THE INTERNET AND INFORMATION CONTROL: THE CASE OF CHINA

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Introduction

Computer-mediated communication (CMC) is ushering in a new era in the history of mass communication in terms of information and culture transmission across formerly closed or restricted national borders. As more and more countries link their computer networks to the Internet, CMC is quickly expanding both the international and domestic public spheres, through which, according to Habermas (1979), the dissident view is registered, public opinion is formed and eventually rational choice and/or agreement can be made among private individuals.

Although the corporate and technocratic promises of Computopia — societies based on the full potential of human creativity and participatory democracies — are debatable (Wasko and Mosco 1992), advantages of these technologies in breaking through traditional controls of information are apparent. Just as the invention of printing technology made mass communication more of a reality and led to intensified efforts by authoritarian rulers to control information, the development of the worldwide computer networks today poses new challenges to governments in exercising control over the dissemination of information.

It is true that CMC has yet to turn itself into a new form of public sphere, considering its difficulty to meet the requirement that all citizens be allowed to participate with low entry cost and with equal access to information (Habermas 1979). Its potential in expanding the existing public sphere by giving greater freedom to the public in breaking through state domination of and market pressures on mass communication to air and access dissident views should not be underestimated. As Sussman (1989) noted, the nature of the new informa-

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tion technologies entails pluralism, diversity and two-way interaction and thus reduces the potential for monolithic, centralised information control and direct or self-imposed censorship. If "democratic communications are the basis of any democratic culture and political system" (Splichal 1993, 3), we should also expect changes in communications brought about by new technologies to affect a country's culture and political systems.

As the history of mass communication has shown, the most fundamental conflict in communication often takes place between the outlook of the established authorities (responsible for maintaining the current order) and media demands for unrestricted freedom of expression (McQuail 1992). The history of mass communication, in this sense, has evolved around conflicts between the government and media. New communication technologies, providing greater public space and new ways to break through information controls, often lead to new rounds of conflict. Thus, new technologies often play a vital role in readjusting the balance between the established authorities on the one hand and the public and media on the other.

Along the line of such an argument, this study examined the potential impact of CMC on government controls of information in China — one of the few remaining communist countries in the world — where the authorities still want to decide what their people should say and hear by keeping a rigid control over the mass media.

Although "the economic and technological revolution promoted by Deng Xiaoping since 1978 has stripped away much of the ideological prison in which the Chinese had lived for three decades" (***New York Times***, January 4, 1994), the Chinese Communist Party and government have never considered giving up their ideological control over the Chinese people. Although leaders of China today are more willing to relax their control for the sake of the country's economic development, they nevertheless are determined not to "sacrifice spiritual civilisation in order to realise and develop the socialist market economy" (***Straits Times***, April 13, 1994).

With this in mind, the authors of this paper explored the impact of CMC on the Chinese government's policy towards both the internal and external communications of its people. Specifically, it examined the following: (1) the current development of CMC in China; (2) challenges posed by the new media technologies to government information control; (3) the current policy of the Chinese government towards online communication and its implications.

CMC Development in China

Computer networks have had a relatively short but momentous history of development, which can be traced to ARPANET, founded in the United States in 1969 to connect universities, the military and defence contractors. Most people date the true arrival of the Internet at 1983 (Gilster 1993), when the National Science Foundation began a networking program to link its six supercomputer centres to the scientific community with TCP/IP (Transmission Control Protocol/Internet Protocol). This marked the start of what we know today as the Internet, which is actually "an internetwork of many networks all running the TCP/IP protocol suite [...] connected through gateways and sharing common names and address spaces" (Quarterman 1990).

The pace of the Internet's growth in the 1990s is spectacular, spreading faster than both cellular phones and fax machines (Sterling 1993). In June 1991, there were only

130,000 people using the Internet, but the number soon rose to over 8 million in May 1993 and is expected to exceed 100 million in 1998 (***InfoWorld***, May 24, 1993). In early 1995, there were about 33 million Internet users in more than 100 countries (***Newsweek***, Feb. 27, 1995).

The advantages of having a country connected to the Internet are obvious. Scientific, financial, business, industrial, military, political and cultural information will all be within easy reach. As the world enters into the Information Age, it has become more and more evident that information is power, whether in political, military or economic terms. Therefore, it is not surprising that China, which has been engaged in unprecedented efforts to overhaul the national economy, is so anxious to upgrade its infrastructure for information exchange. As Chinese Minister of Posts and Telecommunications Wu Jichuan noted, information exchange is as important to development as the rule of law when China tries to leapfrog its way out of technological backwardness (***Straits Times***, Dec. 5, 1994b).

China's computer information industry is currently averaging an increase of 28 per cent annually, worth 20 billion US dollars at the end of this century. To date, more than two million computers are being used in offices, management enterprises as well as families all over China; more than 800 databanks have been set up; and there are well over 60,000 enterprises in the information industry (Xinhua, August 11, 1995). According to a report released by Microsoft Corp., China is already the seventh largest personal computer market in the world and it is estimated that it would overtake France in 1996 (***South China Morning Post***, Dec. 24, 1995).

China, as a large nation, appeared rather late on the Internet map for technical reasons. Although some Chinese computer networks established e-mail links to the Internet as early as the late 1980s, computer centres in the country remained internationally isolated until 1994 when several major computer networks began to establish direct links with the Internet. In May 1994, IHEP, a computer network run by the Institute of High Energy Physics of the Chinese Academy of Sciences (CAS) was connected to the Internet through a 64K bps line leased from AT&T (***CINET-L Newsletter***, May 20, 1994). Then in July 1994, IHEP changed its satellite link to submarine link via KEK, the National Laboratory for High Energy Physics in Tsukuba, Japan, to Esnet in the United States (***CINET-L Newsletter***, July 31, 1994).

The IHEP link was quickly followed by other links. The NCFC (National Computing & Networking Facilities of China), which began in 1989 as the first high speed network project funded by a grant from China's State Planning Commission and a World Bank loan, was connected to the NSFNET by a 64K bps satellite link via Sprint International router. NCFC, which embraces the CASnet (Chinese Academy of Sciences Net), PUnet (Peking University Net) and TUnet (Tsinghua University Net), also received the country-level domain name ".CN" (***CINET-L Newsletter***, Oct. 30, 1994). Other Chinese computer networks with an Internet link includes BUCT, a network operated by the Beijing University of Chemical Technology; CERNET (China Education and Research Network), a network managed by China's State Education Commission and consisting of ten key universities in China; NJNET, the network of Nanjing which is the first city computer network in China; and ChinaPac and CHINADNN, two government-run commercial networks.

With major Chinese computer networks connected to the Internet, paths are paved for Internet access by end users of lower-level or independent networks throughout

the country. At present, eight Internet providers are in place, including the government-funded ChinaNet; China Internet Corp. (CIC), a commercial enterprise; and the China Education and Research Network (CERNET) (***Information Week***, October 2, 1995). By July 1995, the number of computers in China linked to the Internet stood at 6,000 with about 40,000 users. By the end of 1995, the Internet service were expected to accommodate 10,000 computers and 100,000 users.

In general, China's Internetted computer networks can be classified into three types: academic, educational and commercial. Computer networks for academic purposes are headed by ChinaNet with NCFC as its backbone, which embraces:

- CASnet (Chinese Academy of Science Network),
- PUnet (Peking University Network),
- TUnet (Tsinghua University Network),
- CAnet (Chinese Academic Network),
- CRNet (China Research Network),
- IHEPnet (Institute of High Energy Physics of CAS),
- SSTC (State Science and Technology Commission network),
- CERNet (Chinese Ecosystem Research Network),
- USTCnet (University of Science & Technology of China campus network),
- NFCwan (National Flood Control wide area network),
- MEFnet (China National Research Centre for Marine Environment Forecast),
- BSTISnet (Beijing Science & Technology Information Society),
- IMnet (Institute of Microbiology of CAS),
- Shanghai Regional Network and Wuhan Regional Network[1]

CERNET (China Education and Research Network), which opened its Internet link via NCFC, is China's first nation-wide education and research computer network. The network, which is still under development, will eventually connect all the universities and institutes in China in the near future, as well as secondary and elementary schools and other education and research entities by the end of this century. It currently consists of a national computer network centre, eight regional network centres and a few university campus networks.

In addition to the academic and educational computer networks already in place, the Chinese government also began an ambitious plan for a nation-wide digital data network despite little demand for computer information exchange systems from the public sector at present (Qin 1994). In October 1994, CHINADDN, the country's first nation-wide digital data network was inaugurated. Based on powerful fibre-optic, digital microwave and satellite transmission systems, this commercial network connects 21 municipalities and provincial capitals, serving the securities and banking industries, scientific research institutions and major companies in the country. The first group of users of CHINDAA include the Bank of Communications, the Bank of Construction, the Agricultural Bank of China, the State Foreign Exchange Administration and the State Administration of Taxation. The second phase of the construction of the network is expected to hook up an additional 300 cities in 1995 (AFP, Oct. 24, 1994). In addition to CHINDNN, the China Public Packet Switching Data Network (ChinaPac), whose clients include more than 20 government ministries and commissions and a large number of China's financial and tax units (***South China Morning Post***, Dec. 24, 1995), directly covers 688 cities, with nearly 60,000 terminals. Founded on these two

commercial computer networks, China Internet, an Internet service operated by the China Internet Corp. was officially opened to the public in April 1995, giving the public direct access to the Internet (Xinhua, March 28, 1995). In November 1995, China signed a comprehensive deal with Cisco Systems, a Dallas-based firm, to provide Internet access in all its 30 provinces and regions through ChinaNet (***Apple Daily***, Dec. 12, 1995). It is predicted that the number of individuals with access to the Internet would rise by ten times before the end of 1997 (***Far East Economic Review***, July 27, 1995).

Although only a limited number of China's computer centres are actually linked to the Internet at the moment, a dramatic increase in the number of Chinese users of the Internet could be foreseen thanks to the expansion plans of these nation-wide networks. Of these nation-wide networks, CHINADDN will perhaps see the largest growth since the Chinese government has made it a priority to build eight information projects between 1996 and 2000 covered by the country's Ninth Five-Year Construction Plan (***CINET-L Newsletter***, July 3, 1995). The eight projects include:

- The Golden Bridge Project, a nation-wide public economic information processing network;
- The Golden Customs Project, a foreign trade information sources network;
- The Golden Card Project, an electronic monetary and modern payment system;
- The Golden Taxation Project, an electronic taxation system;
- The Golden Enterprises Projects, an industrial production and circulation information network;
- The Golden Agriculture Project, an agricultural comprehensive management and service information system;
- The Golden Intellectual Project, an educational and scientific research computer network and human resource system;
- The Golden Policy Project, a national economic micro-policy making support system.

Four out of the eight projects mentioned above — the Golden Bridge, Golden Card, Golden Custom and Golden Enterprise — are already under construction. By the end of 1995, the Golden Bridge Project had set up 24 ground satellite stations in 22 provinces and municipalities for networking purpose (***Hong Kong Economic Journal***, Jan. 4, 1996). In addition, the Chinese Ministry of Public Health also started a project to link the country's health administration departments, hospitals and medical education and research institutions. The project, known as Golden Health, was expected to link up 20 large hospitals and help install health card systems by the end of 1995 (Xinhua, May 23, 1995).

New Challenges Posed by CMC

Technologies affect of human life even though their invention may originally target only at changing ways of doing things. This is especially true for information technologies, which often result in changes which are never part of the intention of their inventors. As McQuail (1992) noted:

> *The period from the invention of printing until the mid- seventieth century saw an extensive challenge to, and the fragmentation of, the "communication order"* [...] *During the sixteenth century, printing also became a minor industry and its*

product a significant item of commerce. These activities generate a set of much-contested (thus internally inconsistent) principles and practices concerning communication, especially: individual rights to publish; the rights of self-governing communities of like-minded believers to control the communication of their own membership; tolerance for differences of belief; the licensing of printers and their accountability for the views and opinions which they publish; the commercial tradability of cultural or scientific works; the issue of censorship or other forms of control.

Among things said about the development of new information technologies, there is a popular vision of the average citizen empowered by computer technology, able to communicate honestly and directly, challenging established power and planning political actions that advance democracy (Wasko and Mosco 1992). If Gutenberg's Bible weakened the power of the church by passing the holy script to ordinary people for their own interpretation, connection to the Internet may also open a Pandora's Box for China, where the government relies on information control to maintain its legitimacy and authority.

Ever since the Communist Party came to power in 1949, it has successfully used its control of the mass media as the bottle neck to manipulate information flow in and out of the country. Mass media, tamed by the government through direct control and punishment against erring journalists, see themselves as "eyes, ears and the mouthpiece" of the Communist Party.[2]

Remarkable progress has been made in the freedom of press in China since the start of its modern reforms in 1978. The market forces, the increasing public demand for information access and the Communist Party's promise to have a more open government, have brought about unprecedented changes in the Chinese media. These changes can be demonstrated by the Party's recognition of the media's roles in providing information and entertainment, open discussion of press freedom and the media's supervision of the Party and the government (Chu 1994). Despite all these welcome changes, the question of freedom of information and of the press remains the "Achilles' heel" of the regime's commitment to the Marxist doctrine. Freedom of information and of the press, as Party general secretary Jiang Zemin noted, is merely a slogan used by "bourgeois liberals" to battle against the Party and people (***People's Daily***, March 2, 1990). The Party's determination to continue its information control was clearly stated in a circular issued by its Central Committee: Newspapers and journals of the Party, radio and television broadcasting stations of the state as well as other relevant publications are mouthpiece of the Party and people. They must unconditionally propagate the guidelines, policies and regulations of the Party and government under the leadership of the Party (CPC Central Committee 1987).

The unrest of 1989, which started with student protests, led the Party to reaffirm its control by drafting various policies and regulations against unwanted information and replacing untrustworthy journalists. The renewed fervour for a market economy following Deng Xiaoping's endorsement for further reform in 1992 has forced the Party and government to give more leeway to the media in running their business, but the Party's control of the nation's information flow through monitoring the media, has never been seriously challenged. The media still remain the most important tool for the Party to manipulate public opinion for support. For example, a joint circular issued by the Communist Party Central Committee and the State Council at the

end of 1994 announced a ban on all new printing houses and audio-visual production lines for the next two years, as part of a major crackdown on pornography and political suspect publications (***Straits Times***, Dec. 5, 1994b).

In addition to exercising tight control of the domestic media, the Chinese government also has tried to ensure the ideological purity of its people by cutting them off from any possible contact with undesirable information. For a long time after the Communists took power in China, foreign publications and broadcast programs, except for a limited number approved by the government, were banned in China. At the height of the cultural revolution, people possessing banned publications or listening to "enemy stations," including Radio Moscow and Taiwan radio stations,[3] were prosecuted as counter-revolutionaries. As a result, China was isolated not only politically and economically but also in terms of information access during that period. Although such prosecution has virtually come to a stop since the end of the Cultural Revolution, the government ban against importing foreign publications without its approval and on-and-off interference of hostile foreign broadcast have continued. Overseas publications are imported only for use by foreign diplomats, business people and tourists or for restricted circulation among academics and government officials. Foreign television and radio broadcasts are allowed only in hotels for foreign tourists.[4]

In general, however, the focus on information control has shifted more and more from the liability of Chinese citizens to stay away from foreign publications and broadcast to the responsibility of government to stop the inflow of such publications and broadcast programs. At the same time, the government has shown an increasingly more tolerant attitude in this regard.

With such a background in mind, it is not difficult to see the potential threats the Internet may pose to the Chinese government in information control. What the Chinese netters are able to get over the Internet is more than scientific and financial information. The wide connections enjoyed by the Internet make it an ideal electronic forum for diversified exchange of opinions and information. Numerous newsletters, journals, complete volumes of books, pictures, video and audio records are stored and exchanged over the net. Surfing various World Wide Web sites, one can find virtually anything he wants or does not want.

The Chinese government may have been successful in preventing the Chinese media from publishing or broadcasting anything it considers opposing the Chinese Constitution; harming the socialist system and national security; promoting subversion, rebellion, riots and ethnic animosity; and instigating defiance to the leadership of the Communist Party, but Chinese netters could easily be deluged by such materials once they log onto the Internet. For instance, China's domestic media kept silent when its official news agency Xinhua announced the arrest of Wei Jingsheng, China's No.1 political dissident, only to the overseas media. With access to the Internet, Chinese netters could easily receive the information from ***China News Digest*** or other publications on the Internet, defeating the government's purpose of censorship.

Chinese political dissidents, a large of number of whom were driven out of China by the government to keep the Chinese from hearing from them, have long been trying to influence China's domestic politics, but have so far made little impact on China's politics because of the censoring of information about their activities abroad by the Chinese media. What better means could they have for their propaganda than the Internet? In addition to its own dissidents, the Chinese government will also feel

nervous about letting Chinese netters play audience to various political advocates, ranging from communist- haters and human-rightists to proponents for the independence of Tibet or Taiwan. The pornographic materials available on the Internet will also abort all its efforts against the "yellow" culture.

What is more important is that the interactivity and ease of distribution of CMC via the Internet has blurred the distinction between the receiver and publisher of information. Unlike the traditional mass media, where the gatekeeper decides who can publish, the CMC over the Internet allows all netters the right and power to publish without prior censorship, bringing the practice of free expression and free press to an unprecedented scale. Such a unique feature of CMC may not matter much to countries which believe in a free press, but it will prove to be detrimental to the Chinese government's control over information.

Though experienced in playing the censor, the Chinese government will find it extremely difficult, if not totally impossible, to control what is being exchanged over the Internet because today's new information technologies defy censorship for a number of reasons.[5]

First, unlike its domestic media, the sources of undesirable information are simply beyond the reach of the Chinese government. Most publishers and senders of such information operate in countries which practice an entirely different type of freedom of speech or of the press and are beyond the jurisdiction of the Chinese government.

Second, the development of computer technologies has greatly accelerated the speed of transferring electronic information and diversified its means of delivery. The mobile nature of information on the Internet makes "detrimental" information, as one expert put it, a "moving target" (*CINET-L Newsletter*, April 17, 1995). Even for Chinese netters, the government will find it hard to gather evidence against any involvement in sending or receiving such detrimental information without monitoring all information exchanges, which are too fast and too numerous for careful scrutiny.

Third, new technologies straddle the border between being a mass or interpersonal medium with a convergence on its mail function, information retrieval function, message posting function and broadcasting function. An interpersonal exchange of information could easily result in a massive broadcast. Without a clear distinction made between these two types of communication, law enforcement is impossible without intruding on privacy and other personal rights.

Fourth, in the computer culture magnified by the Internet, maximum freedom is celebrated. The cyberspace culture prescribes free speech and free flow of ideas as the route to social and intellectual progress. The Internet lacks a central controlling body without whose co-operation any attempt of control by the ruler of a single domain are useless. Although managers of the Chinese domain may try censorship by closing the access of its netters to certain sites as the Chinese networks are doing to the majority of newsgroups, this does not prevent users from bypassing the local service provider and accessing such censored information via an overseas service provider through telnet, FTP or Gopher functions.

Fifth, the Internet's fault-proof set up resists censorship. A technical blockup is read by the Internet as "damage," which will be reported as an error and elicit automatic correction. Dynamic re-routing ensures that if one communication link is broken, the traffic can be redirected through other existing links. The Internet, after all, was designed for military use, and the design criteria expect fault tolerance and reli-

ability even after a nuclear attack (***Business Times***, March 27, 1995).

Sixth, the global interconnectivity in the Information Age complicates an individual country's efforts for law enforcement. In general, it is difficult to enforce criminal laws outside of one's country under international law. It would be difficult to pinpoint the origin of offending information. Even if the origin can be identified, it is still difficult to stop the inflow of such information without effective control over the flow of information from the originating country. Corresponding laws and their enforcement need to be in place in the originating country as well in order for the receiving country to carry out law enforcement or extradition arrangements. This means that censorship by an individual country is almost impossible as long as there are no global standards for censorship.

China's Policies and Regulations

Despite all the potential problems the Internet connection would bring to China's political and social systems, the Chinese government is nevertheless determined to link the country to the global computer network. By a rough estimate, China still lags behind the world in advanced electronic techniques by 15 to 20 years (***South China Morning Post***, Oct. 1, 1995). A delay in linking up the country with the global computer network would only further enlarge such a gap.

While eager to link China's computer networks with the Internet, the Chinese government has never wavered in its determination to maintain its control over information and extend its censorship policy to communication over the Internet. As Chinese Minister of Posts and Telecommunication, Wu Jichuan, said "by linking with the Internet, we don't mean absolute freedom of information." He explained that China would adopt "management measures" to make sure that only acceptable information gets through to its people (***South China Morning Post***, Oct. 1, 1995). A participant of the Chinese Ministry of Posts and Telecommunication at a meeting of the Internet Society in Hawaii in June 1995 also revealed that China was planning to block access to objectionable information (Leonard 1995).

Although specific regulations regarding the use of Internet are yet to be announced, existing regulations regarding computer information systems can apply to the Internet services too. The Regulations on Safeguarding Computer Information Systems issued by the Chinese government in February 1994 (Xinhua, Feb. 23, 1994) could be cited as an example. Although the regulations focus on protecting computer information systems and classified information, several provisions can easily be applied to Internet users. Among other things, the regulations provide in Article 7 that "no organisation or individual may use computer information systems to engage in activities that endanger national or collective interests, as well as the legitimate interests of citizens." Such an all-embracing rule can cover all the Chinese netters. In addition, Article 12 stipulates that "individuals who ship, bring, or mail computer information media into or out of the country shall file truthful declarations with the customs authorities." Such a rule will affect all Chinese netters who wish to download electronic publications over the Internet and even those who send or receive personal electronic mail messages, though whether reading such publications over the net should be considered bringing them into the country is debatable. Much will be subject to the deliberation of the authority in charge. What will perhaps prove to be most scary for the Chinese netters is that the regulations put the authority of enforcement of the rules into

the hands of the public security and state security organs, with which no Chinese in their right mind wants to get involved.

Another set of regulations that may affect Chinese netters is that on electronic publications. According to a directive from China's Press and Publications Administration (PPA), electronic publications must be produced by approved publishing houses with an assigned book number, or imported with authorisation by the PPA before they can be distributed, sold, or rented on the market. Starting on April 1, 1995, all new and reprinted electronic publications must bear an assigned standard Chinese book number of six digits. Although these regulations may not directly affect on-line materials yet, the government official who announced the directive was quoted as saying "we will certainly regulate on-line publications in the future" (***CINET-L Newsletter***, March 31, 1995).

Another means for the government to ensure censorship lies in its control over Internet service providers in the same way as it controls the mass media in China. Computer network operators work as censors and gatekeepers in the same way as journalists do by keeping certain information out of the reach of Chinese netters, despite the fact that such censorship could be technically by-passed anyway. The China Internet Corp., China's largest commercial Internet service provider, announced recently that the company's network will bar any "smut, politics or decadent Western culture. By eliminating these things not related to business, we will make better use of the Internet, as resources will be at a lower cost." The government-run ChinaNet is also censoring information that traverses its access lines according to Wu Jichuan, Minister of Post and Telecommunications, who noted that "as a sovereign state, China will exercise control over this information" (***Information Week***, Oct. 2, 1995). In addition, Chinese netters are also warned for "proper use" of the net by service providers. For example, the State Information Centre warns users of its network in the application form that they will be held responsible for inaccurate and illegal information posted on the net (Min 1996). There is enough evidence to show that such tactics do work in China where the Internet surfers are either technically not sophisticated enough to bypass censors or afraid to do so. According to a ***Newsweek*** (Feb. 27, 1995) report, when Washington and Beijing got into a nasty dispute over trade, no one in China logged onto the VOA Internet service for an entire week. The next week, with the trade issue under negotiation, they came back on-line.

Realising the technical impossibility of completely censoring all undesirable information over the Internet, the government also employs the most traditional means of censorship — limiting the public access, by granting such access only to people who not only need to use the Internet for government-approved purposes but are also politically reliable and manageable. When e-mail link was first established between the Internet and China's computer networks, access was granted only to a few hundred of the country's top scientists and researchers. When the Internet becomes more accessible with direct links established between the global computer network and China's various computer systems, priority is given to staff of academic institutions and government offices. The reason for such control is simple — government and academic institutions are more controllable than private companies and institutions. The effectiveness of such a measure could be seen in a case involving the computer network of the Institute of High Energy of Physics (IHEP), a pioneer in China's Internet connection. From April to June 1994, a few IHEP users received e-mail messages dis-

cussing the 1989 crackdown of the Chinese student protest and issues related to the independence of Taiwan and Tibet. Officials of the institute were so nervous that they immediately reported the "incident" to higher authorities, and took the occasion to reiterate the policy against the use of computer systems for illegal purposes (Huaxia Wenzhai 1995).

Although public access to the Internet is officially approved and opened in April 1995, the actual number of independent users of the Internet service remains small. By the end of 1995, there were only about 10,000 Internet users in China (China Computer News 1996). Of the 4,000 users of China Internet, which is the most attractive to individual users because of its free installation and low user fees, only 45 per cent are individual users (***China Infoworld***, Jan. 2, 1996). On the one hand, the high user fees, which could easily run into a few hundred yuan a month, keep the service out of the reach of ordinary Chinese citizens. On the other hand, the state monopoly on providing Internet service limits the on-line access. Requests to get leased lines from the government to make the Internet access more available to the general public have been shelved by government officials even though such requests are mainly for legitimate research purposes.[6] What is ironic is that in June 1995, two months after the Internet service was opened to the public, the Chinese Ministry of Posts and Telecommunications issued new regulations to restrict public access and use of the Internet in light of increasing undesirable access from inside China to political news and information via the Internet by means of electronic mail, FTP, Gopher, World Wide Web, Usenet and so on (***China News Digest***, June 22, 1995).

There is further indication that the Chinese government is ready to crack down on the unrestricted exchange of information over the net. Only eight months after China officially opened public access to the Internet, the Communist Party and the State Council, China's cabinet, issued a circular in December 1995, ordering the service providers to take measures to stop "pornographic and detrimental information" from entering the country via the Internet (Associated Press, Dec. 31, 1996). On January 1, 1996, Internet service providers were told that new subscription to their service must be postponed indefinitely and no additional permit would be granted to establish international links (***China News Digest***, Jan. 16, 1996). Three weeks later, it was announced that the State Council, China's cabinet, approved a set of draft regulations on access to the international computer network designed to strengthen controls over on-line links with the outside world (***South China Morning Post***, Jan. 24, 1996) The new regulations are expected to be made law by the State Council for implementation after some "revisions" (***Hong Kong Standard***, Jan. 24, 1996).

Implications

A paradoxical praxis of the 20th century communism lies in its political unreformability despite its acknowledged need for economic reforms. The question of freedom of information and of the press will remain a taboo in China as long as the government does not give up its commitment to the Marxist doctrine. Since the political system itself depends on the manipulation of information for survival, it is impossible for the Chinese government to give a free rein to the Internet penetration in China.

In its quest for modernisation, the Chinese government had no choice but to let the country join the global computer networking. Such a decision was a result of the

government's desire to catch up with the advanced countries in scientific and economic development rather than a change in its stand on information control to ensure the continued leadership of the Communist Party.

Unfortunately for the Chinese government, however, the development of new information technologies has reached such a stage that these technologies make it difficult to maintain the existing level of censorship. Although determined to not let the Internet access destroy the equilibrium of the Communist society, the Chinese authorities are yet to fully realise the potential threat of the Internet to the country's political system. As Microsoft Corp. President Bill Gates said that Chinese officials might not understand that to implement full Internet access and maintain censorship, they would almost have to have someone looking over the shoulder of every user (Vittachi 1995). The strategies and tactics that have been traditionally used by the Chinese government in controlling the mass media are critically challenged by the Internetted CMC.

There is already a sense of freedom among Chinese netters. Unlike the traditional media, for which the government plays the role of censor and gatekeeper, the Internet provides an efficient and safe forum for Chinese users to discuss politically sensitive issues and exchange information censored by the government-controlled media. A lecturer from Beijing University who is accessing the Internet through the university computer centre said: "I am now talking to my friends on almost everything, even politically sensitive issues, without the worry of being bugged. A friend of mine communicates frequently with an old friend who fled to the U.S. because of his involvement in the pro-democracy movement. A few years ago, a person would have been in real trouble if found talking by phone to blacklisted overseas activists" (***Asia Week***, Sep. 8, 1995). As a result, the new communication revolution is likely to affect the way information is generated, distributed and consumed in China. The fact that the Internet allows more open-ended access to outside information and creates dynamic interaction between the media and audience, poses a direct challenge to the Communist Party's control over the communication channels and contributes to the transformation of China's existing communication system.

In the face of the potential explosion of all kinds of information, both desired and undesired, that could come as a result of the Internet connection, the Chinese government finds it hard to locate the bottleneck for information control in the cyberspace. At present, it has no choice but to slow down the process of plunging the country into the cyberspace by drafting new laws and regulations, controlling the Internet service providers and limiting public access until it can find a right balance between control and access. Such actions, however, defeat the very purpose of connecting China to the global information network because it also hampers the flow of desirable information in and out of the country.

All signs seem to indicate that the Chinese government is determined not to let the Internet connection destroy its controls over what the Chinese people should hear and see, to say less about what they want to say and show. At the same time, Chinese leaders also seem genuinely concerned about the possibility that China would further lag behind in scientific and economic development if it is left out of the cyberspace. But the questions is: Can they have their cake and eat it, too?

While it cannot be denied that the Internet connection will greatly challenge the Chinese government's control of information and media, it must be acknowledged

that the Internet connection is unlikely to produce fundamental changes in China's political system or media system in the foreseeable future. On the one hand, the environment for drastic political changes in China is no longer present. The government high-handed policy towards political dissent and the lures of the market economy have made the Chinese people less politically active and more materialistic than they were in 1989. On the other hand, the role of the Internet in promoting the public sphere for the Chinese society is limited by at least two factors.

First, access to the Internet is unequally distributed due to government restrictions as well as its high cost and technical know-how required. As a result, the Internet is mainly used by government officials, scientists and businessmen mainly for financial and scientific purposes. The number of net users in China no doubt will rise dramatically by the end of this century, but it will take much longer before CMC is able to pass from its current elite stage to the mass stage. Without massive participation in the electronic communication over the net, it is impossible for CMC to replace the government-controlled mass media as a major source of information despite its advantages in freedom of information and free exchange of ideas.

Second, the fact that communication over the net is mainly conducted in the English language because of the Western dominance also keeps out a large number of potential Chinese users and limits the role that Chinese users could play in the international exchange of information. Although more and more Chinese can communicate in English today, the number of those who can effectively use the language to communicate over the net is still limited. At the same time, net communication in the Chinese language is not as convenient and restricts net activities to communication among China's netters themselves or with Chinese living overseas.

Because of the elite nature of net communication in China, CMC is unlikely to produce any fundamental changes in China's political and communication systems in the near future although it will help to expand and diversify the country's communication structures. In addition, the Internet access may also further enlarge the gap between the information rich and information poor in the country. With the elite having greater access to information and thus bigger profile in the public sphere, it may make it even more difficult to achieve the goal of participatory democracy on a massive scale.

Notes:

1. Source: http://www.cnc.ac.cn.

2. Hu Yaobang, former general secretary of the Communist Party, emphasised this in a speech delivered to the Communist Party Central Committee Secretariat, February 8, 1985. It was printed in *People's Daily* on April 14 the same year. Jiang Zemin, current general secretary of the Communist Party, reiterated the idea in an article printed in the *Chinese Journalism Yearbook* (Beijing: Chinese Social Science Press, 1990).

3. Some of the radio programs considered hostile to China, such as Voice of America, could not be received in China because of government interference of their signals

4. For various government regulations and decrees against the import of foreign publications and broadcast programs, see *Press Laws and Regulations* (Beijing: Study Publishing House, 1994).

5. Some of the reasons were proposed by Ang Peng Hwa in a paper entitled "Control and Censorship in the Information Age: A Singapore Perspective," presented at a workshop on Chances and Risks of the Information Society: Its Social and Economic Effects in Europe and Southeast Asia, in Singapore, September 18-20, 1995.

6. See Li Lailai's story in *Christian Science Monitor*, April 13, 1995.

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