The Great Net of China
Information Technology and Governance in China

In early August 2000, the Ministry of State Security in the People’s Republic of China shut down the web site of the New Culture Forum. Government officials accused the Forum of posting “counter-revolutionary content,” while wire reports noted that this was the Chinese government’s latest effort to contain the spread of political dissidence and pornography on the Internet. A few days later, the People’s Daily in Beijing issued a call to arms against enemy forces at home and abroad that use the Internet as a “battlefront to infiltrate” China.

The confrontation between the Chinese party-state and dissidents on the web underscores the uneasy relationship between China’s political monopoly and the rise of new information technologies. Governments in many countries, including the United States and China, have had to strengthen their ability to deal with new types of crimes in the Internet age. Yet, unlike the US government, the Chinese security apparatus has also expended vast resources to contain dissent on the Internet. Already the Chinese state’s continuing efforts to rein in the Internet has earned China the dubious distinction, according to the Paris-based Reporters Sans Frontiers, of being one of the 20 enemies of the Internet in 1999.

While the Western media focused on the arrests of the Internet-based dissidents in China, Netease.com, one of the largest Chinese web portals hosting numerous online communities, began a nationwide television advertising campaign with the message “Power to the People.” Netease Company officials launched the campaign saying that they believed that the Internet empowers its users through meaningful information sharing and exchange. Using shots of scenic wonders throughout China, the Netease campaign focused on the theme of bringing the people of China and the world together through the Internet. Netease thus joins numerous other companies such as the government-owned telecommunication upstart China Unicom in highlighting the revolutionary implications of new technologies. Netease’s success also seems to support academics who contend that in the struggle for online power between the state and dissident groups, the new media appears to be uncontrollable in spite of the government’s powerful measures. As China joins the World Trade Organization (WTO), this argument suggests that the Chinese government will find it even harder to unilaterally address the challenges of the global communications revolution.

Is the Chinese government stifling the Internet revolution in China? Or, is the Internet really uncontrollable and subversive to the extent that it will ultimately undermine China’s political monopoly? This dichotomy, however, misses the point. Political organizations, including modern states, have had to adapt to new technologies throughout history. History is littered with countries that failed to stay in this race. In the case of the Internet, however, the current Chinese leadership clearly understands the web’s transformative power. As President Jiang Zemin noted recently in his address to the World Computer Congress in August

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2000, "virtual reality is profoundly changing the way people produce, learn and live," creating "a borderless information space around the world." Jiang's view is that China must vigorously promote the development of information technology. Clearly, though, there are limits to this enthusiasm.

Yet, precisely because the current political oligarchy recognizes the revolutionary nature of the Internet and other information technologies, it is loudly promoting technological development while cracking down on dissent. The Chinese government has advocated the establishment of an international Internet pact to regulate the net to emphasize information safety and harness its productive capacity. In a further ironic twist, while the state machinery stifles dissent—which has received the bulk of western media attention—it has also responded to the popularity of the net by improving governance as well as the competitiveness of the official media.

**Telecommunication Boom**

By the late 1990s, it was widely recognized in China that more competition was needed in the telecommunications industry to improve services and lower prices. For Premier Zhu Rongji and his administration, the telecom industry is not simply a source of government revenue but rather a crucial infrastructure for sustaining China's economic development. By reducing the exorbitant prices of the telecom and other network-related industries, the government sought to lower costs for businesses and make China's economy more competitive.

The Zhu administration began by leveling the playing field for telecom operators. As part of the 1998 government restructuring program, the Ministry of Posts and Telecommunications (MPT) and the Ministry of Electronics were merged to form a single Ministry of Information Industry, which controlled both China Telecom and China Unicom. Moreover, the Zhu administration has worked hard to create more competition. By 2000, China Telecom was broken up into separate companies for fixed telecommunications (China Telecom), mobile communications (China Mobile), paging (transferred to Unicom) and satellite communications. Additional players, such as China Netcom, have also been established.

The efforts to invest and to create competition have stimulated consumer demand. By summer 2000, China had more than 120 million fixed-line subscribers. It also boasted more than 60 million cellular customers—the second most in the world. Prices have also come down for all types of services, including online access.

**Critical Mass**

Though China was a latecomer to the Internet, once the Chinese leaders became convinced of its significance, they began to play critical roles in unleashing its potential. Besides promoting the construction of telecom infrastructure and introducing competition to reduce costs and improve services for customers, they also served as a catalyst by launching the Government Online Project (www.gov.cn). It is useful to recall the importance of externalities of the Internet network. If there are many sites and many users, then the benefits accrued from a new user going online are much higher than if the user is one
of the first to go online; the earliest users can only go to few sites and have few others to communicate with. This is the classic chicken and egg problem that the telephone industry was confronted with decades earlier. Companies, particularly China's under-performing state-owned firms, would not find it very attractive to invest a great deal in setting up a website if there were few users; likewise, few people would want to go online (particularly considering China's high telephone costs and China Telecom's bad services) to visit only a few sites. The situation is exacerbated by the fact that the Chinese government blocked users' access to various international sites that the government deemed politically or morally unacceptable.

Given these considerations, how could China quickly gain the critical mass of web sites and users to truly participate in the Internet revolution? To solve this problem, the Chinese government launched a campaign to put government agencies online. In January 1999, China Telecom and the Information Center of the State Economic and Trade Commission, with 40 government ministries and agencies, initiated the Government Online Project to bring government agencies to the Internet.

By the end of 1999, most government departments, including most provincial and municipal governments, had established some sort of online presence. On May 17, 1998 only 145 domain names were registered under gov.cn; a year later the number had risen to 1,470. Moreover, a site catering to cities, www.govonline.net.cn, was launched at the end of 1999.

Most government web sites are far from the ideals of e-government. Many offer information on the agency functions and provide the organizational chart and contact information. Some of the better sites, especially those hosted by central government agencies and some local governments along the coast, offer a wealth of archived data and information and provide regular updates. Nevertheless, these sites essentially fulfill a broadcast function.

Yet dramatic changes have occurred in some areas, including the People's Bank of China's payments system. The Customs Administration, the State Administration of Industry and Commerce, the State Tourism Bureau, the Ministry of Foreign Trade and Economic Cooperation, the State Administration of Taxation, and other agencies have all set up online systems for processing customs forms, booking hotels, and applying for import and export quotas. The Ministry of Foreign Trade and Economic Cooperation and the State Administration of Internal Trade have set up sites to facilitate e-commerce. By 2000, the State Administration of Internal Trade as well as various local governments, including Shanghai, Henan, Jilin, Sichuan, and various smaller cities, had set up web sites dedicated to government procurements. It was also a pleasant surprise to find that the Beijing Military Region had set up a well-functioning web site called the Military Government Procurement Management System to handle its purchases of office equipment and other items. By publicizing this information, as well as accepting bids on the Internet, these web sites help improve both the efficiency and transparency of the government-procurement process. The proliferation of these service-oriented government web sites has served to catalyze Internet growth in China. As government agencies make more information and services available on the Internet, firms and individuals that interact with them, whether they go through customs or bid for government procurement contracts, would do well to have Internet access.

Nevertheless, the Government Online Project is only the first part of the government's multi-pronged Internet strategy. On July 7, 2000, China Telecom and the SETC Economic Information Center jointly launched the Enterprise Online Project in order to speed up the transformation of Chinese industry. In association with industry associations and enterprise groups, the Enterprise Online Project hopes to bring 100 large firms, 10,000 medium-sized firms, and one million small firms online in 2000. To achieve this goal, China Telecom has launched various services, including reduced service fees and assistance with e-commerce. In the meantime, prices for Internet access have come down to attract individual customers. Emulating America Online and other service providers abroad, China Telecom this year has given away 10 million software packages for Internet access. It has also promised one million users free training and free activation. By the end of August 2000, China Telecom's data service customers exceeded 10 million.

Precisely because the current political oligarchy recognizes the revolutionary nature of the Internet and other information technologies, it is loudly promoting technological development while cracking down on dissent.
These activities have helped sustain the rapidly growing number of Internet customers. By mid-2000, the number of Internet users had grown to an estimated 17 million, according to the China National Network Information Center (CNNIC). Most importantly, the state sector has ceased to be the main engine of Internet growth in China. According to the China Data Network Service, China's top international domain name service provider, Chinese institutions added nearly twice as many internationally registered domain names in the second quarter of 2000 as in the first, bringing the total to 477,900. Non-government players led the new growth. Beijing (with 14.3 percent of domain names), the political center, fell behind economic powerhouse Guangdong (19.3 percent). When it comes to the Internet in China, economics has taken the lead over politics.

Web Expression

When it comes to content, the Internet has clearly made it easier for political dissidents as well as various civil groups to communicate with each other and for non-dissidents who grumble about the government to blow off steam on issues such as corruption. For the politically silent majority, however, the Internet is the place for e-mail, information, entertainment, chat rooms, love connections, online games, and the downloading of software and music.

The most visible aspect of the Internet's development in China, however, has been its potentially subversive role for China's political monopoly. The governing elite is keenly aware of this potential. Several years before the Chinese government embraced the Internet revolution, I was told by a leading adviser to the Party establishment that the technological nature of the Internet meant that there was no way the Party-state could have total control over activities conducted via the Internet. Dissidents based overseas have made extensive use of the Internet to disseminate information or to debate political issues. Perhaps the most visible group has been the quasi-religious Falun Gong, which the Chinese government banned as a cult in 1999. Though Falun Gong relied on phones and pagers to organize its protest activities in China, since the ban it has relied on its web presence to disseminate messages and rally followers.

Fearing that the net may become the instrument for the anti-regime forces to organize and mount a genuine challenge to the ruling elite, the Chinese party-state has attempted to block undesirable web sites as well as to constrain the release of information on China-based Internet content providers. Occasionally, the Chinese government has deliberately slowed down Internet traffic on its international routes, though this will become more difficult to accomplish as the bandwidth for international connections expands exponentially.

Even while the government has worked hard to constrain the availability of freewheeling content in China, government-owned media outlets have had to adapt to the Internet age. On the one hand, the Internet allows gossip, rumors, news and views to circulate much faster than before. Sometimes these preempt the government while at other times they constrain the leadership's hands. In the former category was the suicide of Li Fuxiang, the head of the State Administration of Foreign Exchange. First circulated in Internet chat rooms, news of Li’s suicide prompted the government to respond for fear that the rumors would mul-
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tightly uncontrollably. In the latter category are Chinese demonstrations with respect to the atrocities against ethnic Chinese in Indonesia or the US bombing of the Chinese Embassy in Belgrade. Here the net as well as other forms of media became a handmaiden to outpourings of nationalism. "Netizens" used the Internet to disseminate information and organize political action in support of nationalist claims that the Chinese leadership, whose own legitimacy depends increasingly on such claims, has found difficult to contain.

On the other hand, government officials realize that state media risks losing its audience and relevance to the proliferation of web sites. Such recognition has led the Chinese state to redouble its efforts to reach the people via the Internet. The People's Liberation Army, for instance, has developed its own intranet for soldiers to give troops access to online libraries, lectures, mail, and even movies. In recent months, the government has poured a significant amount of funds into seven of its flagship news organizations, including the Xinhua News Agency, People's Daily, and the English-language China Daily (all can be accessed at www.chinaguide.org). These and other news organizations have remade their web sites to make them richer and livelier. For instance, most major web portals in China, led by the People's Daily, include special buttons and extensive coverage on corruption. Indeed, the China Procurator Daily (www.jcrb.com.cn), the newspaper of the national procurator's office, has set up a web site dedicated to anti-corruption (www.anticorruption.com.cn).

The new investments came after these web sites experienced the fruits of online forums and chat rooms. In the aftermath of the bombing of the Chinese Embassy in Belgrade, these forums and chat-rooms, such as the People's Daily's Qiangguo Forum, became important institutions in their own right, helping foster new communities in China and abroad. Interestingly, the censors have adapted to the new age of the Internet. While all chat rooms and forums warn users to adhere to certain norms of restraint, Internet censors have been more tolerant than their counterparts in print and television. Moreover, the online communities have allowed various social interests ranging from environmentalists to AIDS activists to express their opinions. In short, while it would be naive to believe that the Internet would liberate China from the dictates of one-party rule, the Internet has indeed expanded the realm of expression in China.

Improving Transparency...

One only needs to go to www.gov.cn to appreciate the pervasive importance of the Internet for ordinary Chinese. Whereas 20 years ago government agencies kept their phone numbers from the public, today a wealth of information regarding government agencies is available online. The Internet has become a major instrument for China's drive toward greater transparency of government operations. For instance, during the annual session of the Beijing Municipal People's Congress, Beijing residents sent e-mail to the MPC's mail box. Some delegates used chat rooms set up at the Beijing government web site to solicit comments and proposals. State organizations including the Supreme People's Court have also set up web sites devoted to consumer rights and all types of legal knowledge complete with compilations of court verdicts and instructions for filing legal cases.

Most importantly, reformers of government administration have now made the Internet an integral part of government reforms. For example, in
mid-2000, the Guangdong provincial Public Security Bureau launched a campaign to improve its image through transparency. On the Bureau's web site (www.gdga.gov.cn), one can find answers to common questions regarding household registration and immigration as well as key documents on a host of topics. It also provides details about the power and responsibility of the police as well as cases showing how the public may complain about and appeal against illegal police acts and seek state compensation. Local bureaus have made major efforts to provide interactive features for users. At the police department web site of Guangzhou municipality, users can only find a wealth of information about various procedures but also check on the status of cases filed with the police and the results of applications for household registration and traffic violations. The local web sites in Guangzhou and other cities have also made a major effort to answer e-mail questions from users. Such initiatives have drawn the public and the police closer together and have helped to sharply reduce public complaints.

To be sure, Guangdong is one of China's more developed provinces, but the experiences of Guangdong and other areas point to the changes that have been made possible by new technologies. Similar developments have also happened vertically. As Wang Zhongju, Director-General of the State Administration of Industry and Commerce noted, the use of new information technologies can improve the uniformity of administrative services and curb the influence of personal connections in the issuing of business licenses. In fact, the Internet has become an important new weapon in China's arduous fight against corruption. Web sites maintained by the Supreme People's Procuratorate as well as local procurators' offices allow informants to report on corruption and other crimes. In Shanghai the procurators' office in the Pudong New District have been able to use leads submitted via e-mail to uncover a number of bribery cases.

...and Governance

The Internet is also playing a fundamental role in improving the Chinese state's capacity to govern. The police have access to a nationwide network and have used it to track down a large number of criminals. The National Statistics Bureau is introducing a computer system to directly collect data from firms in order to reduce distortion by local officials. In some cases, such as in the districts of Beijing, efforts are being made to connect community service centers to form a community network system of the city, district, neighborhood, and family.

The most powerful illustration of the application of new technologies in preventing corruption and fraud has occurred in combating foreign-exchange fraud. Under China's foreign-exchange management system, the banks offer foreign exchange to traders with their Customs declaration forms. Unfortunately, smugglers and others used forged Customs declarations to obtain foreign exchange from banks, undermining the government's efforts to strengthen its foreign exchange reserves. Repeated efforts by the Customs Administration to produce anti-forgery tags and seals were easily defeated by forgers. Because of poor communication between the Customs Offices and the Banks, criminals could easily trick banking staff into accepting the forged documents.

Amid the Asian financial crisis, the General Administration of Customs, the State Administration of Foreign Exchange, the Bank of China, and the Ministry of Information Industry jointly began the construction of a network to enable customs offices and the banks to examine foreign exchange declaration forms on the same platform. After a period of trial operations, the network was formally launched for foreign exchange administrations and banks nationwide in January 1999. With this computer network, bank staff can verify customs declaration forms submitted by traders against those provided by the Customs Administration online. Chinese reports suggest that the adoption of this computer network effectively curbed the use of forged customs declaration forms to obtain foreign exchange and has played a major role in boosting China's foreign reserves.

The success of the fight against foreign-exchange fraud has inspired growing demand for new technologies. Speaking at a seminar in early September 2000, Premier Zhu Rongji urged all levels of government to promote the digitalization of administrative management. He called for strengthening of customs and tax projects involving the Internet and for computer networking among government agencies to improve information sharing.

In spite of lingering misgivings about new information technologies, the Chinese state has helped promote telecom infrastructure development and catalyze the growth of the Internet. To be sure, the Chinese government has put the brakes on certain aspects of Internet growth. Yet, the net and other information technologies have become an essential part of China's governance reforms. The political dissident Harry Wu may be right in asserting that by harnessing the Internet and other technologies to improve the efficiency and transparency of government and fight corruption, the Communist Party may be able to use new technologies to stay in power. But, at the same time, the Chinese state is also changing with the technologies, making it more transparent and accountable to the public.