. No specific records of origin exist but accounts of the philosopher Wang Ch'ung in 80 CE describe it. This pump can haul enormous quantities of water from lower to higher levels. A single good pump can lift water 15 feet. By medieval times in China the pumps

had been adapted for use as conveyors of earth or sand rather than just water. By 828 CE the Emperor ordered that a considerable number should be distributed along the Cheng Pai Canal for irrigation purposes.

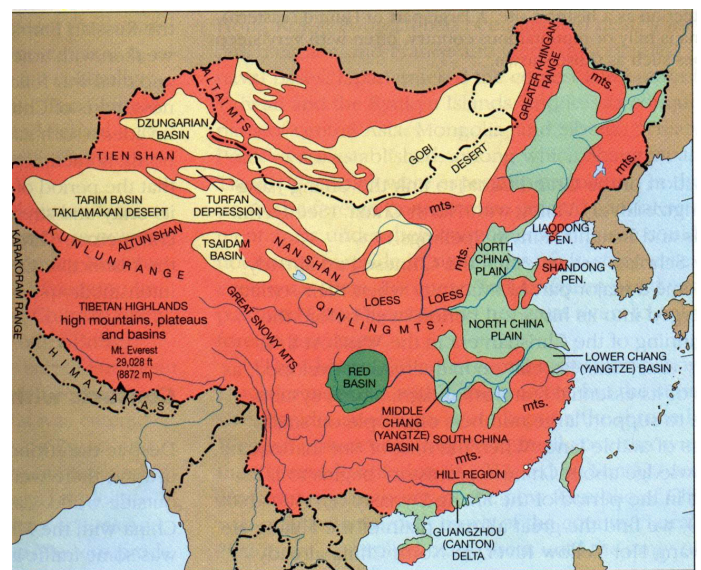
The tremendous utility of this invention has caused its spread from China throughout the world and in many different applications. Visiting dignitaries took the design back to Korea, Vietnam (Annam) and Turkestan for use in irrigation. The Europeans made their first square-pallet chain pumps in the 16th century CE. They were modeled directly on Chinese designs. The British

Navy copied designs from Chinese junks for use as bilge pumps. As recently as 1938 the classic square pallet chain pump was reintroduced from China to the US for pumping crystallized brine from the Great Salt Lake in Utah.

## A long history of big projects

China has a long history of immense water projects. The relatively small volume (per capita) and irregular distribution of the country's water flows have spurred on grand schemes. We are most familiar with the Three Gorges Dam across the Yangtze River. But ancient sections of the Grand Canal date to 486 BCE and plans for larger diversions are underway.

The Grand Canal is one of the greatest projects constructed in ancient China. It is the world's oldest and longest canal, far surpassing the Suez and Panama Canals. It begins in the north at Beijing and ends at Hangzhou so it is sometimes called the Jing-Hang Canal. It has some 24 locks and 60 bridges (the Chinese invented the suspension bridge too!). Building of the Grand Canal began in the Wu Dynasty in 486 BCE and extended during the Qi Dynasty. Emperor Yangdi of the Sui Dynasty oversaw furious construction from 605-610 CE.



Since most of China's major rivers run west to east, the Grand Canal running north south provides an important connection among several river systems: Yangtze, Yellow, Huaihe, Haihe and Qiantang. It flows through Beijing, Tianjin, Hebei, Shandong, Jiangsu and Zhejiang with Hangzhou its southernmost point.

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# Book Reviews

## How it Feels to be Adopted

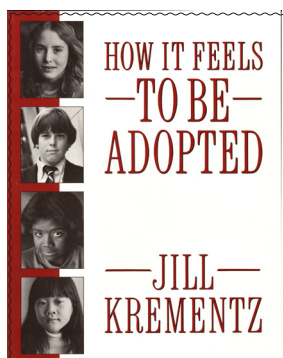
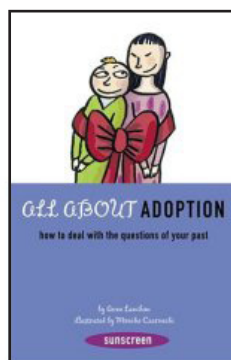
Jill Krementz

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## All About Adoption

Anne Lanchon

by Rachel Spitz



*As our children grow, they may express more concerns about their pasts and how they fit in with peers during the tumultuous teen years. While parents and families can provide some understanding, the experiences of older adoptees can be the most valuable. One of our teens reviews two books that provide some insight into the teen adoptee experience.*

The book *All About Adoption* is about teenagers who are adopted and how they feel about being adopted. It gives many opinions about and from adopted kids, what teens have to deal with and how to face questions from other people. It tells stories about people's reactions to many different situations. I think this book is very helpful to many adopted teens who might have trouble making friends at school or who don't feel important because they are adopted.

The book *How it Feels to be Adopted* is a book about young adult's stories about being adopted. How they feel, if they are sad about it and what they do in their life if they are adopted. I think this book isn't the best book to read about being adopted because it doesn't give any suggestions to help you and it doesn't give opinions, just facts about specific lives. I prefer *All About Adoption* as the book to read because it gives you helpful hints and strategies to overcome your worries and concerns as an adopted teen.

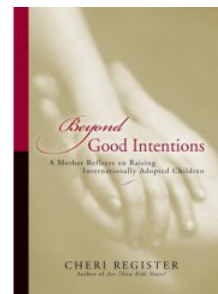
## Beyond Good Intentions: A Mother Reflects on Raising Internationally Adopted Children

Cheri Register

Yeong & Yeong Book Company

St. Paul MN, 2005, 183 p.

by Anna Spitz



This small book provides helpful considerations for the joyous challenge of raising internationally adopted children. I was looking for a little advice and insight particularly as my oldest enters the teen years in a city without the diversity of large coastal cities. The fact that the Norwegian-American author raised two Korean-American daughters in Minnesota brings experience and weight to her observations and suggestions. Although I didn't agree with all her ideas, was rather surprised by what she didn't seem to know at times (e.g. current affairs of other countries, the world beyond the US), bristled at some of her commentary, and felt that the focus was a bit too much on the adoptive parent rather than the child (but the point of the book, I guess!), her observations and admonitions will be generally quite helpful as our family moves forward. It pushed me to reexamine and more deeply evaluate our activities and behaviors. By questioning some of the common practices in ten categories, Ms. Register provokes candid examination of adoptive parents' well-meaning attempts to raise internationally adopted children. Her ten essays focus on the following counterproductive behaviors that some parents do at different times and to varying extents:

- Wiping away our children's past
- Hovering over our "troubled" children
- Holding the lid on sorrow and anger
- Parenting on the defensive
- Believing race doesn't matter
- Keeping our children exotic
- Raising our children in isolation
- Judging our country superior
- Believing adoption saves souls
- Appropriating our children's heritage

Her list of pitfalls that well-intentioned adoptive parents can fall into and how we might avoid them are very valuable ideas to help us balance our parenting to create healthy, thriving international families as well as understand our children, adoptees and other cultures in more substantive ways.

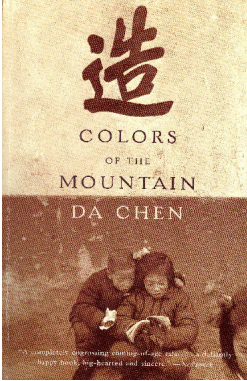
Visit the SAFCC website for a downloadable list of books for children with Chinese and adoption themes.

## Book Reviews

### Colors of the Mountain

Anchor Books,  
Division of Random House, Inc.  
New York. 310 p.

by Anna Spitz



So many of the novels, histories and memoirs of China are tragic and despairing. *Colors of the Mountain* by Da Chen details the terrible years during the time of the Cultural Revolution, but ultimately this coming-of-age memoir is a story with a happy ending of triumph over obstacles. Da Chen was born to a family

of the landlord class - which one would expect made their lives and his childhood filled with fear, uncertainty and dislocation to a degree even greater than for peasants in rural China. Yet the story never dwells on these aspects of his life. Although Da Chen relates his ordeals as an outcast, they often are immediately followed and overshadowed by a more amusing or happy segment. Da Chen writes of his friendship with other growing juvenile delinquents, education with the white-haired Professor Wei, adventures in hard work, and finally vindication and success when he is accepted to university. He escapes what might have been a very limited existence in rural China. Obviously Da Chen is an exceptional star – certainly in this telling of the tale.

This memoir seems to recount an almost too-good-to-be-true story – much more upbeat than I would have expected given his circumstances and the time. It makes me wonder how much of a role nostalgia plays in his memories of that time and the tone of the writing. The narrative never seems to provide suspense that Da Chen will fail or be frustrated, or an in-depth look at his family, friends or the turmoil of the time. Nevertheless, it is an entertaining and interesting look at a boy's coming-of-age in rural China. Da Chen lives with his family near New York City. His adventures continue in his memoir, *Sounds of the River: A Young Man's University Days in Beijing*.

## Restaurant Review

### Seven Cups Teahouse

by  
Cathi Kentera

I recently visited the *Seven Cups Teahouse*, located on the southeast corner of Tucson Boulevard and 6th Street. I had skimmed through their website noting the variety of teas, but was amazed at the selection in person. My visit to *Seven Cups* couldn't have been farther from the noisy and hurried atmosphere I am used to at *Starbucks*. The back seating area in the teahouse had several large tables. Couples either were speaking quietly, individuals studying or sitting silently. It was relaxing and peaceful.

One thing we noticed right away were the very small serving pots and cups of the tea sets displayed for sale and being used in the teahouse. I remember seeing sets this small in China, but thought they might be for children to play with. Christine, who served us, explained. The small size was actually because the pot is refilled many times, which enhances the flavor of the tea, causing the personality of the same tea leaves to change each time your pot is refilled.

The hard part was making a decision about which tea to try. The menu was literally 10 pages. Each tea receives a detailed description and advises the health benefits of each selection. They serve a variety of White, Yellow, Green, Scented, Oolong, Herbal and Black teas. We asked for some suggestions. We tried a white tea, the Silver Needle and an herbal, called Seven cups Eight treasures. Just as Christine had advised, each refill of our pot brought a subtle change in the flavor. The Silver Needle was a very delicate tea, while the *Seven Cups' Eight treasures* was somewhat fruity, tasting sweeter with each refill. They also had a variety of small cakes and pastries to choose from. We sampled some Chofu, a pounded sticky rice cake tucked inside a fluffy sponge-cake like crepe.

I would recommend *Seven Cups*, even if you are not a tea drinker, for a relaxing, enjoyable time. You can visit their website at [www.sevencups.com](http://www.sevencups.com) for their varied selection, address and hours.