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Google's China Problem (and China's Google Problem)
By CLIVE THOMPSON

For many young people in China, Kai-Fu Lee is a celebrity. Not quite on the level of a movie star like Edison Chen or the singers in the boy band F4, but for a 44-year-old computer scientist who invariably appears in a somber dark suit, he can really draw a crowd. When Lee, the new head of operations for Google in China, gave a lecture at one Chinese university about how young Chinese should compete with the rest of the world, scalpers sold tickets for $60 apiece. At another, an audience of 8,000 showed up; students sprawled out on the ground, fixed on every word.

It is not hard to see why Lee has become a cult figure for China's high-tech youth. He grew up in Taiwan, went to Columbia and Carnegie-Mellon and is fluent in both English and Mandarin. Before joining Google last year, he worked for Apple in California and then for Microsoft in China; he set up Microsoft Research Asia, the company's research-and-development lab in Beijing. In person, Lee exudes the cheery optimism of a life coach; last year, he published "Be Your Personal Best," a fast-selling self-help book that urged Chinese students to adopt the risk-taking spirit of American capitalism. When he started the Microsoft lab seven years ago, he hired dozens of China's top graduates; he will now be doing the same thing for Google. "The students of China are remarkable," he told me when I met him in Beijing in February. "There is a huge desire to learn."

Lee can sound almost evangelical when he talks about the liberating power of technology. The Internet, he says, will level the playing field for China's enormous rural underclass; once the country's small villages are connected, he says, students thousands of miles from Shanghai or Beijing will be able to access online course materials from M.I.T. or Harvard and fully educate themselves. Lee has been with Google since only last summer, but he wears the company's earnest, utopian ethos on his sleeve: when he was hired away from Microsoft, he published a gushingly emotional open letter on his personal Web site, praising Google's mission to bring information to the masses. He concluded with an exuberant equation that translates as "youth + freedom + equality + bottom-up innovation + user focus + don't be evil = The Miracle of Google."

When I visited with Lee, that miracle was being conducted out of a collection of bland offices in downtown Beijing that looked as if they had been hastily rented and occupied. The small rooms were full of eager young Chinese men in hip sweatshirts clustered around enormous flat-panel monitors, debugging code for new Google projects. "The ideals that we uphold here are really just so important and noble," Lee told me. "How to

build stuff that users like, and figure out how to make money later. And 'Don't Do Evil' "
— he was referring to Google's bold motto, "Don't Be Evil" — "all of those things. I
think I've always been an idealist in my heart."

Yet Google's conduct in China has in recent months seemed considerably less than
idealistic. In January, a few months after Lee opened the Beijing office, the company
announced it would be introducing a new version of its search engine for the Chinese
market. To obey China's censorship laws, Google's representatives explained, the
company had agreed to purge its search results of any Web sites disapproved of by the
Chinese government, including Web sites promoting Falun Gong, a government-banned
spiritual movement; sites promoting free speech in China; or any mention of the 1989
Tiananmen Square massacre. If you search for "Tibet" or "Falun Gong" most anywhere
in the world on google.com, you'll find thousands of blog entries, news items and chat
rooms on Chinese repression. Do the same search inside China on google.cn, and most, if
not all, of these links will be gone. Google will have erased them completely.

Google's decision did not go over well in the United States. In February, company
executives were called into Congressional hearings and compared to Nazi collaborators.
The company's stock fell, and protesters waved placards outside the company's
headquarters in Mountain View, Calif. Google wasn't the only American high-tech
company to run aground in China in recent months, nor was it the worst offender. But
Google's executives were supposed to be cut from a different cloth. When the company
went public two years ago, its telegenic young founders, Sergey Brin and Larry Page,
wrote in the company's official filing for the Securities and Exchange Commission that
Google is "a company that is trustworthy and interested in the public good." How could
Google square that with making nice with a repressive Chinese regime and the
Communist Party behind it?

It was difficult for me to know exactly how Lee felt about the company's arrangement
with China's authoritarian leadership. As a condition of our meeting, Google had
demanded that I not raise the issue of government relations; only the executives in
Google's California head office were allowed to discuss those matters. But as Lee and I
talked about how the Internet was transforming China, he offered one opinion that
seemed telling: the Chinese students he meets and employs, Lee said, do not hunger for
democracy. "People are actually quite free to talk about the subject," he added, meaning
democracy and human rights in China. "I don't think they care that much. I think people
would say: 'Hey, U.S. democracy, that's a good form of government. Chinese
government, good and stable, that's a good form of government. Whatever, as long as I
get to go to my favorite Web site, see my friends, live happily.' " Certainly, he said, the
idea of personal expression, of speaking out publicly, had become vastly more popular
among young Chinese as the Internet had grown and as blogging and online chat had
become widespread. "But I don't think of this as a political statement at all," Lee said. "I
think it's more people finding that they can express themselves and be heard, and they
love to keep doing that."

It sounded to me like company spin — a curiously deflated notion of free speech. But spend some time among China's nascent class of Internet users, as I have these past months, and you begin to hear such talk somewhat differently. Youth + freedom + equality + don't be evil is an equation with few constants and many possible solutions. What is freedom, just now, to the Chinese? Are there gradations of censorship, better and worse ways to limit information? In America, that seems like an intolerable question — the end of the conversation. But in China, as Google has discovered, it is just the beginning.

Cultural Differences

Google was not, in fact, a pioneer in China. Yahoo was the first major American Internet company to enter the market, introducing a Chinese-language version of its site and opening up an office in Beijing in 1999. Yahoo executives quickly learned how difficult China was to penetrate — and how baffling the country's cultural barriers can be for Americans. Chinese businesspeople, for example, rarely rely on e-mail, because they find the idea of leaving messages to be socially awkward. They prefer live exchanges, which means they gravitate to mobile phones and short text messages instead. (They avoid voicemail for the same reason; during the weeks I traveled in China, whenever I called a Chinese executive whose phone was turned off, I would get a recording saying that the person was simply "unavailable," and the phone would not accept messages.) The most popular feature of the Internet for Chinese users — much more so than in the United States — is the online discussion board, where long, rollicking arguments and flame wars spill on for thousands of comments. Baidu, a Chinese search engine that was introduced in 2001 as an early competitor to Yahoo, capitalized on the national fervor for chat and invented a tool that allows people to create instant discussion groups based on popular search queries. When users now search on baidu.com for the name of the Chinese N.B.A. star Yao Ming, for example, they are shown not only links to news reports on his games; they are also able to join a chat room with thousands of others and argue about him. Baidu's chat rooms receive as many as five million posts a day.

As Yahoo found, these cultural nuances made the sites run by American companies feel simply foreign to Chinese users — and drove them instead to local portals designed by Chinese entrepreneurs. These sites, including Sina.com and Sohu.com, had less useful search engines, but they were full of links to chat rooms and government-approved Chinese-language news sites. Nationalist feelings might have played a role, too, in the success Chinese-run sites enjoyed at Yahoo's expense. "There's now a very strong sense of pride in supporting the local guy," I was told by Andrew Lih, a Chinese-American professor of media studies at the University of Hong Kong.

Yahoo also was slow to tap into another powerful force in Chinese life: rampant piracy. In most parts of the West, after the Napster wars, movie and music piracy is increasingly understood as an illicit activity; it thrives, certainly, but there is now a stigma against taking too much intellectual content without paying for it. (Hence the success of iTunes.) In China, downloading illegal copies of music, movies and software is as normal and accepted as checking the weather online. Baidu's executives discovered early on that

many young users were using the Internet to hunt for pirated MP3's, so the company developed an easy-to-use interface specifically for this purpose. When I sat in an Internet cafe in Beijing one afternoon, a teenager with mutton-chop sideburns a few chairs over from me sipped a Coke and watched a samurai movie he'd downloaded free, while his friends used Baidu to find and pull down pirated tracks from the 50 Cent album "Get Rich or Die Tryin'." Almost one-fifth of Baidu's traffic comes from searching for unlicensed MP3's that would be illegal in the United States. Robin Li, Baidu's 37-year-old founder and C.E.O., is unrepentant. "Right now I think that the record companies may not be happy about the service we are offering," he told me recently, "but I think digital music as a trend is unstoppable."

At first, Google took a different approach to the Chinese market than Yahoo did. In early 2000, Google's engineers quietly set about creating a version of their search engine that could understand character-based Asian languages like Chinese, Japanese and Korean. By the end of the year, they had put up a clunky but serviceable Chinese-language version of Google's home page. If you were in China and surfed over to google.com in 2001, Google's servers would automatically detect that you were inside the country and send you to the Chinese-language search interface, much in the same way google.com serves up a French-language interface to users in France.

While Baidu appealed to young MP3 hunters, Google became popular with a different set: white-collar urban professionals in the major Chinese cities, aspirational types who follow Western styles and sprinkle English words into conversation, a class that prides itself on being cosmopolitan rather than nationalistic. By pulling in that audience, Google by the end of 2002 achieved a level of success that had eluded Yahoo: it amassed an estimated 25 percent of all search traffic in China — and it did so working entirely from California, far outside the Chinese government's sphere of influence.

The Great Firewall

Then on Sept. 3, 2002, Google vanished. Chinese workers arrived at their desks to find that Google's site was down, with just an error page in its place. The Chinese government had begun blocking it. China has two main methods for censoring the Web. For companies inside its borders, the government uses a broad array of penalties and threats to keep content clean. For Web sites that originate anywhere else in the world, the government has another impressively effective mechanism of control: what techies call the Great Firewall of China.

When you use the Internet, it often feels placeless and virtual, but it's not. It runs on real wires that cut through real geographical boundaries. There are three main fiber-optic pipelines in China, giant underground cables that provide Internet access for the public and connect China to the rest of the Internet outside its borders. The Chinese government requires the private-sector companies that run these fiber-optic networks to specially configure "router" switches at the edge of the network, where signals cross into foreign countries. These routers — some of which are made by Cisco Systems, an American firm — serve as China's new censors.

If you log onto a computer in downtown Beijing and try to access a Web site hosted on a server in Chicago, your Internet browser sends out a request for that specific Web page. The request travels over one of the Chinese pipelines until it hits the routers at the border, where it is then examined. If the request is for a site that is on the government's blacklist — and there are lots of them — it won't get through. If the site isn't blocked wholesale, the routers then examine the words in the requested page's Internet address for blacklisted terms. If the address contains a word like "falun" or even a coded term like "198964" (which Chinese dissidents use to signify June 4, 1989, the date of the Tiananmen Square massacre), the router will block the signal. Back in the Internet cafe, your browser will display an error message. The filters can be surprisingly sophisticated, allowing certain pages from a site to slip through while blocking others. While I sat at one Internet cafe in Beijing, the government's filters allowed me to surf the entertainment and sports pages of the BBC but not its news section.

Google posed a unique problem for the censors: Because the company had no office at the time inside the country, the Chinese government had no legal authority over it — no ability to demand that Google voluntarily withhold its search results from Chinese users. And the firewall only half-worked in Google's case: it could block sites that Google pointed to, but in some cases it would let slip through a list of search results that included banned sites. So if you were in Shanghai and you searched for "human rights in China" on google.com, you would get a list of search results that included Human Rights in China (hrichina.org), a New York-based organization whose Web site is banned by the Chinese government. But if you tried to follow the link to hrichina.org, you would get nothing but an error message; the firewall would block the page. You could see that the banned sites existed, in other words, but you couldn't reach them. Government officials didn't like this situation — Chinese citizens were receiving constant reminders that their leaders felt threatened by certain subjects — but Google was popular enough that they were reluctant to block it entirely.

In 2002, though, something changed, and the Chinese government decided to shut down all access to Google. Why? Theories abound. Sergey Brin, the co-founder of Google, whose responsibilities include government relations, told me that he suspects the block might have been at the instigation of a competitor — one of its Chinese rivals. Brin is too diplomatic to accuse anyone by name, but various American Internet executives told me they believe that Baidu has at times benefited from covert government intervention. A young Chinese-American entrepreneur in Beijing told me that she had heard that the instigator of the Google blockade was Baidu, which in 2002 had less than 3 percent of the search market compared with Google's 24 percent. "Basically, some Baidu people sat down and did hundreds of searches for banned materials on Google," she said. (Like many Internet businesspeople I spoke with in China, she asked to remain anonymous, fearing retribution from the authorities.) "Then they took all the results, printed them up and went to the government and said, 'Look at all this bad stuff you can find on Google!' That's why the government took Google offline." Baidu strongly denies the charge, and when I spoke to Guo Liang, a professor at the Chinese Academy of Social Sciences in Beijing, he dismissed the idea and argued that Baidu is simply a stronger competitor than

Google, with a better grasp of Chinese desires. Still, many Beijing high-tech insiders told me that it is common for domestic Internet firms to complain to the government about the illicit content of competitors, in the hope that their rivals will suffer the consequences. In China, the censorship regime is not only a political tool; it is also a competitive one — a cudgel that private firms use to beat one another with.

Self-Discipline Awards

When I visited a dingy Internet cafe one November evening in Beijing, its 120 or so cubicles were crammed with teenagers. (Because computers and home Internet connections are so expensive, many of China's mostly young Internet users go online in these cafes, which charge mere pennies per hour and provide fast broadband — and cold soft drinks.) Everyone in the cafe looked to be settled in for a long evening of lightweight entertainment: young girls in pink and yellow Hello Kitty sweaters juggled multiple chat sessions, while upstairs a gang of young Chinese soldiers in olive-drab coats laughed as they crossed swords in the medieval fantasy game World of Warcraft. On one wall, next to a faded kung-fu movie poster, was a yellow sign that said, in Chinese characters, "Do not go to pornographic or illegal Web sites." The warning seemed almost beside the point; nobody here looked even remotely likely to be hunting for banned Tiananmen Square retrospectives. I asked the cafe manager, a man with huge aviator glasses and graying hair, how often his clients try to view illegal content. Not often, he said with a chuckle, and when they do, it's usually pornography. He said he figured it was the government's job to keep banned materials inaccessible. "If it's not supposed to be seen," he said, "it's not supposed to be seen."

One mistake Westerners frequently make about China is to assume that the government is furtive about its censorship. On the contrary, the party is quite matter of fact about it — proud, even. One American businessman who would speak only anonymously told me the story of attending an award ceremony last year held by the Internet Society of China for Internet firms, including the major Internet service providers. "I'm sitting there in the audience for this thing," he recounted, "and they say, 'And now it's time to award our annual Self-Discipline Awards!' And they gave 10 companies an award. They gave them a plaque. They shook hands. The minister was there; he took his picture with each guy. It was basically like Excellence in Self-Censorship — and everybody in the audience is, like, clapping." Internet censorship in China, this businessman explained, is presented as a benevolent police function. In January, the Shenzhen Public Security Bureau created two cuddly little anime-style cartoon "Internet Police" mascots named "Jingjing" and "Chacha"; each cybercop has a blog and a chat window where Chinese citizens can talk to them. As a Shenzhen official candidly told The Beijing Youth Daily, "The main function of Jingjing and Chacha is to intimidate." The article went on to explain that the characters are there "to publicly remind all Netizens to be conscious of safe and healthy use of the Internet, self-regulate their online behavior and maintain harmonious Internet order together."

Intimidation and "self-regulation" are, in fact, critical to how the party communicates its censorship rules to private-sector Internet companies. To be permitted to offer Internet

services, a private company must sign a license agreeing not to circulate content on certain subjects, including material that "damages the honor or interests of the state" or "disturbs the public order or destroys public stability" or even "infringes upon national customs and habits." One prohibition specifically targets "evil cults or superstition," a clear reference to Falun Gong. But the language is, for the most part, intentionally vague. It leaves wide discretion for any minor official in China's dozens of regulatory agencies to demand that something he finds offensive be taken offline.

Government officials from the State Council Information Office convene weekly meetings with executives from the largest Internet service companies — particularly major portals that run news stories and host blogs and discussion boards — to discuss what new topics are likely to emerge that week that the party would prefer be censored. "It's known informally as the 'wind-blowing meeting' — in other words, which way is the wind blowing," the American businessman told me. The government officials provide warnings for the days ahead, he explained. "They say: 'There's this party conference going on this week. There are some foreign dignitaries here on this trip.' "

American Internet firms typically arrive in China expecting the government to hand them an official blacklist of sites and words they must censor. They quickly discover that no master list exists. Instead, the government simply insists the firms interpret the vague regulations themselves. The companies must do a sort of political mind reading and intuit in advance what the government won't like. Last year, a list circulated online purporting to be a blacklist of words the government gives to Chinese blogging firms, including "democracy" and "human rights." In reality, the list had been cobbled together by a young executive at a Chinese blog company. Every time he received a request to take down a posting, he noted which phrase the government had objected to, and after a while he developed his own list simply to help his company avoid future hassles.

The penalty for noncompliance with censorship regulations can be serious. An American public-relations consultant who recently worked for a major domestic Chinese portal recalled an afternoon when Chinese police officers burst into the company's offices, dragged the C.E.O. into a conference room and berated him for failing to block illicit content. "He was pale with fear afterward," she said. "You have to understand, these people are terrified, just terrified. They're seriously worried about slipping up and going to jail. They think about it every day they go into the office."

As a result, Internet executives in China most likely censor far more material than they need to. The Chinese system relies on a classic psychological truth: self-censorship is always far more comprehensive than formal censorship. By having each private company assume responsibility for its corner of the Internet, the government effectively outsources the otherwise unmanageable task of monitoring the billions of e-mail messages, news stories and chat postings that circulate every day in China. The government's preferred method seems to be to leave the companies guessing, then to call up occasionally with angry demands that a Web page be taken down in 24 hours. "It's the panopticon," says James Mulvenon, a China specialist who is the head of a Washington policy group called

the Center for Intelligence Research and Analysis. "There's a randomness to their enforcement, and that creates a sense that they're looking at everything."

The government's filtering, while comprehensive, is not total. One day a banned site might temporarily be visible, if the routers are overloaded — or if the government suddenly decides to tolerate it. The next day the site might disappear again. Generally, everyday Internet users react with caution. They rarely push the government's limits. There are lines that cannot be crossed, and without actually talking about it much, everyone who lives and breathes Chinese culture understands more or less where those lines are. This is precisely what makes the environment so bewildering to American Internet companies. What's allowed? What's not allowed?

In contrast to the confusion most Americans experience, Chinese businessmen would often just laugh when I asked whether the government's censorship regime was hard to navigate. "I'll tell you this, it's not more hard than dealing with Sarbanes and Oxley," said Xin Ye, a founding executive of Sohu.com, one of China's biggest Yahoo-like portals. (He was referring to the American law that requires publicly held companies to report in depth on their finances.) Another evening I had drinks in a Shanghai jazz bar with Charles Chao, the president of Sina, the country's biggest news site. When I asked him how often he needs to remove postings from the discussion boards on Sina.com, he said, "It's not often." I asked if that meant once a week, once a month or less often; he demurred. "I don't think I can talk about it," he said. Yet he seemed less annoyed than amused by my line of questioning. "I don't want to call it censorship," he said. "It's like in every country: they have a bias. There are taboos you can't talk about in the U.S., and everyone knows it."

Jack Ma put it more bluntly: "We don't want to annoy the government." Ma is the hyperkinetic C.E.O. of Alibaba, a Chinese e-commerce firm. I met him in November in the lobby of the China World Hotel in Beijing, just after Ma's company had closed one of the biggest deals in Chinese Internet history. Yahoo, whose share of the Chinese search-engine market had fallen (according to one academic survey) to just 2.3 percent, had paid $1 billion to buy 40 percent of Alibaba and had given Ma complete control over all of Yahoo's services in China, hoping he could do a better job with it. From his seat on a plush sofa, Ma explained Alibaba's position on online speech. "Anything that is illegal in China — it's not going to be on our search engine. Something that is really no good, like Falun Gong?" He shook his head in disgust. "No! We are a business! Shareholders want to make money. Shareholders want us to make the customer happy. Meanwhile, we do not have any responsibilities saying we should do this or that political thing. Forget about it!"

A Bit of a Revolution

Last fall, at a Starbucks in Beijing, I met with China's most famous political blogger. Zhao Jing, a dapper, handsome 31-year-old in a gray sweater, seemed positively exuberant as he explained how radically China had changed since the Web arrived in the late 1990's. Before, he said, the party controlled every single piece of media, but then

Chinese began logging onto discussion boards and setting up blogs, and it was as if a bell jar had lifted. Even if you were still too cautious to talk about politics, the mere idea that you could publicly state your opinion about anything — the weather, the local sports scene — felt like a bit of a revolution.

Zhao (who now works in the Beijing bureau of The New York Times) pushed the limits further than most. After college, he took a job as a hotel receptionist in a small city. He figured that if he was lucky, he might one day own his own business. When he went online in 1998, though, he realized that what he really wanted to do was to speak out on political questions. He began writing essays and posting them on discussion boards. Soon after he started his online writing, a newspaper editor offered him a job as a reporter.

"This is what the Internet does," Zhao said, flashing a smile. "One week after I went on the Internet, I had a reputation all over the province. I never thought I could be a writer. But I realized the problem wasn't me — it was my small town." Zhao lost his reporting job in March 2003 after his paper published an essay by a retired official advocating political reform; the government retaliated by shutting the paper down. Still eager to write, in December 2004 Zhao started his blog, hosted on a blogging service with servers in the U.K. His witty pro-free-speech essays, written under the name Michael Anti, were soon drawing thousands of readers a day. Last August, the government used the Great Firewall to block his site so that no one in China could read it; defiant, he switched over to Microsoft's blogging tool, called MSN Spaces. The government was almost certainly still monitoring his work, but remarkably, he continued writing. Zhao knew he was safe, he told me, because he knew where to draw the line.

"If you talk every day online and criticize the government, they don't care," he said. "Because it's just talk. But if you organize — even if it's just three or four people — that's what they crack down on. It's not speech; it's organizing. People say I'm brave, but I'm not." The Internet brought Zhao a certain amount of political influence, yet he seemed less excited about the way his blog might transform the government and more excited about the way it had transformed his sense of himself. Several young Chinese told me the same thing. If the Internet is bringing a revolution to China, it is experienced mostly as one of self-actualization: empowerment in a thousand tiny, everyday ways.

One afternoon I visited with Jiang Jingyi, a 29-year-old Chinese woman who makes her living selling clothes on eBay. When she opened the door to her apartment in a trendy area of Shanghai, I felt as if I'd accidentally stumbled into a chic SoHo boutique. Three long racks full of puffy winter jackets and sweaters dominated the center of the living room, and neat rows of designer running shoes and boots ringed the walls. As she served me tea in a bedroom with four computers stacked on a desk, Jiang told me, through an interpreter, that she used to work as a full-time graphic designer. But she was a shopaholic, she said, and one day decided to take some of the cheap clothes she'd found at a local factory and put them up for auction online. They sold quickly, and she made a 30 percent profit. Over the next three months, she sold more and more clothes, until one one day she realized that her eBay profits were outstripping her weekly paycheck. She

quit her job and began auctioning full time, and now her monthly sales are in excess of 100,000 yuan, or about $12,000.

"My parents can't understand it," she said with a giggle, as she clicked at the computer to show me one of her latest auctions, a winter jacket selling for 300 yuan. (Her description of the jacket translated as "Very trendy! You will look cool!") At the moment, Jiang sells mostly to Chinese in other major cities, since China's rudimentary banking system and the lack of a reliable credit-card network mean there is no easy way to receive payments from outside the country. But when Paypal — eBay's online payment system — finally links the global market with the Chinese market, she says she will become a small international business, marketing cut-rate clothes directly to hipsters in London or Los Angeles.

Compromises and Disclaimers

Google never did figure out exactly why it was knocked offline in 2002 by the Chinese government. The blocking ended abruptly after two weeks, as mysteriously as it had begun. But even after being unblocked, Google still had troubles. The Great Firewall tends to slow down all traffic coming into the country from the world outside. About 15 percent of the time, Google was simply unavailable in China because of data jams. The firewall also began punishing curious minds: whenever someone inside China searched for a banned term, the firewall would often retaliate by sending back a command that tricked the user's computer into believing Google itself had gone dead. For several minutes, the user would be unable to load Google's search page — a digital slap on the wrist, as it were. For Google, these delays and shutdowns were a real problem, because search engines like to boast about delivering results in milliseconds. Baidu, Google's chief Chinese-language rival, had no such problem, because its servers were located on Chinese soil and thus inside the Great Firewall. Worse, Chinese universities had virtually no access to foreign Web sites, which meant that impressionable college students — in other countries, Google's most ardent fans — were flocking instead to Baidu.

Brin and other Google executives realized that the firewall allowed them only two choices, neither of which they relished. If Google remained aloof and continued to run its Chinese site from foreign soil, it would face slowdowns from the firewall and the threat of more arbitrary blockades — and eventually, the loss of market share to Baidu and other Chinese search engines. If it opened up a Chinese office and moved its servers onto Chinese territory, it would no longer have to fight to get past the firewall, and its service would speed up. But then Google would be subject to China's self-censorship laws.

What eventually drove Google into China was a carrot and a stick. Baidu was the stick: by 2005, it had thoroughly whomped its competition, amassing nearly half of the Chinese search market, while Google's market share remained stuck at 27 percent. The carrot was Google's halcyon concept of itself, the belief that merely by improving access to information in an authoritarian country, it would be doing good. Certainly, the company's officials figured, it could do better than the local Chinese firms, which acquiesce to the censorship regime with a shrug. Sure, Google would have to censor the most politically

sensitive Web sites — religious groups, democracy groups, memorials of the Tiananmen Square massacre — along with pornography. But that was only a tiny percentage of what Chinese users search for on Google. Google could still improve Chinese citizens' ability to learn about AIDS, environmental problems, avian flu, world markets. Revenue, Brin told me, wasn't a big part of the equation. He said he thought it would be years before Google would make much if any profit in China. In fact, he argued, going into China "wasn't as much a business decision as a decision about getting people information. And we decided in the end that we should make this compromise."

He and his executives began discussing exactly which compromises they could tolerate. They decided that — unlike Yahoo and Microsoft — they would not offer e-mail or blogging services inside China, since that could put them in a position of being forced to censor blog postings or hand over dissidents' personal information to the secret police. They also decided they would not take down the existing, unfiltered Chinese-language version of the google.com engine. In essence, they would offer two search engines in Chinese. Chinese surfers could still access the old google.com; it would produce uncensored search results, though controversial links would still lead to dead ends, and the site would be slowed down and occasionally blocked entirely by the firewall. The new option would be google.cn, where the results would be censored by Google — but would arrive quickly, reliably and unhindered by the firewall.

Brin and his team decided that if they were going to be forced to censor the results for a search for "Tiananmen Square," then they would put a disclaimer at the top of the search results on google.cn explaining that information had been removed in accordance with Chinese law. When Chinese users search for forbidden terms, Brin said, "they can notice what's missing, or at least notice the local control." It is precisely the solution you'd expect from a computer scientist: the absence of information is a type of information. (Google displays similar disclaimers in France and Germany, where they strip out links to pro-Nazi Web sites.)

Brin's team had one more challenge to confront: how to determine which sites to block? The Chinese government wouldn't give them a list. So Google's engineers hit on a high-tech solution. They set up a computer inside China and programmed it to try to access Web sites outside the country, one after another. If a site was blocked by the firewall, it meant the government regarded it as illicit — so it became part of Google's blacklist.

The Google executives signed their license to become a Chinese Internet service in December 2005. They never formally sat down with government officials and received permission to put the disclaimer on censored search results. They simply decided to do it — and waited to see how the government would react.

The China Storm

Google.cn formally opened on Jan. 27 this year, and human-rights activists immediately logged onto the new engine to see how it worked. The censorship was indeed comprehensive: the first page of results for "Falun Gong," they discovered, consisted

solely of anti-Falun Gong sites. Google's image-searching engine — which hunts for pictures — produced equally skewed results. A query for "Tiananmen Square" omitted many iconic photos of the protest and the crackdown. Instead, it produced tourism pictures of the square lighted up at night and happy Chinese couples posing before it.

Google's timing could not have been worse. Google.cn was introduced into a political environment that was rapidly souring for American high-tech firms in China. Last September, Reporters Without Borders revealed that in 2004, Yahoo handed over an e-mail user's personal information to the Chinese government. The user, a business journalist named Shi Tao, had used his Chinese Yahoo account to leak details of a government document on press restrictions to a pro-democracy Web site run by Chinese exiles in New York. The government sentenced him to 10 years in prison. Then in December, Microsoft obeyed a government request to delete the writings of Zhao Jing — the free-speech blogger I'd met with in the fall. What was most remarkable about this was that Microsoft's blogging service has no servers located in China; the company effectively allowed China's censors to reach across the ocean and erase data stored on American territory.

Against this backdrop, the Google executives probably expected to appear comparatively responsible and ethical. But instead, as the China storm swirled around Silicon Valley in February, Google bore the brunt of it. At the Congressional hearings where the three companies testified — along with Cisco, makers of hardware used in the Great Firewall — legislators assailed all the firms, but ripped into Google with particular fire. They asked how a company with the slogan "Don't Be Evil" could conspire with China's censors. "That makes you a functionary of the Chinese government," said Jim Leach, an Iowa Republican. "So if this Congress wanted to learn how to censor, we'd go to you."

Zhao Jing's Rankings

In February, I met with Zhao Jing again, two months after his pro-democracy blog was erased by Microsoft. We ordered drinks at a faux-Irish pub in downtown Beijing. Zhao was still as energetic as ever, though he also seemed a bit rueful over his exuberant comments in our last conversation. "I'm more cynical now," he said. His blog had been killed because of a single post. In December, a Chinese newspaper editor was fired, and Zhao called for a boycott of the paper. That apparently crossed the line. It was more than just talk; Zhao had now called for a political action. The government contacted Microsoft to demand the blog be shuttered, and the company complied — earning it a chorus of outrage from free-speech advocates in the United States, who accused Microsoft of having acted without even receiving a formal legal request from the Chinese government.

Microsoft seemed chastened by the public uproar; at the Congressional hearings, the company's director of government relations expressed regret. To try to save face, Microsoft executives pointed out that they had saved a copy of the deleted blog postings and sent them to Zhao. What they did not mention, Zhao told me, is that they refused to e-mail Zhao the postings; they offered merely to burn them onto a CD and mail them to any address in the United States Zhao requested. Microsoft appeared to be so afraid of the

Chinese government, Zhao noted with a bitter laugh, that the company would not even send the banned material into China by mail. (Microsoft declined to comment for this article.)

I expected Zhao to be much angrier with the American Internet companies than he was. He was surprisingly philosophical. He ranked the companies in order of ethics, ticking them off with his fingers. Google, he said, was at the top of the pile. It was genuinely improving the quality of Chinese information and trying to do its best within a bad system. Microsoft came next; Zhao was obviously unhappy with its decision, but he said that it had produced such an easy-to-use blogging tool that, on balance, Microsoft was helping Chinese people to speak publicly. Yahoo came last, and Zhao had nothing but venom for the company.

"Google has struck a compromise," he said, and compromises are sometimes necessary. Yahoo's behavior, he added, put it in a different category: "Yahoo is a sellout. Chinese people hate Yahoo." The difference, Zhao said, was that Yahoo had put individual dissidents in serious danger and done so apparently without thinking much about the human damage. (Yahoo did not respond to requests for comment.) Google, by contrast, had avoided introducing any service that could get someone jailed. It was censoring information, but Zhao considered that a sin of omission, rather than of commission.

The Distorted Universe

Zhao's moral calculus was striking, not least because it is so foreign to American ways of thinking. For most Americans, or certainly for most of those who think and write about China, there are no half-measures in democracy or free speech. A country either fully embraces these principles, or it disappears down the slippery slope of totalitarianism. But China's bloggers and Internet users have already lived at the bottom of the slippery slope. From their perspective, the Internet — as filtered as it is — has already changed Chinese society profoundly. For the younger generation, especially, it has turned public speech into a daily act. This, ultimately, is the perspective that Google has adopted, too. And it raises an interesting question: Can an imperfect Internet help change a society for the better?

One Internet executive I spoke to summed up the conundrum of China's Internet as the "distorted universe" problem. What happens to people's worldviews when they do a Google search for Falun Gong and almost exclusively find sites opposed to it, as would happen today on google.cn? Perhaps they would trust Google's authority and assume there is nothing to be found. This is the fear of Christopher Smith, the Republican representative who convened the recent Congressional hearings. "When Google sends you to a Chinese propaganda source on a sensitive subject, it's got the imprimatur of Google," he told me recently. "And that influences the next generation — they think, Maybe we can live with this dictatorship. Without your Lech Walesas, you never get democracy." For Smith, Google's logic is the logic of appeasement. Like the companies that sought to "engage" with apartheid South Africa, Google's executives are too dedicated to profits ever to push for serious political change. (Earlier this month,

Google's C.E.O., Eric Schmidt, visited Kai-Fu Lee in Beijing and told journalists that it would be "arrogant" of Google to try to change China's censorship laws.)

But perhaps the distorted universe is less of a problem in China, because — as many Chinese citizens told me — the Chinese people long ago learned to read past the distortions of Communist propaganda and media control. Guo Liang, the professor at the Chinese social sciences academy, told me about one revealing encounter. "These guys at Harvard did a study of the Chinese Internet," Guo said. "I talked to them and asked, 'What were your results?' They said, 'We think the Chinese government tries to control the Internet.' I just laughed. I said, 'We know that!' " Google's filtering of its results was not controversial for Guo because it was nothing new.

Andrew Lih, the Chinese-American professor at the University of Hong Kong, said that many in China take a long-term perspective. "Chinese people have a 5,000-year view of history," he said. "You ban a Web site, and they're like: 'Oh, give it time. It'll come back.' " Or consider the position of a group of Chinese Internet geeks trying to get access to Wikipedia, the massive free online encyclopedia where anyone can write an entry. Currently, all of wikipedia.com is blocked; the group is trying to convince Wikipedia's overseers to agree to the creation of a sanitized Chinese version with the potentially illegal entries removed. They argue that this would leave 99.9 percent of Wikipedia intact, and if that material were freely available in China, they say, it would be a great boon for China, particularly for underfinanced and isolated schools. (So far, Wikipedia has said it will not allow the creation of a censored version of the encyclopedia.)

Given how flexible computer code is, there are plenty of ways to distort the universe — to make its omissions more or less visible. At one point while developing google.cn, Google considered blocking all sites that refer to controversial topics. A search for Falun Gong in China would produce no sites in favor of it, but no sites opposing it either. What sort of effect would that have had? Remember too that when Google introduced its censored google.cn engine, it also left its original google.com Chinese-language engine online. Which means that any Chinese citizen can sit in a Net cafe, plug "Tiananmen Square" into each version of the search engine and then compare the different results — a trick that makes the blacklist somewhat visible. Critics have suggested that Google should go even further and actually publish its blacklist online in the United States, making its act of censorship entirely transparent.

The Super Girl Theory

When I spoke to Kai-Fu Lee in Google's Beijing offices, there were moments that to me felt jarring. One minute he sounded like a freedom-loving Googler, arguing that the Internet inherently empowers its users. But the next minute he sounded more like Jack Ma of Alibaba — insisting that the Chinese have no interest in rocking the boat. It is a circular logic I encountered again and again while talking to China's Internet executives: we don't feel bad about filtering political results because our users aren't looking for that stuff anyway.

They may be right about their users' behavior. But you could just as easily argue that their users are incurious because they're cowed. Who would openly search for illegal content in a public Internet cafe — or even at home, since the government requires that every person with personal Internet access register his name and phone number with the government for tracking purposes? It is also possible that the government's crackdown on the Internet could become more intense if the country's huge population of poor farmers begins agitating online. The government is reasonably tolerant of well-educated professionals online. But the farmers, upset about corrupt local officials, are serious activists, and they pose a real threat to Beijing; they staged 70,000 demonstrations in 2004, many of which the government violently suppressed.

In the eyes of critics, Google is lying to itself about the desires of Chinese Internet users and collaborating with the Communist Party merely to secure a profitable market. To take Lee at his word is to take a leap of faith: that the Internet, simply through its own inherent properties, will slowly chip away at the government's ability to control speech, seeding a cultural change that strongly favors democracy. In this view, there will be no "great man" revolution in China, no Lech Walesa rallying his oppressed countrymen. Instead, the freedom fighters will be a half-billion mostly apolitical young Chinese, blogging and chatting about their dates, their favorite bands, video games — an entire generation that is growing up with public speech as a regular habit.

At one point in our conversation, Lee talked about the "Super Girl" competition televised in China last year, the country's analogue to "American Idol." Much like the American version of the show, it featured young women belting out covers of mainstream Western pop songs amid a blizzard of corporate branding. (The full title of the show was "Mongolian Cow Sour Yogurt Super Girl Contest," in honor of its sponsor.) In each round, viewers could vote for their favorite competitor via text message from their mobile phones. As the season ran its course, it began to resemble a presidential election campaign, with delirious fans setting up Web sites urging voters to pick their favorite singer. In the final episode, eight million young Chinese used their mobile phones to vote; the winner was Li Yuchun, a 21-year-old who dressed like a schoolgirl and sang "Zombie," by the Irish band the Cranberries.

"If you think about a practice for democracy, this is it," Lee said. "People voted for Super Girls. They loved it — they went out and campaigned." It may not be a revolution, in other words, but it might be a start.

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