A singing workforce, Mongolian millionaires in Porsches, and saving the planet—inside the empire of a Chinese tycoon with more than money on his mind

by James Fallows

Mr. Zhang Builds His Dream Town

The first time I met the Chinese tycoon Zhang Yue, he was showing guests the Versailles-style palace he has built on his estate. This was happening far from the coastal cities where so much of China's new wealth and glitter are on display. On a pleasant weekend last fall—"pleasant" with allowances for the opaque brown sky—Zhang (his family name) had invited three dozen fellow Chinese millionaires to join him at "Broad Town," the place where he lives and where Broad Air Conditioning, which he owns and runs, is based. Broad Town is on the outskirts of Changsha, a city known by few people outside China even though its population is roughly as large as New York's. In China, Changsha is famous as the capital of Hunan province and one of the places where the young Mao Zedong lived.
The Atlantic national correspondent
James Fallows narrates photos from Chinese tycoon Zhang Yue’s one-of-a-kind contemporary town.

and worked. A twenty-three-foot-high statue of Mao, long a fixture in the city square, was recently re-covered in pure gold.

The event at Broad Town was a “luxury weekend” organized by Zhang and Jet Asia-Pacific magazine, a publication designed to introduce business jets and the associated lifestyle to “Asia-based High Net Worth Individuals” who are newly able to afford such products. Guests were flown in from across China, free, on private jets. On Saturday, foreign airplane manufacturers like Gulfstream, Bombardier, and Cessna displayed their latest products, and the French industrialist Serge Dassault, whose Falcon jets sell for tens of millions of dollars, described the joys of air travel without the airlines. This is largely a theoretical pleasure in China, where the People’s Liberation Army still tightly controls airspace and discourages private flights. But a few private jets, among them one owned by Zhang, already crisscross the country, and China’s current Five Year Plan calls for airspace controls to be relaxed so a personal-airplane industry can arise. Niu Gengsheng, the CEO of a group that controls one of China’s largest dairy-products companies, was among the several guests from Inner Mongolia (charmingly, his family name means “cow”). He told Jet Asia-Pacific that the conference had helped him understand “the rationale behind the acquisition of such an essential business tool.”

It was the aviation aspect of the event that got me there, by chance. I had agreed to help ferry a small Cirrus airplane that was part of the luxury weekend display from Changsha to its next destination, the Zhuhai Air Show in far southern China, near Macau. (The Cirrus was the same kind of plane I had owned and piloted in the United States.) But the weekend, I learned on arrival in Broad Town, was not just about airplanes. On Saturday evening, after the display, more than fifty guests and exhibitors dined at one long banquet table, in a marble-floored chamber that had been designed by Zhang’s wife, Lai Yujing, and resembles a palazzo in Tuscany.

Then on Sunday morning, the guests took test drives in brand-new Porsche racing cars—bright yellow, red, lustrous black—along an improvised course made by closing off a public street adjoining Broad Town. A Hummer was also part of the fleet. As each car rolled in at the end of a circuit, a small clash of cultures could be observed. The Chinese millionaires, used to doing what they wanted the instant it occurred to them, would stride to the driver’s side of the car, past anyone who happened to be waiting in line. Then a member of Porsche’s professional-driver team would look for a tactful way to guide the guest to the passenger’s side for a first, instructional run through the slalom cones and rapid-acceleration zones on the course.

After a few hours of driving, the guests went to Broad Town’s Mediterranean Club, which had one wood-paneled room full of long, narrow felt-covered tables for snooker and a similar room with squarer, squatter felt-covered tables for playing pool. (Plus bowling alleys, a vast and modern indoor swimming pool, antique Chinese furniture and statues, and so forth; the facilities are open to all company employees.) A huge video screen at the back of the room ran footage about Sunseeker motor yachts, the maritime equivalent of private jets. On leather seats in the clubhouse’s bar, the guests sat down to a tasting of $250-a-bottle French wine, poured by a young duo from Hong Kong. One of the wine merchants was British and looked like Prince William; as he described each wine in Chinese, his partner, a chic Chinese woman, went around the room pouring the wine. A few minutes into the tasting, the guests were summoned for lunch, and they carried along their glasses of 1994 Château Latour to enjoy with mouth-burning Hunan dishes.
After lunch, Zhang thanked the guests for coming and invited them to spend time seeing some of the other highlights of Broad Town: the 130-foot-high gold-colored replica of an Egyptian pyramid, for instance, or the life-sized bronze statues of forty-three inspirational leaders from different eras and different cultures, from Confucius and Socrates to the Wright Brothers, Mahatma Gandhi, Rachel Carson, and Jack Welch. Later in the afternoon, one of the company helicopters came in for a landing not far from the Mediterranean Club. A group of guests ran toward the helipad to meet it—Zhang, in shirt and tie, running faster than anyone else, and grinning like a happy little boy.

The next time I met Zhang Yue was in Shanghai, at the China International Luxury Property Show, where resort properties from around the world—villas in France, ski lodges in Canada—were up for sale. His company was displaying its new line of home air conditioners in a small structure that got a large amount of attention because of two young female Broad employees who stood on its roof in skintight white bare-midriff outfits, playing electric violin and viola on numbers ranging from Bach to Grace Jones. (Or appearing to play: they were actually violin-synching—not that anyone cared.)

Zhang breezed smilingly past me and another foreigner who had come to see him. “Five minutes!” he said in Chinese, and spent the next half hour roaming through the display and pointing out to the dozen uniformed staff members every detail that could be improved. The Broad staffers stood at attention while listening, notebook in left hand and pen in right, as if trained in that pose—as I later learned they were.

A week later I saw Zhang Yue again, back at Broad Town. I had spent the previous night in the on-campus hotel, sans Internet or telephone, feeling remote from my known world. Then I ran into engineers from Trinidad, Russia, and Argentina who were in Broad Town for several weeks of lessons on maintaining Broad systems in their home countries. Like the 1,800 regular employees of the company, they were living next to the factory in Broad Town housing and eating three meals a day, free, in the company cafeteria, in a building with the English name Aspiration Theater. Unlike the 1,800, they were neither delighted by the prospect of Chinese food twenty-one times a week nor able to communicate easily in Chinese. “Remote!” a man from Trinidad scoffed when I told him the way I was feeling, and set off into an I’ll-show-you-remote soliloquy.

The next morning, I toured the factory where locomotive-sized institutional air conditioners were prepared for shipment to India, Germany, the United States, or one of forty other countries. I saw the company’s “Aviation Division,” where maintenance men kept Zhang’s helicopter ready in case he wanted to make a trip. I saw the laboratory, and the warehouse, and the NORAD-style control room, where a team of technicians watched readouts from every large-scale Broad system installed in a hotel, office building, shopping mall, or airport anywhere in the world. While I watched, the display switched from a hotel in Manhattan to the international airport in Madrid to a new structure in Beijing.

Then it was time to interview the creator and owner of it all, whom I invariably heard referred to in Broad Town as “our chairman.” Chairman Zhang strolled without formality or entourage into a tea-break room where I was sitting, slapped me on the back, and spent the next half hour grilling me, through an interpreter, about ... airplanes. He loves flying, and he was the first person in China to buy a private jet. According to a Broad representative, he was also the first person in China to be certified as a private pilot, and while he rarely flies his airplanes himself anymore, he remains an aviation enthusiast. Now he wanted a new airplane. No—as an environmentalist, he needed a new airplane, one that was much more energy-efficient

than the ones he now had. To be specific, he needed one that would go at least 300 miles an hour and get at least fifteen miles to a gallon of jet fuel. Zhang had lectured Dassault, the French aircraft baron, on the need to create such a plane. Zhang usually went by himself on business trips, so for efficiency he would be happy with a plane that had only two or three seats (plus one for a hired pilot). Since I had once written a book about airplanes, I should tell him which one to buy!

James Watt, the English inventor, and an Egyptian pyramid are among Broad Town’s historical figures and buildings.

I delicately asked whether he needed such a plane now, or could wait two or three years for one of the many small jets currently being developed. Without waiting for translation he said, in Chinese, “Now! Now!” As I began to say (gulp) that no such plane existed at the moment, I saw his face cloud. So I backtracked and said I would call a friend at NASA who was the world’s expert on exciting new aircraft, to see if he knew of one. Fine! said Zhang. Let’s call him now! Well, it was 3:30 a.m. on the U.S. East Coast. Maybe we could wait an hour or two?

Airplanes deferred for the moment, Zhang spent half an hour talking about himself, his company, and his vision for China. Every second of that time, he was in motion around the room, talking as if dictating to scriveners. Zhang Yue is a short, very trim man, forty-six years old; his black hair appears undyed, and his face is youthful and smooth. “I have not taken a medicine in eighteen years!” he said at one point with pride. Nervous energy may be the key to his fitness. Like many Chinese nouveaux riches (I am told), he is impatient and indulged. Unlike many American plutocrats, he has no formality or stuffiness. I enjoyed being with him. Suddenly he decided that he’d had enough—and with a reminder that we’d meet that evening, after I called my NASA friend, he was gone.

China, like America, is too big, complicated, and contradictory to have any “typical” or representative character. Zhang Yue is no more representative of today’s China than a fur merchant like John Jacob Astor or a press baron like William Randolph Hearst was representative of the America of his time. But certain prominent characters are interesting because they are so clearly of their culture’s moment in history. Astor was of the era in which natural resources were being turned into fortunes, and those fortunes turned into social standing. Hearst built his fortune in the age of large urban markets and converted it, with mixed results, into political influence and the artistic legacy of his castle. Zhang is of the moment when China has opened the door to ambitious people with entrepreneurial plans. And to me he is more interesting than many
others superficially like him, because he suggests an answer to one fundamental question about the China of the era to come. The question is what China will dream of, as its dreams of money begin to be realized. Most people will be poor, far into the future. But tens of millions of Chinese are already able to think of more than just getting by. Zhang, it turned out, had more than making money and buying as-yet-undeveloped planes on his mind.

**Zhang Yue leading a tour of Broad Town**

_Depending on the rankings, Zhang Yue stands somewhere between twenty-fifth and fiftieth on the list of the richest people in China, with assets worth as much as $300 million; Broad Air Conditioning has no debt, and last year it had annual sales of about $300 million. His wealth does not appear to be based principally on political connections, which have obviously been crucial in the formation of other empires—in real estate, construction, and broadcasting, for example. Indeed, Broad has been discussed in Chinese business blogs, which I’ve seen in translation, as proof that a business can thrive while keeping government more or less at arm’s length._

The company’s English name is derived, perhaps too literally, from its Chinese name Yuan Da, which might also have been rendered as “expansive” or “spacious.” The company’s logo—the familiar @ sign, but with the a in the middle replaced by a lowercase b, for Broad—is elegant and eye-catching; Zhang designed it in 1990, before e-mail made the “at” symbol common. Among the six “Broad Values” that Zhang says must guide the company, one is “Don’t pay bribes” and another is “Do pay taxes.” (The others are environmental protection, respect for intellectual-property rights, no price gouging, and no predatory competition.)

Nor does Broad aim to beat its competitors with a lowball “China price” that manufacturers in developed countries cannot match. According to a quite respectful case study of Broad used at the Harvard Business School, the company’s prospects have been closely tied to the technological niche that Zhang has insisted it occupy. Broad’s specialty is a form of air-conditioning that uses less energy than conventional means. Broad did not invent the technology on which its business is based, but it did take the risk of investing heavily in an approach that companies in Japan, Korea, Europe, and North America had looked at and neglected.
The company and its CEO came to their current identities through an indirect route. Zhang grew up near Changsha, studied art in college, and began work as an interior decorator in southern China. His younger brother Jian trained as an engineer at Harbin Institute of Technology, in Manchuria. In the late 1980s, as Deng Xiaoping opened China seriously for business, Jian, in his mid-twenties, patented the invention that got the company started. This was a “pressure-free boiler” for factories, and its main selling point was that if anything went wrong, the boiler would collapse rather than explode. Such explosions were common in China; demand was brisk. Using the roughly $3,000 Zhang Yue had saved from his decorating business, the brothers went into business selling boilers and consulting on factory design.

By 1992, they had decided to concentrate on what is now Broad’s entire business: “nonelectric refrigeration.” The air conditioners most Americans are familiar with are compression coolers. They use electric power to compress a refrigerant such as Freon, and when the refrigerant expands, it cools the surrounding air. The nonelectric coolers instead use natural gas (or some other source of heat) to boil a special liquid, a lithium bromide solution, and when the vapors from that solution condense, they cool whatever is near them.

It sounds odd to use a flame to cool a building—and, indeed, when China’s premier, Wen Jiabao, visited Broad Town in 2005, he asked several times to have the principle explained. A company pamphlet that lovingly commemorates this historic visit calls the premier’s persistent curiosity a sure sign of his acumen. “If I spread a drop of alcohol on your hand, you will feel very cold,” Zhang told Wen, describing part of the cooling process. The account continues: “The Premier nodded in understanding and said, ‘Yes! Yes! For it evaporates and takes away the heat.’ The Premier is a specialist indeed.”

Zhang has never wavered from this technology, even when, in the early 2000s, market conditions temporarily turned against it and his sales force begged him to add normal, electric-powered air conditioners to Broad’s offerings. Its advantages all involve energy savings. Compared with typical compression systems, nonelectric air-conditioning as Broad makes it will always require less energy per unit of cooling, because when energy is converted from one form to another, some of it is lost. Electric-compression cooling requires more stages of conversion—fossil fuel to electricity at the power plant, electricity to mechanical power at the compressor, both stages very wasteful—than does using natural gas to boil liquid. Nonelectric cooling will also always be more adaptable to other sources of energy, since it is easier to apply a variety of heat sources, including solar power and biomass burning, to do the boiling than to use them to generate electricity in a remote plant and transmit it to the air-conditioning site. And this method of cooling helps reduce the costly peak loads imposed on the power grid, because natural gas is cheapest and most abundant in the summer, exactly when the demand for air-conditioning goes up. Indeed, since storing natural gas is expensive and difficult, in many countries the available gas is simply burned off—wasted—during the summer, when no one needs it for heating. In China, air-conditioning accounts for as much as 50 percent of the electric load during peak times in the summer. Zhang pointed out to me—as he has noted in countless speeches, and as is emphasized by the Harvard Business School case study—that with all of these advantages, his kind of air-conditioning can make both the electric and the natural-gas networks less wasteful while still keeping people cool in the summer. And while we’re at it: the nonelectric systems use a relatively benign natural salt (lithium bromide) rather than using—and inevitably releasing—Freon and other chlorine-based products that erode the Earth’s ozone layer.

The company made its first big sale of air conditioners in China, in 1992. As construction throughout China boomed, so did Broad’s business—partly because installing the system required little paperwork or official approval, compared with what
was required for electric units, which would draw on the power grid. It succeeded overseas in India, Pakistan, and other countries with shaky electric systems, since the natural-gas-powered cooler would run during a brownout. “Japanese companies did poorly in markets like those, because their systems were designed for clean water and good management,” Sean Wang, who handles Broad’s international accounts, told me. “Ours were designed with the assumption of worse conditions and looser management.”

Broad made its first American sale in 1999, a combined heating-cooling system at a medical center in downtown Boston. It pushed hard into the California market after the blackouts of 2000–2001, it equipped a community college in New Jersey, and it arrived in New York: Near Zhang’s office is a large picture of a Broad cooler in a Con Edison plant in Manhattan. “Thomas Edison is our idol,” Wang said. The company competed for, and won, Department of Energy contracts to demonstrate energy-saving techniques, notably a major project in Austin, Texas. It now has more than 200 installations in the United States, including at Fort Bragg and other military bases, and many hundreds more around the world, including in the new airport facilities in Madrid, Athens, and Bangkok.

In 2001, ’02, ’04, and ’05, Broad was was named one of the “20 Most Admired Companies in China” by China’s Economic Observer weekly. I thought of asking Zhang: What happened in 2003? But I only thought it.

The first time I was in an office building at Broad Town, a European friend who has lived in China for years nudged me and asked, What don’t you see? I looked around and realized: I didn’t see piles of junk.

There were no scrap papers, cigarette butts, half-empty teacups, or other debris on the Broad Town desks, which made it different from other places I had seen in China. What was true in the office was true of the factory as well: no heaps of spare parts or scrap metal, no workers holding welding guns while standing barefoot, no oily rags looking as if they were about to burst into flames. What I had seen in many other Chinese worksites fit the motto “If it’s worth doing, it’s worth doing sloppily.” But when I saw a gardener kneeling on one of Broad Town’s sweeping lawns and resodding a small plot of grass practically blade by blade, I realized: This is like Japan!
Those would be fighting words in much of China, so let me be precise: The people working at Broad Town seemed not just to be holding jobs but to have been made into a culture and team. Japan’s thoroughgoing organization of people into large teams—the Mitsubishi team, the Toyota team—often seems like a peacetime military. At Broad Town the connection is more explicit. New recruits go through a ten-day session of literal boot camp, wearing military-style outfits and living in barracks on the grounds. They run in platoons through Broad Town’s streets in fatigues, behind an instructor carrying a unit flag. Many of the blog-world concerns about Broad involve recruits who drop out during the training—or are summarily dismissed, for versions of “bad attitude.”

After demobilization into the regular workforce, employees are like an army in mufti. They eat, work, and sleep on the base—I mean, the factory grounds. They are roused each morning at 6:00 for physical training before the workday begins. Zhang and his wife and son live at Broad Town too, as do his parents, in houses tucked behind the fishpond that helps supply the company cafeteria. White-collar workers, male and female, wear a blue-blazer uniform every day, as does Zhang. Factory workers wear royal-blue uniforms with their employee number stenciled in large digits down one leg. Every Monday morning the workforce musters for the raising of the national and company flags. When I asked Sean Wang about the clean factories and overall air of control, he said, “We want to solve problems at their root.” He was talking about how a little bit of dirt in the factory could lead to big, expensive problems later on, but the point seemed to apply more generally. It was a one-company illustration of what former Singaporean Prime Minister Lee Kuan Yew and others have called the Asian social bargain: less individual latitude, more collective success.

I heard from a former factory worker that pay for blue-collar workers, nearly all of them male, starts at 1,200 yuan per month, or about $150. That’s not bad by Chinese factory standards—especially considering that Changsha is a low-cost area, and Broad workers get their food and housing free. I’ve visited factories near Shanghai and Guangzhou where monthly wages started at 900 yuan. Zhou Wei, of Broad, declined to comment on pay levels in the company, but I heard that white-collar workers started at around 2,000 yuan per month. In theory, Chinese law requires companies to pay overtime to anyone working more than forty hours in a week. Some managers of North American-, Japanese-, or European-owned companies with Chinese plants have mentioned to me that they obey this rule. It hardly ever comes up in discussions with companies from mainland China, Taiwan, or Singapore. At Broad the rule seems to be “Work till the job is done.” I met some former employees who said that they typically had two days off per month; often worked till midnight; and survived by shoveling down food as quickly as they could and then using the rest of their lunch and dinner breaks, two hours apiece, for sleep. They weren’t complaining: this is modern China.

As will be obvious by now, there are things both admirable and creepy about this utopia. In every way possible, Zhang has isolated the culture of Broad Town from influences other than his own. He has no public shareholders to second-guess his choices—whether to stick to environmentally friendly products or to build a pyramid—nor even bankers holding debt. He has distanced the company from governmental control as much as any Chinese company owner can. His workers are physically distant from the distractions of Changsha—and that city itself is distant from the thriving metropolises of the coast. The same blogs that complain about imposed cult-like behavior at Broad acknowledge that the jobs pay well enough that plenty of new applicants are always willing to put on military uniforms and live their lives at Broad Town.
The positive aspect of this invented world is its ambition for something more than sheer efficiency and success. The entire workforce also musters for musical events. Many employees play musical instruments, and apparently all can, or do, sing. On December 31, 1999, Zhang had all of his workers stand in front of the then half-finished Versailles to be photographed singing in the new millennium. (The palace now serves as a “management training center,” for meetings and seminars; the pyramid’s interior is being fitted out as an environmental museum.) The inspirational sayings carved on nearly every wall could sound like corporate boilerplate. From the founder of Toyota: “There is no boat that cannot be sunk” (Moral: Don’t let up). But the walls also bear sayings from Abraham Lincoln and other non-corporate figures. Among those honored with statues are Winston Churchill, the Chinese poet Li Bai, and Martin Luther King Jr. Zhang has not forgotten his background as an artist, and he is renowned for fussing over every design detail of every feature of Broad Town.

When I asked him a more polite version of what any visitor would wonder—What is the deal with the pyramid?—Zhang said: “Our products are to make people comfortable and happy. If our employees are comfortable and happy, that will affect their work ethic and their professionalism.” He said that good food matters—and the food at Broad Town is good. So does a visually pleasant environment—and most vistas in this controlled landscape are pleasant. “Many companies in China are looking only for the short-term profit,” he said in conclusion. “Some of our expenditures are not directly for manufacture and sales, but our vision is long term, and we believe that indirectly they will increase manufacture and sales.” And even if the steps don’t pay off, in the end it’s his company, and like utopians before him, he seems to consider it another work of art.

**ZHANG AND INCONVENIENT TRUTHS**

If I had asked my European friend what he was seeing but not noticing at Broad Town, the answer should have been: wood. Polished, attractive wood shows up in every structure. Clean, gleaming wood floors and beams in a lovely Japanese house, built (for no apparent reason) as part of a “Global Village” of housing styles from around the world. Wooden parquet floors and walls in a gymnasium for badminton and Ping-Pong. Wooden furniture in many of the offices. Dark wood paneling in the Mediterranean Club. Wood-block flooring throughout. If China was ever rich in timber resources, it certainly is not now. Why should a heavy-industry facility use so much expensive wood?

Because it was free. All of the wood was recycled from shipping pallets and packing crates coming into the factory. Where it came from before that is another matter, but once it got to Broad Town, it was carefully reprocessed and reused—all at the insistence of Zhang Yue.

There is a showboat aspect to Broad Town’s recycling effort—every person I met there told me the story of the packing crates. And the Porsches roaring through town over the luxury weekend did not quite fit Zhang’s message that people should be conscious of their environmental impact at all times. But in fairness, when the United Nations Environment Program held a forum at Broad Town in 2003, Zhang argued that worldwide, systematic changes—in energy, packaging, and transportation—were essential so consumers could “enjoy a comfortable yet moderate life.” And when we finally reached my friend from NASA, around 6:30 a.m. EST, Zhang grilled him (through an interpreter) about the most efficient engines on the market—and lit up when he heard about a radically more efficient airplane being made in Austria. His company got its start partly because China was growing too fast for its own electric grid. Over the last decade he has read constantly about environmental problems and has come up with serious-sounding proposals for what his company, his country, and the world could do.
Solar-energy collectors are everywhere in Broad Town. Part of boot-camp indoctrination is training employees about environmental issues. When the company sells a cooling unit, it also offers guidance on reducing demand for air-conditioning. “For years the Chinese government focused only on economic development, but now they say that the environment and the economy should both be stressed,” Zhang told me. “But really the environment needs to be in first place, and economic growth in fourth.” Not seeing the trap, I asked what should come second and third. “The environment, and the environment!” he said. “The real measure of our economic progress is the life people can live, and the [gross domestic product] does not measure that.” He observed that a ton of dirty coal might bring 120 yuan, or $15, in profit—but recent studies had shown that a ton of coal cost at least 200 yuan in medical care for inhabitants of the bleak, cancer-ridden mining towns. “Any primary-school child can see what’s wrong with that,” Zhang said. “But our economists can’t.”

For another international conference on the environment, Zhang prepared a captivating and unintentionally revealing document called “The World in 2015.” Part of it is quiet Chinese triumphalism: the world’s largest trading zone will be in Asia; the international currency will be not the U.S. dollar but the Asian dollar; the world’s most popular movie will be a drama set in ancient China. The world’s most profitable and admired company will not be one that sells computers or airplanes or oil but one that quietly economizes on energy use around the world, starting with new air-conditioning systems. “This company still has little reputation, for they have done those things others don’t care about ... It doesn’t matter that people may not know the name of this company, but they should know it is a Chinese company.”

The conclusion of the imagined history involves a historic UN speech by another of Zhang’s idols: “Albert Gore, sixty-seven years old, walked slowly to the platform. This old man, who became Secretary-General of the UN one year ago, has a dull look in his eyes.” Why had no one heeded his warnings when there was time? Why did the world keep building more coal and nuclear plants, instead of noticing what was happening to its climate and learning to conserve? “Choked with sobs, Secretary [Gore] cannot speak.” At last he finds his voice and challenges mankind, in the final words of Zhang’s essay, “to choose the establishment of the new moral ideal with higher standards.”

Subtle? No. Consistent with every detail of Zhang’s daily life? Probably not. But as an indication that more than pure moneymaking is under way, it is worth noticing. China will bring more than mere commerce to the world.

*Photographs by Michael Christopher Brown*