The Internet in China: A New Arena for Government/Individual Interaction

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ABSTRACT

China has fallen in love with the Internet. The Internet not only promotes the new information economy, but also fosters Chinese political reform. The fact that millions of Chinese netizens have already access to the wealth of information challenges the traditional model of the governance, which was dominated by a centralized and propagandized approach to governance. The Chinese government is simultaneously promoting the development of the Internet and constructing a strict censorship and license system to limit network content and use. Internet technology will continue to evolve and will have an increasingly profound impact on Chinese society. But it is not likely that the technology will transform China into a Western-type liberal democracy even in the long run. A more probable outcome is that a modern Internet will have strong Chinese characteristics, and diverge from the capitalist-oriented model of the advanced industrial countries in significant ways.

China; democracy; political reform; Internet; Internet policy and regulation.

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Dedication

To Mama, Papa and DDBB

Introduction

Over the past few years, with the transition from a planned economy to a market economy and progress in building a telecommunication infrastructure, the Internet has played an active role in accelerating China's economic development. While economists are dazzled by China's breathtaking economic growth, political scientists are questioning the role of this new communication technology in the shaping of modern China. Many Western and Chinese scholars have examined the formation of civil society and democracy in China. However, most of these works concentrate on the Chinese political realm before millions of Chinese obtained access to the Internet. Thus, the study of Internet, which has few boundaries of time and space and features a huge amount of information and incredibly fast speed of dissemination, becomes an important step to understand what is actually happening in current China.

The purpose of this study is to explore how the Internet may foster Chinese political reform. Thus, in the light of the Internet, Chinese citizens, especially urban and coastal residents, could get more freedom as well as more awareness of their individual rights. Their demands and approaches may help form autonomous groups, which are independent from government control. The Internet plays an important role in the interaction of the government and the individual.

This study will begin with a chapter introducing the traditional model of the relationship between the government and the individual in China. The chapter will then derive from the survey on an official definition of the Internet. The potential

role the Internet may play in the changing of the traditional model will be discussed as well. A clear understanding of the traditional model and corresponding definition of the Internet is important as it provides the discussion a firm reference as well as prevents confusion later.

Once this has been established, there will be examination of four fundamental factors besides the technology that also contribute to the shaping of the new relationship. First there is a broad economic context in which the market economy demands free flowing information. The information revolution is taking place worldwide and deeply affects all economies. It is also dramatically increasing global competition. China's continuing transition to a market economy creates strong pressures for both economic and political restructuring. Given these pressures, the government has to choose the Internet as well as carry out internationalization. Therefore, Chapter Two will describe the Internet's development in China. It will explore how the Internet can assist economic development and the tension between the booming economy and government policy. These issues help us to understand the economic functionality of the Internet and provide the framework to launch the discussion. The government's desire for a strong economy potentially unleashed the force of the Internet that may challenge the government itself.

The second factor is the Chinese government. How the central government identifies and responds to the Internet directly affects economic reform and the individual. Chapter Three focuses on government control and it will analyze the firewall construction and the legal environment of Internet development in China. It will also explain the conflicts between the Chinese centralized system that has great

control over the dissemination of information and a decentralized Internet system, which is crucial for domestic economic development and for the attraction of foreign investment.

The third factor to be discussed is how the individual responds to this new technology. The paper hypothesizes that since the government desires maximum information and the individual desires freedom, there is a tension between them. Individuals try to protect their privacy and the right of free speech while the government uses firewalls and corresponding regulations to control the information transmission as well as to protect state secrecy. The latter seems more powerful, especially in the Chinese cultural and historical context. Moreover, there is a big gap between the urban middle class and the rural poor. The urban sophisticates are fed a diet of technology and consumer culture. They are more eager to use Internet and more sensitive about their own rights. Therefore this paper focuses on China's urban Internet users' interaction with the government. Some Internet enthusiasts believe this technology could quickly bring social and political change, but this is not likely for China. Chapter Four will explore the reality of Chinese "netizations" and their demands for their own rights. Two dominant user groups will be discussed in this chapter as well.

The fourth factor is foreign participation. Foreigners have greatly helped China modernize its telecommunication networks. They also brought some social and political influences. The participation of foreign investors does not necessarily work against the government but their activities surely will open more channels for information, which potentially challenges the state's traditional methods of

surveillance and censorship. The foreign based Internet dissidents and websites concern the government. Thus the desire for economic growth, the desire to obtain more foreign capital and new technology conflicts with the concern on national security and political stability. Moreover, after the accession to the World Trade Organization, competition from foreign companies also challenges the government that used to rely on its state monopoly. This factor will be discussed in several related sections.

The last chapter will not only summarize the relationships among those factors, but also further analyze the Internet as a whole. Even though efforts will be made throughout the study to draw connections among the different chapters, the last section will ensure that exercise is achieved. It will examine the study's hypothesis using claims made in earlier parts of the study. This chapter will not only summarize present conditions, but also indicates the possibilities of new governance in China in the relationship to the Internet.

Chapter One:
The Traditional Model of Governance and the Internet in China

A clear understanding of the traditional role of the government and its corresponding political theories is essential to providing the study with a firm reference as well as preventing confusion from rising as the discussion evolves. The contents of both Confucianism and Chinese Communism will be examined in this chapter. Then it will use this model to explore the relationship between the Internet and the traditional model. The official definitions towards the Internet will be examined as well.

The Traditional Governance Model

China is a country with a tradition of bureaucratic government. To understand contemporary China and the profound influence of the Internet, we must first look at Confucian ideology and the corresponding political system.

Confucianism provided the Chinese with a consensus about the values and paradigms of authority that supported the imperial system, which lasted for over two thousand years. Lucian Pye examined the characteristics of Confucian authority in Asia:

> Throughout the Confucian culture area of Asia, the family was considered the proper model of government. Relations between ruler and subject were seen as analogous to those between parent and child…Just as the Confucian concept of the ideal government was an extension of the ideal family, so the prime tasks of government were the same as those of family: to provide security, continuity, cohesion, and solidarity. In other words, government was modeled on that human institution which is directed towards self-maintenance rather than

> toward the attainment of external goals… in a fundamental sense, Confucianism left vague any ultimate purpose of government beyond the maintenance of cohesion and stability.[1]

In this way, the government, which is constituted by trained elites, was expected to play a role like a wise and powerful father who controls and supervises everything of his "foolish and short-sighted sons". The center of the government was the Emperor, viewed as the " Son of Heaven" with a mandate to rule on earth. But it is not the same Monarchy of Western history. Though the emperor had authority and legitimacy, he had to depend upon the "established bureaucratic machinery administered by career officials".[2] Thus, dynasties rose and fell, but they all followed the same general pattern of government.

The goal of government was mixed with morality and a purpose of defending harmony. Consequently, Chinese rulers of almost every generation agreed that unity both in territory and ideology is the first task of government. Confucianism does not include the concept of "democracy". Even the word *Min Zhu* (Democracy in Chinese) does not exist in China until the beginning of the nineteenth century and is often fused with the concept of human rights. The government strictly controlled the transmission of information and knowledge, to guide the thoughts of people. The media are looked on as tools that the government must control in order to keep the unity of ideology. Traditionally, since information exists and is conveyed by the writing system, the officials control the majority of semi-literates and illiterates by mastering the written words and censoring publications.

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[1] Lucian Pye, Asian Power and Politics, (Harvard University Press, 1985), pp 61-65
[2] James C. F Wang, Contemporary Chinese Politics, (Prentice Hall, 1989), pp 1-3

The law in the imperial time was never treated distinctively from morals and was viewed as the tool of government to keep the harmony and unity of the society. The legal system was not to protect individual rights. Thus, law accompanied with military power was used to protect the emperor and the unity of the imperial system. Of particular importance, the law also protected official theories and ideologies. The traditional law, started more than 3,000 years ago, never stopped the cruel punishment towards intellectuals who dared challenge the government or official ideologies. The common methods were physically to punish and execute dissidents, their families even their relatives and friends.

The ancient theory of Confucianism was replaced by the modern theory of Communism. After founding the People's Republic (1949), the Communist Party of China established the Communist ideology as the new dogma of revolutionary China. The current official definition of Chinese Communist ideology consists of: Marxism and Leninism and Mao Zedong's Thought and Deng Xiaoping's Theory. This ideology believes that there is a hidden law behind the development and changing of human history and society. Historical materialism predicts "an inevitable development of the economic forces and relations of production, which leaves no room for conscious human initiatives". [3] Moreover, "Marx issued a manifesto and the communist party has often assigned itself a vanguard role in speeding up history".[4] Chinese Communist Party (CCP) theory combined with implicit Confucian theory and historical paradigms, and it viewed itself as a far-sighted vanguard leader, which could understand the "truth of human history" and master the hidden determinism of

[3] Stella Z Theodoulou and Rory O'Brien (eds), Methods for Political Inquiry. The Discipline, Philosophy, and the Analysis of Politics,(New Jersey: Prentice Hall.1999) p14-15
[4] Ibid.

law. So it is essential for the CCP to control the "new productive force" and the information it transmits through government regulations.

Party-controlled government views the control of the media as a necessary means to keep the country and the economy stable. In current China, the government elaborated in "thought work" (*Sixiang Gongzuo*). "Thought work" originally denoted the exertion of influence in small study groups, but is now used to refer to propaganda and persuasion in general. The authorities believe if they can control the symbolic resources from which Chinese people derive their values and worldviews, they will be much more able to maintain political stability. Therefore there have been many propaganda campaigns, even after the Cultural Revolution. In 1983 there was a "Campaign against Spiritual Pollution" and in 1987 there was a "Campaign against Bourgeois Liberalization".

The notion of *law* (in the West explanation) and the system of law, however, did not take the primary emphasis in Chinese society until the late 1970s. Therefore, the law was defined as a tool in the class struggle. The turmoil of ultra-leftist thoughts and the lawlessness of the ten-year "Cultural Revolution" convinced the Communist party to rebuild a modern "socialist legal system". Nevertheless, the impact of traditional and Communist patterns, especially the goal to keep the unity of ideology, cannot be disregarded. The radical break of Communism cannot eliminate all the features of traditional model, which still influences the Chinese Marxists' ways of thinking. The "Chinese Characteristics" did not emerge from a theory and history vacuum. The current Chinese government has maintained the tradition of

emphasizing the stability of society and linking individual rights to the ends of the state.

According to a survey carried out by Tianjian Shi in 1993, a majority of Chinese people perceive the relationship between the individual and the state to be hierarchical, and less than 15 per cent perceive their relationship with authority to be reciprocal. Around 39 per cent of the people in the survey don't expect equal treatment by the governmental bureaucracy.[5] Figure 1 shows the attitudes towards authority.

Figure 1. Attitudes Towards Power and Authority

Percentage Who Are	Disagree	Agree	Don't Know
Individual is cog in machine	14.9	71.1	15.5
Government officials are like family heads	18.2	73.3	8.5
Senior people resolve conflict	16.6	81.6	1.8

SOURCE: Data from Table 5 in Tianjian Shi, "Cultural Value and Democracy in The People's Republic of China", The China Quarterly, June, 2000. The Chinese data come from 1993 nation-wide survey on political culture and political participation.

Figure 2 shows the difference of each theory discussed above.

Figure 2. A Comparative View of the Definitions of the Government and the Individual

[5] Data from Table 4 in Tianjian Shi, "Cultural Value and Democracy in The People's Republic of China", The China Quarterly, June, 2000. The Chinese data come from 1993 nation-wide survey on political culture and political participation.

	Chinese Model		Western Model
	Confucianism	**Chinese Communism**	
Get Self Identification from	Family, Social Relationships	Class status and Social Relationship	Self
Individual Rights Derive from	Rarely Discussed	The laws and constitutions enacted by the party-state	Natural Law
Individual Duties vs. Individual Rights	Duties to family and society come first; the rights individuals possess derive from duties	Duties to the collective and to society come first; the rights individual possess derive from duties	Individuals first have rights and the duties they may develop from the rights
Owner of Individual Rights	Rarely Discussed	Individual of the People (not a part of 'class enemies')	Everyone, Universal
Priority in Legal Protection	Noble, Official and Intellectual	Individual of the People (not a part of 'class enemies')	No priority
The Aim of Law /Government (protects)	The political stability and the unity of the imperial system	The political stability and the People's Democratic Dictatorship	Public goods, Individual Rights

In a word, the Communist leaders of China have long adhered to a centralized, secure, and propagandized approach to governance. The rights of the individual are linked to the ends of the state. The emerging Internet, which challenges the control of the information and empowers the individual, however, questions whether this approach to governance will be able to continue.

The Internet and the Traditional Model

Based on Communist theory, the Internet is considered a new type of productive force and is important for both economic and political development. Marx and Engels tried to explore the relationship of human individuality and material production. In Part I of *The German Ideology*, they pointed out the mode of production must be not considered simply as being the reproduction of the physical existence of the individuals. Rather, it is "a definite form of activity of these individuals, a definite form of expressing their life, a definite *mode of life* on their part". [6] By changing the shape of material things, Marx observed, we also change ourselves. [7] In the preface to *A Contribution to the Critique of Political Economy*, Marx further explained the relationship economic and political superstructures as follows:

> The sum total of these relations of production constitutes the economic structure of society, the real foundation, on which raises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life process in general. It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness…this consciousness must be explained rather from the contradictions of material life, from the existing conflict between the social productive forces and the relations of production.[8]

Similar reasoning can also be found in Deng Xiaoping's theory. Deng said science and technology present the primary productive force. He also pointed out the necessity of a rapid economic growth to the Chinese Communist Party as:

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[6] Langdon Winner, 'The Whale and the Reactor" A Search for Limits in an Age of High Technology (Chicago: University of Chicago Press, 1986) pp12-18
[7] Ibid.
[8] Karl Marx, A Contribution to the Critique of Political Economy, (London: Lawrence & Wishart, 1971), p20-21

> We should pay particular attention to the question of the drop in the economic growth rate. I am worried about this. If our economy grows at the rate of only four or five per cent a year, it will be all right for a couple of years. But if that rate continues for a long time, it will represent a decline compared with the growth in the rest of the world, especially in the East Asian and Southeast Asian countries and regions…Why do the people support us? Because over the last ten years our economy has been developing and developing visibly. If the economy stagnated for five years or developed at only a slow rate -- for example, at four or five per cent, or even two or three per cent a year -- what effects would be produced? This is not only an economic problem but also a political one. When we work to improve the economic environment and rectify the economic order, we should therefore try to quickly attain an appropriate growth rate.[9]

Therefore, the common Chinese official explanation of the importance of Internet development is:

> In theory, the Internet is a product of the information technological revolution…It is a new type of productive force. According to the viewpoint of historical materialism, productive forces determine the relations of production, and the economic basis determines the superstructure. The development of productive force will definitely lead to profound changes in the relations of production and the superstructure.[10]

However, since the government enjoyed a monopoly on telecommunication and Internet service, this sector was viewed as merely an instrument for the transmission of purely academic and commercial information. At the first stage of the Internet development, the leaders only focused on the "new type of productive force" part of this technology and the corresponding infrastructure constructions.

The government's decision to break the Ministry of Posts and Telecommunication's (MPT) monopoly on the telecommunication sector and to carry out value-added service in 1994[11], however, opened the floodgates to Internet development. In order to be competitive in this new market, the MPT developed a series of marketing plans to promote its Internet service. (Including hanging up a

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[9] Xiaoping Deng, "The International Situation and Economic Problems—March 3, 1990", http://english.peopledaily.com.cn/dengxp/vol3/text/d1130.html

[10] "Opportunities and Challenges—An interview with Wang Qingcun, Deputy Director of the Network Department of the Information Office of the State Council", Beijing Review, NO 16, April 17, 2000, pp. 17-19. This article will be quoted as "Opportunities and Challenges" later.

[11] See details in the next chapter.

huge red banner with the word "INTERNET" written in English on their Beijing headquarters building). By late June 1995, when access had spread from Beijing to Shanghai and Guangzhou, more than 1,000 individuals and units had subscribed to the MPT's Internet service, with the number of regular users[12] estimated at more than 40,000. The government began to worry about the free flow of information and launched *The Safety and Protection Regulations of the Computer Information System of the People's Republic of China*[13] in 1994. However, the government underestimated the appeal of the Internet. The official reports expected the Internet users would only reach 4 million by 2000, which finally turned out to be 22.5 million. [14]The astonishingly rapid rate of growth made the Internet the target of government control. The leaders began to pay attention to the "profound changes in the relations of production and the superstructure"

There are probably two important functions of the Internet that may change Chinese society. First, the Internet plays a unique role as a news media. In China, the state-run media used to account for almost 100% of news dissemination. Thus the government, to some extent, was able to manipulate information. Therefore Chinese people are used to getting information through unofficial channels, which can provide them with more information. For example, in a study of the Chinese sorcery scare of 1768, Harvard scholar Philip A. Kuhn found out that the "back-alley news" (*Xiaodao Xiaoxi*) that Chinese find so essential to supplement the government-controlled media

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[12] Including users of CERNET and CASNET. See details in later chapters.
[13] When possible, I provide the official translation of the names and content of laws. When this is not possible, I provide my own translations, together with those gathered from various news agencies.
[14] Daniel C. Lynch, "Dilemmas of 'Thought Work' in Fin-de-Siecle China", The China Quarterly, March1999, p193

is so well developed that it has even formed regional and national networks.[15] As a provider of information, the Internet offers Chinese users a new opportunity to get alternative information, which is a prime resource in the creation and maintenance of social power and shapes people's political behavior—this also explains why the government is so eager to regulate the Internet news service. Secondly, the Internet also can be used as a convenient medium for mass communication. Thus, by exchanging emails and communicating in chat rooms or Bulletin Board System (BBS), people can be informed or organized in a very short time, which will promote the emerging of civil society, "broadly defined as a political realm of ideas and actors separate from state influence or control". As Shanthi Kalathil argued, the existence of civil society is the necessary condition for the democratization process. In pointing out the impact of the Internet on civil society, he remarked that "civil societal uses of the Internet can be broken down into use by domestic and transnational advocacy groups, civic groups without explicitly political agendas, fledgling opposition movements in authoritarian regimes, and more broadly the mass public". [16]

Therefore, the unique way that the government manages the Internet is to identify the Internet as a part of the campaign over "thought work". The vigorous campaign initiated in 1993 began to target the flow of communications messages into and through China. Thus the authorities were aware of the political price of this communication revolution and decided to persuade and/or force the media and telecommunication to cater only to those market tastes considered to be "healthy". As the Minister of Culture explained in 1993, "if cultural products are chosen by the

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[15] Philip A. Kuhn , Soulstealers: The Chinese Sorcery Scare of 1768, (Harvard University Press, 1990), p36
[16] Shanthi Kalathil, "The Internet and Asia: Broadband or Broad Bans?"
Reprinted with permission from Foreign Service Journal, February 2001, p26

market, under certain social and historical conditions, harmful 'cultural trash' will inundate the market and poison the people. Our regulation and control of cultural products and cultural market through such means as laws and policies should be more direct and forceful".[17] The government started to limit the access of foreign Internet websites, restrict satellite television and take different methods to ban heterodox ideas and theories in China.

The concern that those free economic and political messages circulated through technology would change the Chinese world views slowly overtime made the authorities further broaden the scope of the campaign. As the Chinese Communist Party journal *Qiushi* (Seeking Truth) argued in 1996: "content and form, and contents and levels can infiltrate and transform one into another…In this regard, certain Western political bigwigs are much wiser than some of our comrades". [18]This article pointed out that as long as the youth have learned western languages and dances and have a weakness for western movies and television programs, they will, sooner or later, accept the western concepts of value. Since the collapse of Soviet Union and communism countries in Eastern Europe already proved the danger of the trend, the government should make efforts to reassert the control over thought work.[19] In early 1996 the Chinese authorities promulgated a set of provisional methods governing the Internet and targeted the Internet as part of the thought work campaign. The 1997 *Computer Information Network and Internet Security, Protection and Management*

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[17] Zhongde Liu, "Several Theoretical and Practical Questions Concerning Cultural Work Under the New Conditions", Qiushi, August 1993 pp.19-25. Details see also Daniel C. Lynch, "Dilemmas of 'Thought Work' in Fin-de-Siecle China", pp172-201

[18] Renwei Liu, "On Colonial Culture", Qiushi, 1 March 1996, pp26-33. Details see also "Dilemmas of 'Thought Work' in Fin-de-Siecle China", pp172-201

[19] Ibid.

Regulations further expressed the need to forbid undesirable information. The law established that no units or individual should use the Internet to produce, retrieve, duplicate, and disseminate information prejudicial to public order, and pornographic materials.[20]

Wang Qingcun, Deputy Director of the Network Department of the Information Office of the State Council, pointed out six challenges of the Internet that the Chinese government has met:

- Challenge one: how to let Chinese websites distinguish themselves.
- Challenge two: how should China extensively disseminate information that publicizes the true, the good and the beautiful and limit the dissemination of information that propagates the false, the vile and the ugly to an absolute minimum.
- Challenge three: how to seize the opportunity to expedite the development of China's Internet industry and enable the modern media to correctly guide public opinion and establish a good image of China.
- Challenge four: how to give play to the role of privately run websites to make them a component part and a beneficial supplement to the Chinese-type socialist information dissemination network.
- Challenge five: how to let China's online publicity develop toward a sound, orderly and standard direction.
- Challenge six: how to let the online and traditional publicity undertaking supplement each other with respective advantages and seek joint development. [21]

However, the challenges indicated above show only some parts of the dilemma the government has to solve. The Internet issue is also combined with several other factors. This chapter simply provides a basic foundation and reference on which a solid argument can be developed. In order to understand this dynamic shaping progress, the next chapter will explore the Internet and Chinese economic development.

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[20] "Dilemmas of 'Thought Work' in Fin-de-Siecle China", p.194-195. The name for this law in this article uses the Chinese official translation version. According to Lynch, the corresponding name of this law can also be "Regulations on the Security and Management of Computer Information Networks and the Internet'. Lynch used the translation from the documents of the United States Embassy in Beijing as reference.

[21] "Opportunities and Challenges"

Chapter Two:
Internet Revolution in China: The Economic Context

A crucial step to exploring the influence of the Internet on Chinese society is to understand the broad economic context. This chapter will begin with a brief introduction to the impressive development of the Internet in China. Once this has been achieved, the discussion will then examine the role of the Internet in Chinese economic development. This historical account will then be followed by a description of the state monopoly of Internet construction and the challenges to this monopoly position. This task will be conducted through explanations of the relationship between the major international connection networks and the government branches as well as the challenges from both domestic and international investors. An analysis of the conflicts between the government's attempts to control information and economic development is important considering its impact on policy making.

Internet Development in China

China's first efforts at creating a data network were the "Chinese Academic Network" (CANet) project (launched in 1986) and Institute of High Energy Physics (IHEP) network (launched in 1987). By the following year, with the help of Karlsruhe University of Germany, the CANet began to use the German gateway to send international e-mail and chose "cn" as the PRC's national domain name. But the scale

of the early stage was very limited and only focused on the exchange of academic information.[22]

"Both a planned economy and a market economy are necessary. If we did not have a market economy, we would have no access to information from other countries and would have to reconcile ourselves to lagging behind… Don't be afraid of risks: we can't do anything without taking some risks."[23] Deng Xiaoping's speech at the end of 1990 introduced a few dynamic changes in China. One of the greatest risks the government took was to connect China and the outside world. The dramatic Internet revolution occurred in the Eighth Five-year Post and Telecommunications Plan Period (1991-1995) when China's Ministry of Posts and Telecommunications (MPT)[24] began building a three-tier network consisting of fiber optic systems, satellite ground stations, and microwave trunks. By 1995, China had established 23 ground satellite stations, 22 fiber optic backbone cables, completed more than 50,000 km of digital microwave systems, and constructed several international fiber optic cables.[25]

The first direct link from China to the Internet was established in 1994 by the Institute of High Energy Physics (IHEP). It set up a direct international leased line to the Stanford Linear Accelerator Center (SLAC) in the United States and used the TCP/IP to carry out full Internet operations. (Since the US government was worried about leaking of important information, this link was limited to certain areas.) Since then the Chinese government invested three hundred thousand yuan to promote

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[22] William Yurcik and Zixiang Tan, "The Great (Fire) Wall of China: Internet Security and Information Policy Issues in the People's Republic of China", http://www.tprc.org/abstracts/tan.txt.
[23] Xiaoping Deng, "Seize the Opportunity to Develop the Economy—December 24, 1990" , http://english.peopledaily.com.cn/dengxp/vol3/text/d1170.html
[24] In March, 1998, MPT changed to Ministry of Information Industry (MII)
[25] "The Great (Fire) Wall of China: Internet Security and Information Policy Issues in the People's Republic of China"

scholars to use this link and the State Council launched several national network construction projects. One example was the building of the China Education and Research Network (CERNet). The central government earmarked nearly 10 billion yuan (US$1.2 billion) to restructure the country's educational system and build an Internet infrastructure for distance education. In 1994 the government began to invest in the construction of CERNet. It connected eight regional nets and a number of campus nets together. The eight nets are those in the North China, East China, South China, Central China, Northwest, Southwest, Northeast and Dalian region. The National Computer Net Center, together with the centers in the eight regions and some other webs, provided rich resources on CERNet and provided convenient ways to visit CERNet. That was the beginning of the construction of a high-speed transmission platform for distance education in China. [26]

By June 1995, IHEP opened accounts for more than 500 top scientists and professors in China, widening its network throughout the country. In 1996, the CANet, IHEP and China Research Network(launched in 1990 and hosting more then 10 research institutes), were combined and joined the auspices of Chinese Academy of Sciences Network (CASNet), to form the China Science and Technology network (CSTNet).[27]

Besides the two academic networks, the State Council also launched projects to structure commercial networks. The five years history, from 1993 to 1998, saw two

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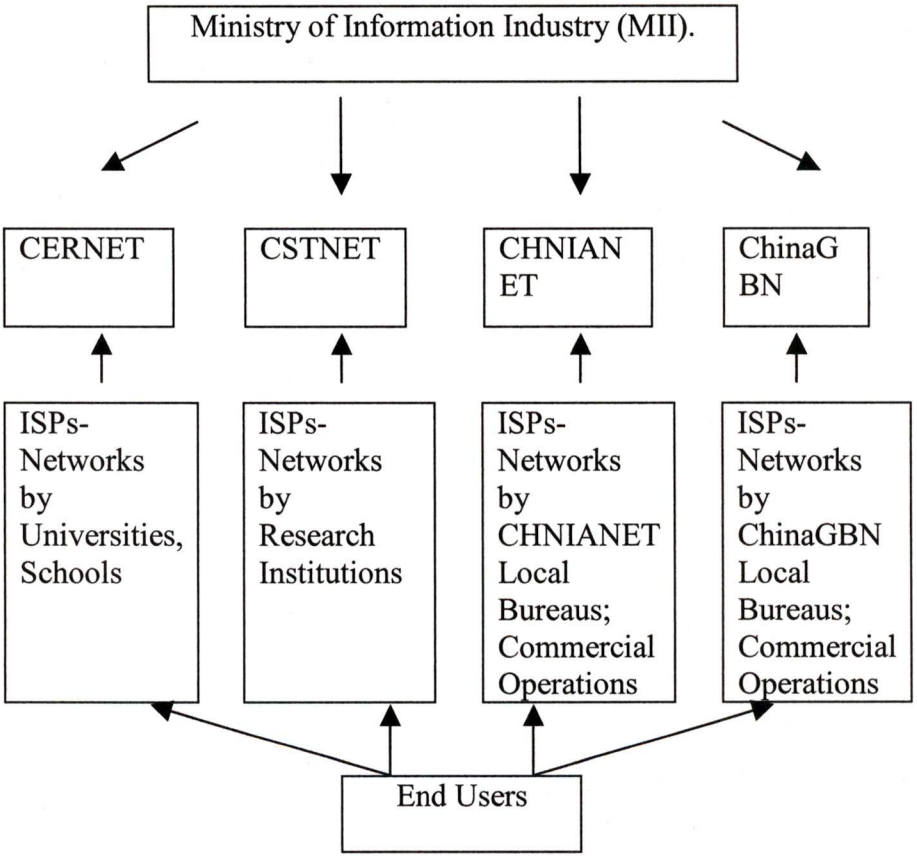
[26] "Distance Education Open Minds", China Daily 30 October 2000 http://210.77.134.148/pls/wcm/Show_Text?info_id=3316&p_qry=Internet

[27] Some of the history of Internet development is derived from Eric Harwit and Duncan Clark, "Shaping the Internet in China: Evolution of Political Control over Network Infrastructure and Content", Asian Survey, VOL XLI NO.3, May/June 2001, pp. 382-387. Some of it can also refer to the "Zhongguo Internet Fazhan Dashi Ji" (The Key Points of the Internet Development in China), China Internet Network Information Center, http://www.cnnic.net/internet.shtml

major commercial networks' constructions in China: The MPT-led CHINANet and the Ministry of Electronics Industry (MEI)-led China Golden Bridge Network (ChinaGBN). In March 1998, the government decided to create the Ministry of Information Industry (MII): MII was set up by merging the existing Ministry of Posts and Telecommunications (MPT) with the Ministry of Electronic Industry (MEI). According to this order, MII was in charge of all the four networks.(Figure 3 shows the structure of MII in 1999)

Figure 3 The Structure of MII (1999)



SOURCE: Part of Figure 5 in Zixiang Tan, "Regulating China's Internet: Convergence toward a Coherent Regulatory Regime", *Telecommunications-Policy*, April-May 1999, p.271

According to the reports of the China Internet Network Information Center (CNNIC) [28], at present, China already has ten networks directly connected to the outside world and the total bandwidth of leased International connections is 3759.5M. Countries directly interconnected to China's Internet include the United States, Canada, Australia, Britain, Germany, France, Japan, South Korea, etc.[29]

There has been a significant expansion of Internet users[30] during the past three years (See Figure 4):

Figure 4. The Internet Users in China (1999-2002):

	Users	Leased Line	Dial-up	Both
1999.7	4,000,000	760,000	2,560,000	680,000
2000.7	16,900,000	2,580,000	11,760,000	2,560,000
2001.1	22,500,000	3,640,000	15,430,000	3,430,000
2001.7	26,500,000	4,540,000	17,930,000	4,030,000
2002.1	33,700,000	6,720,000	21,330,000	5,650.000

SOURCE: CNNIC reports from 1999-2002

The latest report of the China Internet Network Information Center (CNNIC) said there are 33.7 million Chinese who have logged on to the Internet by the end of January 2002. [31]Some government officials are even more optimistic. For example, Zhao Qizheng, minister of the Information Office under the State Council, said the

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[28] CNNIC, "Semiannual Survey Report", CNNIC is a branch of the Ministry of Information Industry (MII), China's governing body that oversees the development of the Internet in China. In 1997, the State Council's Information Office and China Internet Network Information Center (CNNIC) Working Committee determined that the CNNIC, incorporation with the four major inter-connecting networks in China, would be responsible for collecting the statistical data by conducting user surveys in China. The CNNIC now conduct the survey semiannually, and issue the report in January and July each year. The newest report released in January 2002 (Chinese version).

[29] CNNIC report in January 2002. http://www.cnnic.net/develst/2002-1/

[30] CNNIC defined Chinese Internet User as "Chinese citizen who uses Internet no less than 1 hour per week".

[31] CNNIC report in January 2002. http://www.cnnic.net/develst/2002-1/

number of people accessing the Net in China is expected to rise to 200 million by 2005.[32]

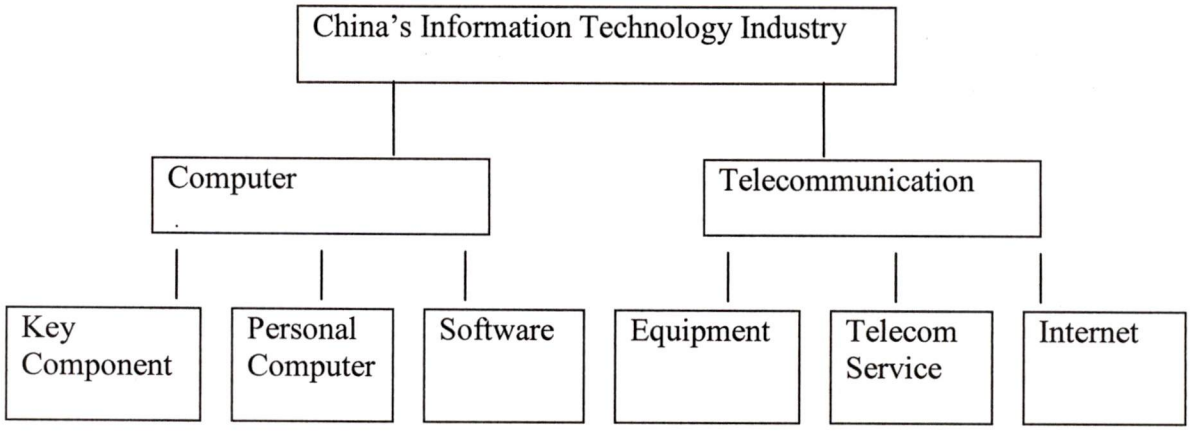
The Internet cannot be developed without the development of a telecommunication infrastructure. The corresponding telecommunications construction in China is also impressive. Since telephone service prior to 1980 was non-existent or inadequate, China has been able to quickly adopt new generations of intermediate technology. As a result of rapid construction of new technology, a high percentage of China's telephone lines that now exist are less than five years old and provide an excellent channel for modem dial-in Internet access of the kind typically used by individuals in their homes.[33]Statistics show that the business volume of the telecommunications sector in China stood at 366.9 billion yuan and the investment in the trade reached some 200 billion yuan. By the end of last November, the number of fixed telephone subscribers in China reached 177 million, second only to that of the United States. Mobile phone users, however, totaled 140 million, ranking first worldwide (not in per capita terms). [34] The transmission capacity of China's basic telecommunications network has been further elevated, a variety of new services have developed rapidly and the quality of telecommunications services has improved notably.[35]

How the Internet Revolution Can Serve Economic Development in China

[32] "Bright Future for Internet – Forum", China Daily, 7 September, http://www.chinadaily.net/itchina/2001-09-07/31739.html
[33] "The Great (Fire) Wall of China: Internet Security and Information Policy Issues in the People's Republic of China"
[34] "China revising Regulations on Information Industry: Minister", China Daily 9 January, 2002, http://210.77.134.148/pls/wcm/Show_Text?info_id=24978&p_qry=telecommunication%20and%20law
[35]Ning Li, "Information Industry Develops Healthily", Beijing Review, NO 34, 21 Aug, 2000, p. 18

Why is China willing to open the door to the international digital network? According to official news and literature at large, the economic concern is the most important factor that affects government policy-making. The Internet is a vital component of the information technology (IT) industry. (See Figure 5) The government has already recognized that the development of an information and knowledge-based economy will indicate a country's comprehensive strength in the 21st century, and IT will be one of the most vigorous sectors in the economy.

Figure 5 Analysis of Structure of China's Information Technology Industry



Source: Author Rong Zhang

Development of the Chinese information industry in recent years strongly supports these expectations. In the first half of 2000, the output of computers was 2.08 million sets, an increase of 102.4 per cent on the corresponding period of 1999. China's software industry and the market have also witnessed skyrocketing growth since the beginning of the 1990s. In the past decade, China's software industry has increased at a double-digit rate. At present, China has more than 5,000 software companies. About 470,000 professionals are working on software research and

development. Statistics indicate that the output of China's software industry hit 14.6 billion yuan (US$1.8 billion) in 1999.[36] Yang Tianxing, director-general of the China Software Industry Association, pointed out: "China will try to cultivate several powerful software bases as well as a group of big software companies with an annual output value of over 1 billion yuan (US$120 million) each in five to 10 years. China expects the export volume of software to increase to US$1 billion by then from the current US$130 million".[37]According to the High-Tech Zone Management Department of the Ministry of Science and Technology (MST), by the end of 1998, the 53 State-level high-tech zones (dominated by dotcom and software companies) had registered more than 15,000 high-tech enterprises, with 1.5 million employees. Of these, 600, each with a technology-industry-trade revenue exceeding 100 million yuan, recorded 420 billion yuan in total technology-industry-trade revenue, 390 billion yuan in gross output value, 44 billion yuan in profit and tax payments and 8 billion yuan in foreign exchange earnings from exports.[38] In 2001, the information industry remained the number one industry in China with the output reaching 1,350 billion yuan (US$162.65 billion), sales standing at 750 billion yuan, and taxes the industry paid reaching 65 billion yuan. Although the world economy slowed last year, China's exports of electronic and information products rose to US$60 billion, a minor increase compared with the year 2000. Internet development, which interacted with the development of the telecommunication construction and the information industry, has brought the Chinese economy to a new stage.

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[36] "New Policies to Aid Software Industry", China Daily , 12 February 2001 http://www.china.org.cn/english/7634.htm

[37] "Software: China's Most Rapidly Growing Industry", Xinhua , 15 October 2000 http://www.china.org.cn/english/2790.htm

[38] 2000 Report from Ministry of Science and Technology, PRC

Although at the current stage, e-business is still not popular in China, it is showing some signs of growth. On-line entertainment, a case to the point, has become another interesting phenomenon in China. In only one year, the online game "Xiao Ao Jiang Hu"(xajh.com) already won 1.5 million users and everyday there will be millions of people who play this game at the same time. Their on-line-club member card sold 50,000 within two months. The Liang Zhong(ourgame.com), which is famous for its chess, Majiang and cards, has 6 million loyal users. Every day, especially at noontime, there will be around 50,000 users and this website brings 80,000 hours of telephone bills for Chinese Telecom per day. [39]

Dotcom companies and corresponding information technology industries also attract many prestige foreign investors who can provide funds for China's nascent market economy development. According to VOA news, for instance, the famous Internet firm TOM.COM will purchase stakes in five media-related companies in China: stakes in Beijing Yanhuang, China Media Network, Tianming Advertising, Qilu Advertising and Qingdao Chunyu.[40]

The Internet is especially crucial to the development in two domestic areas. The first area is education. Since the opening of China and the building of market, competition has become very familiar to Chinese people, especially to urban people. Higher education and multi-skills have become the guarantee of a good life. In the long run, quality education will lead to economic gains. Every year, there are millions of students and parents—in China, parents devote themselves to the education of

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[39] "Youxi "(Games), SinaCom *(Chinese)* http://www.sina.com.cn 2001/01/05 18:36

[40] "China Internet Company To Expand", Voice of America (VOA), 22 August 2001, http://www.voanews.com/article.cfm?ObjectID=4848F813-972A-11D5-843000508BF9712A&Title=China%20Internet%20Company%20To%20Expand&db=voa

children—who take part in the crucial and cruel university entrance examination and fight for the few places of university and colleges. Meanwhile, due to inadequate resources and time and space limitations, several million high school graduates will be denied college education each year. Distance education and e-education has provided a more promising future, which can produce more qualified citizens for the country's development. Now CERNET has 36 bytes linking 700 universities and research institutes in 70 cities. More than 200,000 servers are available on 3 million terminals nationwide. Accompanied by the Chinese Educational TV network (CETV), it will form a basic multi-functional platform for distance education in China. For those people who want to pursue college education, the Ministry of Education launched a pilot project to experiment with distance college education, and five universities (Tsinghua University, Beijing Communications University, Zhejiang University and Hunan University, Peking University) were chosen to provide on-line university education. Tsinghua, for instance, enrolled 1,740 Internet postgraduate students in business administration, computer technology and civil and business law in 1999. In 2000, this prestigious university began to teach students over the Internet in 20 provinces.[41]

A second domestic area in which the Internet is crucial is the development of the vast rural area and the western region of China. Since the early 1990s, gaps between different regions have been widening. Currently, the per-capita GDP in west China is only about 60 percent of the national average, and most of the 30 million

[41] See details in "Distance Education Open Minds"

poor, who still have subsistence problems, live there.[42] Since there are not enough schools (and even if there are schools to go to, there are few qualified teachers to give them a proper education), it is difficult for the Chinese government to carry out its education plan and realize the basic goal of education for all. Besides lack of education, it is also hard for them to get information, which is an important part of knowledge construction and updating. For a long time, farmers could not get timely access to information on agricultural products and the means of production, which led to backwardness in production and marketing. Traditional distance education and self-education for those places depends on TV and radio, which is characterized by a lack of interaction and delay in information updating. The Internet, however, can help interaction with the outside world. With the help of the Internet, many useful courses can be transmitted to the broad rural areas at a very low cost. This is very helpful to realize the sharing of information resources, to enlarge the opportunities of getting education, and to improve the quality of education in different areas. For example, in Mudanjiang City, Heilongjiang Province, 32 villages set up an information column on a website offering regularly updated global supply-and-demand trends for fruit and vegetables. Farmers there now export 440,000 tons of vegetables and fruit to Russia each year.[43]

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[42] "Implementing the Strategy for Western Region Development", Beijing Review, May 29, 2000, p.22
[43] "Farmers Surf to Prosperity", http://210.77.134.148/pls/wcm/Show_Text?info_id=2061&p_qry=Internet

State Monopoly and the Challengers

As discussed above, the Chinese government has rapidly constructed the infrastructure of the Internet. But the exclusive state investments also imply a dominant "Chinese characteristic" that the government monopolizes the whole sector. The government tightly controls the basic infrastructure of China's telecommunication networks, providing huge profits. Between January and May in 2000, for example, revenue from postal and telecommunications business was 123.47 billion yuan, up 27.1 percent over last year's same period. Of this, fixed assets investment of the telecommunications industry totaled 29 billion yuan, up 25.9 percent. Fixed telephone subscribers increased by 14.97 million in number, reaching 124 million; the number of cellular phone users jumped to 56.06 million as a result of a sharp increase of 12.76 million; subscribers to data and multimedia communication went up to 5.58 million, an increase of 1.97 million.[44] Figure 6 shows the major networks in China and their governmental backgrounds.

Figure 6. The Major Interconnected Networks[45] in China (-2001)

Network	**Governmental Background**	**Bandwidth (Megahertz=M)**
CSTNET (China Science and Technology)	Chinese Academy of Sciences	55M
CHINANET	Ministry of Information Industry (Former Ministry of Posts and Telecommunications)	2387M: Beijing 863M, Shanghai 867M, Guangzhou 657M

[44] "Information Industry Develops Healthily"

[45] Refers to computer networks can directly linked to the global Internet through international leased lines. See details in the next chapter.

CERNET (China Education and Research)	Ministry of Education	117M
CHINAGBN* (China Golden Bridge)	Ministry of Information Industry (Former Ministry of Information Industry)	151M: Beijing 51M, Shanghai 49M, Guangzhou 51M
UNINET*	Ministry of Information Industry (Former Ministry of Electronics Industry)	100M: Shanghai 47M, Guangzhou 53M
CNCNET (China Netcom)	Chinese Academy of Sciences, Shanghai's municipal Information Technology Office, Ministry of Railway and State Administration of Radio, Films and Television	355M: Shanghai 200M, Guangzhou 155M
CIETNET (China International Economy and Technology)	Ministry of Foreign Trade and Economic Cooperation	2M
CMNET (China Mobile)	Ministry of Information Industry	90M: Beijing 45M, Guangzhou 45M
CGWNET (China Great Wall)	Military	Under Construction
CSNET (China Satellite)	Ministry of Information Industry	Under Construction

SOURCE: For the governmental background, see CNNIC, "Zhongguo Jiu Da Guoji Hulianwangluo Jianjie" (The Brief Introduction of Nine Major Networks in China). See also Eric Harwit and Duncan Clark, "Shaping the Internet in China: Evolution of Political Control over Network Infrastructure and Content"[46]

* After the reorganization of telecommunication sector, the Ministry of Electronics Industry and the Ministry of Posts and Telecommunications merged with the new MII, meaning that ChinaGBN and UniNet also come under MII authority. Details see also Chapter Three.

[46] CNNIC, "Zhongguo Jiu Da Guoji Hulianwangluo Jianjie" (The Brief Introduction of Nine Major Networks in China), http://www.cnnic.net.cn/annual/2-3-4.shtml. Eric Harwit and Duncan Clark, "Shaping the Internet in China: Evolution of Political Control over Network Infrastructure and Content", Asian Survey , VOL XLI NO.3, May/June 2001, p. 382-387. For the Bandwidth refer see CNNIC report in July 2001, at http://www.cnnic.net/develst/rep200107-e.shtml

Moreover, since most of those interconnecting networks are required to go through the MII's international gateways and are prohibited from establishing their own physical international connections, from a network perspective, China's regulations have turned its Internet into a state Intranet. Intranet is an enterprise network (spanning geographical boundaries to connect different types of computers in various parts of an organization) that provides users with Internet application tools (i.e. web browsers) to access organizational information. An intranet is completely controlled by the organization. If any Internet connection does exist (one does not have to exist) a "firewall" prevents outside computers anywhere on the Internet from accessing computers on the Intranet.[47] (It will also be discussed in the next chapter.)

But there are challenges to the government monopoly, from both domestic and international sources. Domestically, there are many private companies focused on the Internet. Take the website construction for example. There are two pillars of China's Internet information dissemination in the current stage: state-run enterprises and private-run enterprises. Compared to state-run news sites, which are tightly connected to traditional official media organs, private dot-com companies are "younger". Most of them are founded by young digital elites, who are more international, professional and ambitious. Charles Zhang, for instance, a graduate of Massachusetts Institute of Technology (MIT), founder of Sohu.com, has become a role model for young people, especially those students abroad. After several years of development, Sohu.com has become one of the most influential portals and news websites of China. Some private-run websites already make huge profits.

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[47] "The Great (Fire) Wall of China: Internet Security and Information Policy Issues in the People's Republic of China"

However, privatization of the whole Internet sector is not on the government's agenda. The private company is still prohibited from holding controlling stakes and is ruled out of making routine management and operational decisions on the Internet especially the construction of basic infrastructure. One fundamental reason is that privatization will harm bureaucratic interests.[48] Consider China Telecom for example. China Telecom directly belongs to the MII, which controls nearly 80 percent of China's Internet connections. As Muller and Lovelock pointed out, "China Telecom is a state-owned enterprise whose assets and management are still integrated into the bureaucratic hierarchy of a line ministry at national, provincial, and township level".[49] Since it is not profit-motivated, its goal is to meet state development requirements and expand its power within the government hierarchy. Therefore, their key interests are to: 1) prevent foreign direct investment (FDI); 2) shelter its rates and revenue streams from competition; 3) retain China Telecom's special status as a national champion and instrument of development.[50] Moreover, MII/China Telecom acts a dual role. Thus it is both a rule maker as well as a player—the government telecom branch is tightly combined with enterprise. Therefore they are capable of preventing the privatization as well as prohibiting foreign participation. In addition, those branches are parts of the government, which have to provide housing, medical insurance and even the school arrangement for the employees and their children. Since China still has not completed reform of the social welfare and unemployment

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[48] Author's opinion
[49] Milton Muller and Peter Lovelock, "The WTO and China's Ban on Foreign Investment in Telecommunication Services: a Game-theoretic Analysis", Telecommunication Policy, 24 2000, pp. 743-745
[50] Ibid.

insurance system, privatization may result in large-scale unemployment and social disorder.

Another challenge was posed by foreign investors. Chinese history, from 1840 to 1949, saw the Chinese government lose the power to decide its own fate. Prior to 1949, China's telecommunication development was dominated by aggressive foreign encroachment on China's sovereignty. Foreigners directly set up unauthorized telephone facilities and earned large profits. Therefore, the new government established in 1949 did not allow foreigners to invest in the telecommunication sector. Foreigners were considered "imperialistic, exploitative, unfriendly, and unfair". Reform policies of 1978 brought both the adjustment of economic policies and ideology. The government decided to open the door again. Today, big companies like AT&T, Motorola, NEC, Ericsson, Phillips and Northern Telecom all have at least one type of collaboration with their Chinese partners. They have been limited to equipment supply and manufacturing—service operations have been strictly closed to foreigners.[51]

However, according to China's agreements with the World Trade Organization (WTO): upon accession, foreign operators will be permitted to take a 25 percent share in mobile telecom firms, rising to 35 percent after one year and 49 percent after three years. In Internet, paging and other value-added services, foreign firms may immediately take 30 percent stakes in Chinese companies in Beijing, Shanghai and Guangzhou, rising to 50 percent in two years, when geographical constraints are lifted. Tariffs on many high-tech products like telecom equipment will

[51] Zixiang Tan, "The Impact of Foreign Linkages on Telecommunications and Development of China", Paul S.N. Lee (eds) Telecommunications and Development in China, (Cresskill, New Jersey: Hampton Press, 1997), pp263-279

be phased out and eliminated by 2005. Fixed line and long distance service would open most slowly, with 25 percent stakes allowed after three years and 49 percent after six years.[52] Similar to domestic private investors, even after WTO, foreigners are still prohibited from entering the operation level. But their influences are more profound.

Pressures from the WTO have already accelerated the telecommunication reform. In the last three years, the conglomerate China Telecom has been divided several times to break its monopoly in the post service, fixed-line telephone, mobile and satellite business. Soon after China's final accession to the WTO, the State Council formally announced the newest breakup plan to "meet the challenges from international competition posed by WTO". This plan ordered the north part merged with another two telecom operators, China Netcom and Ji Tong, to form the new China Network Communications Corp. The south part inherits the name of China Telecom Group. The two new fixed-line carriers, China Network Communications Corp and China Telecom Group, which also provide Internet service, are expected to be officially launched abound February 2002. Once launched, they will be allowed to enter each other's business terrain to start competitive operations, which will give users more choices. In the long term, the MII will set the four major business operators- China Telecom, China Mobile, China Unicom, and China Network Communications Corp- to compete in all telecoms business.[53] By dividing China

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[52] "Impact on Chinese Sectors after WTO Entry", China Daily, 16 September 2001, http://www.chinadaily.net/news/2001-09-16/33547.html

[53] Jian Cheng, "China to Buck Global Tech Downturn Trend", Chnia Daily, 8 January 2002, http://www1.chinadaily.com.cn/bw/2002-01-08/51065.html

Telecom, the government may have unconsciously unleashed powerful forces capable of changing this sector.

The Conflicts

As illustrated in the section above, the Internet will certainly help the economic development of China. However, there are also potential conflicts. The first tension is the conflict between the government control and the booming economy. A healthy market-oriented economy needs the free-flow of information. Once equipped with advanced telecommunication products—telephone, modem and computer—individuals and groups in Chinese society can obtain various sources of information and quickly communicate with each other, and this poses a threat to government. Moreover, the government is also worried about that so-called "yellow and black" information – pornographic and political dissent materials – can be transmitted via the Internet, weakening its control. Thus, the government's desire to seize the Internet's vast commercial potential conflicts with the desire to maintain control of the information and minimize the potential political cost of this technology development. Moreover, the monopoly of the government also conflicts with the fair competition rule of the market.

The second potential conflict is that between the government and the foreign investors. There is a pressure for a more open market. The media and telecommunication sector is seen as one of the most profitable areas. It is also the last industry that the government will give up. This situation dramatically changed when in April 1999, during the WTO negotiating visit to the United States, Chinese Prime

Minister Zhu Rongji made a major concession to open the telecommunication sector (as well as other sectors) in order to reach a final agreement on China's WTO accession. Although WTO membership does not explicitly mandate open, efficient capital markets, China would be implicitly required to do so in order to attain the full benefits of membership. As John Greenwood points out:

> As soon as China joins the WTO and agrees to a program of rapid tariff reductions to comply with WTO rules, a series of pressures or even shocks will start to be imposed on Chinese mainland industries and firms, which will require urgent, concurrent structural reforms. WTO membership, therefore, will intensify the need to become internationally competitive and increase the pressure for domestic structural reform, which implies a radical shake-up of China's capital markets. [54]

WTO offers a chance for foreign investors to secure a right to participate in the market as well as to obtain protection from the abuse by the government telecom branches. The new trend is the building of a joint venture. In last June, for example, America Online and China's Legend computer company announced a $200 million joint venture - highlighting the opportunities in China's large and growing Internet market. Expected legal changes and the economic slow-down elsewhere make China particularly attractive right now to foreign companies. The deal pairs Legend, China's largest personal computer maker, with America Online, a major U.S. Internet company with tens-of-millions of subscribers around the world. Legend will get a 51 percent stake in the joint venture aimed at developing Internet service in China. But how far the WTO/Open market will go is still in question. AOL will be limited to providing technical expertise to Legend. It remains to be seen whether the Chinese government will relinquish political controls for this Internet deal to fully succeed.[55]

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[54] John Greenwood, "The Impact of China's WTO Accession on Capital Freedom", Cato Journal, Vol. 21, No. 1 Spring/Summer 2001. p.91

[55] Jim Randle, "AOL Enters Chinese Market", VOA, 6 December 2001, http://www.voanews.com/article.cfm?ObjectID=63AA54C8-5F34-11D5-

The worries of foreign companies such as AOL are not without grounds. Following the uncertainties of telecom reforms and opening up of the economy, the policy on services which heavily rely on basic telecommunications, is believed to be one of the least likely to change after the WTO entry. For many areas such as the media, foreign investors will still be very cautious or act when they find out a way to circumvent regulations. In order to "avoid chaos on news media", early this year, the Publicity Department of the Central Committee of the Communist Party of China and the State Administration of Radio, Film, and Television (SARFT) said that operations of Chinese press groups will remain State-monopolized and entirely excluded from private and foreign capital. The new official rule only opens the door to large State-owned enterprises (SOEs) and institutions. Yet these investors are still prohibited from holding controlling stakes and are from making routine management and operational decisions. Therefore, even though there are many SOEs are already joint ventures with foreign and private funds, they have to obey the rules and wait for the final answer of the authorities. China's firm position cools off many foreign investors' WTO dreams.[56]

The government's concern of national security also conflicts with the plans of foreign capital. The failure of Microsoft in the government project competition is a good example. The 2002 Chinese governmental "patent movement" campaign, which urged all government departments to use copyrighted software, attracted both domestic and overseas software makers. Though Microsoft's Windows series are currently widely used by the Chinese government departments it was defeated by the

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841A00508BF9712A&Title=AOL%20Enters%20Chinese%20Market&db=voa

[56] "China limits overseas investment in media", China Daily, 17 January, 2002, http://www1.chinadaily.com.cn/news/2002-01-17/52449.html

domestic Red Flag Linux system. That main reason is the government's fear of the "back door" of Microsoft's software.[57] The new rule launched this year by MII further claims that foreign software makers must now guarantee in writing that their products do not contain hidden programs that would allow spying or hacking into Chinese computers. The rule also requires computers playing an important role in Chinese networks to use only domestic software.[58]

In summary, the development of the Chinese Internet is a study in contrast. China has deployed nearly every technology currently available and yet has a highly regulated monopoly. There is strong competition among different government departments. There are also private investors and foreigners trying to enter. As discussed in this chapter, the government has already noticed that an unregulated network would shift power from the state to the citizen by providing an extensive forum for discussion and collaboration. The participation of foreign investors does not necessarily work against the government but their activities surely will open more channels for information, which potentially challenges the state's traditional methods of surveillance and censorship. The phenomenon of Internet pornography, Internet dissidents and hackers threaten the government's monopoly and policy agenda. Thus the desire for economic growth, the desire to obtain more foreign capital and new technology, conflicts with the traditional model of governance. Therefore currently, the Chinese government is simultaneously fostering the growth of the Internet and

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[57] Mingjuan Hou, "Software Needs a Hard Drive", China Daily HK , 31 January, 2002
[58] "China Orders Net Providers to Screen E-mail", CNN,
http://www7.cnn.com/2002/TECH/internet/01/18/china.internet.ap/index.html

weaving a web of regulations to limit Internet access and content. The following chapter will discuss government approaches to exerting state control over the Internet.

Chapter Three:
Government Control of the Internet in China

The issue of Internet security and censorship is common to all countries. As in other countries, the Chinese government tries to use both technical and non-technical methods to control the Internet. The strict control and broad legal framework for Internet content, however, need further discussion. This chapter will first focus on the legal environment of Internet development, which covers both technical and non-technical aspects. Once this has been achieved, it will discuss the structure of the regulatory institutions. Finally the chapter will explore from a different perspective the conflict discussed in the previous chapter: namely, the conflict between a centralized system that has great controls over the dispersal of information and a decentralized Internet system which will shift the power from the government to the individual.

Firewalls and Internet Regulations

Firewalls offer a convenient point where logging and auditing functions can provide summaries about traffic flows passing through, traces of inbound and outbound connections, attempts to break through, and alarms for attacks as they occur.[59] Since a firewall cannot control traffic that is not routed through it, the government must control the route to make the firewall efficient. In the Chinese context, it is somehow easier than in other countries. First, there are only ten

[59] For further information and consideration see "The Great (Fire) Wall of China: Internet Security and Information Policy Issues in the People's Republic of China"

international links and all of them are under the control of the government. Secondly, since most Chinese Internet users use dial-up to access the Internet, it is convenient for the government to detect—traditionally the MPT/MII has monitored telephone calls, especially international telephone calls.

The Chinese government set up firewalls and corresponding software to filter information and protect secrecy. For example, Internet security was a major design criterion for CERNet, which is charted to connect all Chinese universities and institutes in the near future and all K12 schools. CERNet is configured in three layers: (1) the national backbone, (2) eight regional networks, and (3) university campus networks. As introduced in Chapter Two, CERNet is also part of the Chinese Intranet network. One advantage of a web-based Intranet to an organization seeking to control information is the developing ability to track aggregate web traffic and individual user web traffic. Firewalls and access lists have been set up on different levels to ensure the "safety" of the network. CERNet traffic is recorded and analyzed for network performance and security analysis.[60]

A firewall is the technical way to control the content. It is also related to non-physical control since every firewall needs a filtering standard—the classification of the information. Thus, a question has to be asked: what information should be blocked? The very function of the firewall shifts the power back to the government. In response to the Internet explosion, the governmental departments and agencies responsible for the information security of China have begun to legislate this flourishing sector in a way that is far stricter than in other countries. Preceding the *The Safety and Protection Regulations of the Computer Information System of the*

[60] Ibid.

People's Republic of China (1994), Chinese officials conducted research on legislation on the protection of information security, and subsequently launched a series of new ordinances.[61] Those laws have set up the framework for the Internet provision and regulation of China.

The accord between China and the United States signed in November of 1999 on China's accession to the WTO has put further strain on the IT legislation and development process for the Chinese Communist Party. One of the conditions of China's entry into the WTO is to allow foreign investment into the information technology industry, one of the most promising sectors of the Chinese economy. Under self-imposed pressure, the Chinese government has accelerated the legislation process in a desperate attempt to govern the freewheeling Internet. The year 2000 appears to be a "Great Leap Forward" for the legislation of information technology. The State Council and Ministry of Information Industry instituted a set of regulations[62]: Compared to laws before, those new laws focus on the details of the Internet especially pay more attention to the information conveyed by the Internet.

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[61] Including:

- *The Provisional Administration Methods of World Wide Internet Connection* (1996)
- *Computer Information Network and Internet Security, Protection and Management Regulations* (1997)
- *The Regulations on the Registration of Domain Name in China* (1997)
- *The Implementation Methods of Provisional Administration Methods of World Wide Internet Connection* (1998)
- *The Provisional Administration Rules of Computer Information Secrecy* (1998)
- *The Provisional Administration Rules of Computer Information Security in Finance Institution* (1998).

[62] Including:

- *The Provisional Rules for Online Stock Trading* (April, 2000)
- *The Administration Methods of the Information Service of Internet* (September 20,2000)
- *The Telecommunications Administration Regulation of the PRC* (September 25,2000)
- *The Provisional Regulations on the Solving of Chinese Domain Name Disputations* (November 3, 2000)
- *The Provisional Regulation on Internet News Service* (December 8,2000)

The Chinese government has also revised laws related to Internet development. In 1997 the government revised the criminal law (regarding Article's 285, 286, and 287) for cyber crime. In October 2000, the 18th meeting of the Standing Committee of the Ninth National People's Congress (NPC) passed the revised laws, which govern Chinese-foreign cooperative firms and companies that operate solely with foreign capital.

No doubt, those regulations and acts have enhanced government control of the Internet. First, they help the government to control the Internet connection and structured a state Intranet. According to the State Council's Order No. 195 "*Provisional Administration Methods of World Wide Internet Connection*", which was announced on February 1, 1996 and modified on May 20, 1997 [63]and *The Implementation Methods of Provisional Administration Methods of World Wide Internet Connection* (1998), not every network can "directly" carry out international networking. Thus, there are two different networks: "Interconnecting Networks" (*Hulian Wangluo*) is defined as a computer information network that carries out international networking which is the bridge between Chinese computer networks and foreign computer networks. The other one is "Connected Networks"—also can be translated as "Access Networks"(*Jieru Wangluo*). They are domestic computer networks that connect to an "Interconnecting Network" to carry out international

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- *The Provisional Regulation on the Bulletin Board System* (December 8,2000)
- *The Decisions about the Security Protection of the Internet* (December 28,2000)
- *The Administration Methods of the Management of the Internet Service Public Site* (April 3, 2001)

[63] According to Tym D. Lawrence, it can be also translated as *Provisional Regulations of the PRC for the Management of International Networking with Computer Information Networks*. "Will the Net Entangle the Dragon?", http://www.qis.net/chinalaw/chinnet2.htm

networking. [64]Therefore, China's Access Networks are equal to Internet Service providers (ISPs) in the Western world. The State Council's Order grants the ownership and operation rights of Interconnecting Networks to government agencies, MPT, MEI, CAS and the State Education Commission. After the government reform in March 1998, the above four agencies have been changed to three: MII, CAS and the Ministry of Education. Currently, there are ten Interconnecting Network in China (Including one belongs to the military). No one else is allowed to operate Interconnecting Networks without the approval from the State Council.[65] However, The government's control on the connection is not that efficient. With the help of wireless technology and other Internet skills it will be very hard to say exactly where is the beginning or the end of the Internet. For example, if you have an international dial-up number of a foreign Internet connection provider, you can go to a hotel and dial a long distance phone call and surf the Internet- no problem in China.[66]

Secondly, those laws help the government to regulate ISPs. The government wants to build an efficient censorship system and a registration system, which can ensure control over the information flow in PRC's fledgling computer networks. *The Safety and Protection Regulations of the Computer Information System of the People's Republic of China* (1994) dictates that each organization has to create its own specific procedures to implement computer protection. For example, an organization must develop access controls, administrative controls, and personnel controls. This law was issued before Internet access was a reality in China. In 1997,

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[64] Ibid.

[65] Zixiang Tan, "Regulating China's Internet: Convergence toward a Coherent Regulatory Regime", Telecommunications-Policy, April-May 1999, pp270-272

[66] Some people I knew tried this method in China this year. The connection is good but the phone bill is big.

according to *Computer Information Network and Internet Security, Protection and Management Regulations*, the Ministry of Public Security ordered all users of the Internet and other international computer networks to register with the police. According to Article 4 of *The Administration Methods of the Information Service of Internet* (September 20,2000), China classified ISPs into two different types. One is "Non-commercial ISP", which does not charge fees on the information it provides; the other is "Commercial ISP". The first one must get a governmental permit while the second one must file its records with corresponding governmental branches.

Thirdly, the government regulates Internet Cafes and builds corresponding offices in each local government branch. According to *The Administration Methods of the Management of the Internet Service Public Site* (April 3, 2001), the Internet Café or other Internet service public location provider must get a permit from the government. Its management is under the monitor and check of Telecom, Culture, Public Security Bureau and Commercial Administration sectors of the corresponding government. Every public Internet site must keep records on their users and these records must be kept for 60 days. Thus, the government can monitor random users.

Fourthly, the government monitors the content of the Internet—information available on websites. Article 5 of *Computer Information Network and Internet Security, Protection and Management Regulations* (1997)[67] lists the prohibited information:

> No unit or individual may use the Internet to create, replicate, retrieve, or transmit the following kinds of information:
> (1) Inciting to resist or breaking the Constitution or laws or the implementation of administrative regulations;
> (2) Inciting to overthrow the government or the socialist system;

[67] The English Translation of *Computer Information Network and Internet Security, Protection and Management Regulations* (1997) was found in Law Section of RenMin University Library, Beijing.

(3) Inciting division of the country, harming national unification;
(4) Inciting hatred or discrimination among nationalities or harming the unity of the nationalities;
(5) Making falsehoods or distorting the truth, spreading rumors, destroying the order of society;
(6) Promoting feudal superstitions, sexually suggestive material, gambling, violence, murder;
(7) Terrorism or inciting others to criminal activity; openly insulting other people or distorting the truth to slander people;
(8) Injuring the reputation of state organs;
(9) Other activities against the Constitution, laws or administrative regulations.

In 2000, the *Decisions about the Security Protection of the Internet* restated the sweeping ban on presenting or disseminating information that could harm the state or threaten reunification efforts with Taiwan, as well as pornography and gambling. Moreover, in response to officially defined "cult" activities on the Internet (such as Falun Gong[68]), this law further established a ban on advocacy information from these cults. Accompanying the *Provisional Regulation on the Bulletin Board System* and *The Provisional Regulation on Internet News Service,* the government weaved a tight net for Net information transmissions. (Details will be discussed in the next chapter).

Therefore, by limiting access to networked computers, filtering content or blocking Web sites using software tools and monitoring users' online behavior, the government exercises considerable control of the Internet. From the government's point of view, the current weakness of legislation is the regulation on e-commerce. But the government has already put it into the policy-making agenda. *The Provisional Rules for Online Stock Trading* (April, 2000), for example, bans non-brokerage companies, such as general Internet portal operators, from offering online brokerage services. It also requires any licensed brokerage to apply for permission to launch

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[68] It is a religion group that was banned in 2000 and has come under a government crackdown.

online services. Another weakness is the enforcement of legislation. Who should be in charge of this sector? There are confusions over which of the twenty-some possible state organizations in this sector will exercise government control. This issue will be discussed in the next section.

The Restructuring of the Regulatory Institutions

Another fundamental issue is the enforcement of the legislation outlined in the sections above. The traditional Chinese organizational structure is sector-oriented. Thus, different ministries are separately in charge of telecommunication, TV and radio broadcasting, information technology product manufacturing and publishing. Since the Internet results from the technology convergence of computing, telecommunication and media, this fragmented structure cannot deal with the Internet effectively.

Before 1993, the dominant player in China's basic telecommunications service was the MPT. Since 1993, as part of "Golden Bridge Project",[69] the State Council has announced an important series of new information technology initiatives, which aim at more efficient centralized government planning. Two new telecommunications organizations have been licensed to operate nationwide services to compete with the MPT: Lian Tong and Ji Tong. Lian Tong, also known as China

[69] The Golden Project was first proposed by Vice Minister Zhu Rongji in early 1993. According to Yurcik and Tan, this project includes:

Golden Bridge.....	public economic information processing network
Golden Customs.....	foreign trade information sources
Golden Card.....	electronic monetary and modern payment system
Golden Tax.....	electronic taxation system
Golden Enterprises....	industrial production information network
Golden Agriculture....	management and service information system
Golden Intellectual....	education and research computer network
Golden Policy.....	economic micro-policy making support system

United Telecommunications (China Unicom, also in charge of UniNet) was formed by a group of rival government agencies of MPT. In effect, it is Ministry of Electronics Industry (MEI)'s national corporation. Ji Tong is a joint venture established as a data communications competitor to the MPT. MPT has responded by lowering prices and increasing investment. It is the first step to ending the monopoly of MPT. But as many experts have argued, this is not a fundamental change. There is no clear framework of this sector and the MPT did not change itself much. Rather, it is a battle within the government. Thus the MEI-led ministry coalition fights with MPT for the profits of telecommunication. The former successfully combined their private plan with the central government's agenda of improved macroeconomic control. [70]

In 1994, the government launched the National Joint Conference on Economic Informatization and then started on its restructuring plan. In 1996, it changed to the State Council's Steering Committee on National Information Infrastructure (NII). However, since this Steering Committee is still a transitional form and lacks permanent status, it is unable to take over all regulatory responsibilities. In March 1998, the government decided to carry out an ambitious plan to create the Ministry of Information Industry (MII). MII was set up by merging the existing Ministry of Posts and Telecommunications (MPT) with the Ministry of Electronic Industry (MEI), plus information/telecom related administrative functions of other Ministries[71] Compared to the State Council's Steering Committee on NII, MII has more financial means and

[70] For in-depth information see Zixiang Tan, "Regulating China's Internet: Convergence toward a Coherent Regulatory Regime",

[71] The regulatory functions from: the Ministry of Broadcast, Film and TV(MBFT), China Aerospace Industry Corporation and China Aviation Industry Corparation.

administration powers. It is responsible for regulating the manufacture of information products, telecommunications and software industries, and mapping out overall plans for Internet development. [72]

But unlike the predecessor, MII is not above all the other Ministries. Moreover, some related agencies are not connected to MII. For example, the Chinese Internet Network Information Center (CNNIC) is also under the control of CAS.[73] The existence of State Council's Information Office also affects its political authority. In addition, unlike the Steering Committee on NII, which is a neutral government branch, MII is tightly tied to business operations (e.g.ChinaNet and ChinaGBN). Therefore MII potentially promotes the monopoly and harms the construction of a fair market.[74] Though the government already began to separate MII from the business operation, the future so far is not clear. Moreover, a simple merging cannot solve the conflict between MPT/ChinaNet and MEI/ChinaGBN. Those local operating branches still contest with each other.

Along the trends of institution convergence, the government also developed branches in specific areas. In 2000, the government launched its own central agency: the China Internet Network Information center and its corresponding agency CNNIC as the only body authorized to register Chinese language domains. It challenges the international governing body, the U.S.-based Internet Corporation for Assigned Names and Numbers (ICANN) organization, which, in theory, has the sole power to appoint registrars around the world to govern the use of common web address

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[72] For in-depth information see Zixiang Tan, "Regulating China's Internet: Convergence toward a Coherent Regulatory Regime",
[73] About CNNIC, refer to http://www.cnnic.net
[74] "Regulating China's Internet: Convergence toward a Coherent Regulatory Regime"

suffixes such as ".com" and ".net", also known as generic Top Level Domains (gTLDs).[1] Therefore the Chinese government obtained the power to bar groups, which do not conform to its own criteria. [75]

The Conflicts

There are many critics of China's current information technology policies. For example a report from the *Asian Wall Street Journal* declared, " Beijing has been struggling with how to govern the county's freewheeling Internet sector."[76] The new draft regulations (*The Administration Methods of the Information Service of Internet* and *The Telecommunications Administration Regulation of the PRC*) introduce a torrent of licensing obstacles that could complicate existing operations and even deem them illegal in their current form. The regulations have been said to use vague terms that fail to remove uncertainties for investors, especially foreign investors, and portray a lack of understanding of the Internet's nature.[77] But the important factor that decides the Chinese IT development is the corresponding law. As Professor Zhou Qiren from the Economics Research Center of Beijing University points out, "Without consistent protection by a reliable and well-defined legal system, it will be very difficult for China's Internet industry to develop".[78] Now the question is *how* to regulate the new industry not whether or not there should be a law.

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[75] "China: If ICANN, So Can We", CNN and Reuters
http://www.cnn.com/2000/ASIANOW/business/11/20/ebiz.icann/index.html
[76] Leslie Chang, "Draft Laws on Internet Investing Undercut WTO Pledge," The Asian Wall Street Journal, 18-24 September 2000, p 7
[77] Ibid.
[78] "Foreign Capital and China's Internet Industry," China Today, February 2000, p 43-44

There is also a deeper conflict behind the scene. The related official agenda-setting announcements illustrate the key concern: how to promote the Web's economic benefits while preventing its use as a tool in spreading opposition to Communist party rule. *China Daily* reported the most recent speech regarding the Internet given by Chinese President Jiang Zemin:

> China should promote the application of information technology (IT) to all sectors, from science to education to law, Jiang told a gathering of senior legal leaders. "The development of information networks not only boost the national economy but also enrich the culture and are conducive to improving the governmental efficiency," Jiang said.
>
> Still, this growth brings new problems for authorities to grapple with. The chief concern, Jiang noted, is the rampant spread of superstitious, pornographic, violent and other harmful information and Internet crimes.
>
> Jiang said practical and effective measures must be adopted to strengthen network safety and improve the management of information networks. Present laws are not enough, the president exclaimed.
>
> Jiang also said China should take an active role in drafting international regulations on information networks and strengthen its personnel training on information network management. [79]

In the above speech, there are two fundamentally opposed guidelines for the Chinese government's Internet legislation process as well as the whole IT development plan making process. The first guideline is the need for the free flow of information to promote domestic economic development as well as to attract foreign capital investment. Never before in China has an industry grown as fast as the information industry, including the Internet and telecommunications. China's telecom market, for instance, continued to enjoy record rapid growth with telecom income reaching 307.4 billion yuan (US$37.1 billion) in 2000, a 26.4 per cent increase over 1999.[80] The government itself invests heavily in the Internet and related telecommunication infrastructure buildings. For example, the State Economic and

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[79] "President Highlights Importance of IT Sector in Economy's Future", China Daily, 12 July 2001 http://www1.chinadaily.com.cn/news/cn/2001-07-12/19738.html

[80] "Telecom Service Providers to Grow after China's Entry into WTO – Interview", Xinhua, 23 August 2001 http://www1.chinadaily.com.cn/itchina/2001-08-23/28705.html

Trade Commission said in August 2001 that it would fund Datang Telecom's Dense Wavelength Division Multiplexing (DWDM) project[81], the total investment of which will amount to 110 million yuan (US$13.25 million).[82] Moreover, the government also accepts some international rules and prevents China from being left out of the coming informational revolution and e-commerce. In order to meet the requirements of China being admitted into WTO, the revised laws on Chinese-foreign cooperative firms and companies operating solely with foreign capital have been changed. Some restrictive Articles have been abolished, such as the Article that demand foreign-fund firms to keep a balance of foreign currency and hand over their plans on production and operation to the authorities. To some extent, those revisions help the future legislation on international co-operations on information industry sectors. Even though the *Telecommunications Administration Regulation of the PRC* does not offer a bright future for foreign capital, it at least offers a promise and several details about the future development.

The second guideline is to protect the political stability of China and the leadership of the Chinese Communist Party. Therefore, the government's approach to IT law is to build an efficient censorship system and a registration system, which can ensure control over the information flow in PRC's fledgling computer networks. A new method was launched in August 2001 in Xi'an, the capital of Northwest China's

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[81] DWDM is a fiber-optic transmission technique that uses light wavelengths to transmit data. It's a crucial component of optical networks that allows the transmission of e-mail, video, data, and voice-carried in Internet protocol (IP), asynchronous transfer mode (ATM), and synchronous optical network/synchronous digital hierarchy (SONET/SDH), respectively, over the optical layer.

[82] Jie Gao, "Datang Telecom DWDM Efforts Get Government Funding", China Daily, 11 September 2001 http://www1.chinadaily.net/itchina/2001-09-11/32225.html

Shaanxi Province. According to the report of *Xinhua* on Aug 9[83], over 800 Internet cafes here installed an Internet security software called "Internet Police" to enforce online safety regulations. The software is "highly effective": "visitors attempting to enter banned websites or pages will be warned, and the screen will be automatically shielded off once the page is opened". Moreover, it is "able to capture designated computer screens and cast them on the screen of the central controlling office under the local public security bureau". In contrast with its item on "Internet Police", *Xinhua* presented a very different perspective on Internet technology less than a week later:

> The output of the IT industry is expected to make up more than 7 percent of the gross domestic product (GDP) in China in the next five years, according to a government forecast. The State Development Planning Commission (SDPC) said in a plan that China will expand the size of its information and telecommunication network to become the largest in the world by 2005. According to the plan for upgrading the economy and social life with information technology, the country will have more than 70 million computers in 2005...The plan said that the Chinese government will attach top priority to the development of the economy and society through application of information technology. In the next five years, the output of IT service industries will grow by more than 30 percent annually...The output of information product manufacturing will make up 3 percent of the GDP in 2005. The exports of information products are expected to grow at an annual rate of 15 percent in the next five years, occupying a larger share of the international market, according to the plan.[84]

In comparing the two reports, the inevitable conflict in China mentioned before is obvious: a centralized system that has great controls over the dispersal of information vs. a decentralized Internet system, which is crucial for domestic economic development and the attraction of foreign investments.

The current trends show the government already decided to tighten its grip on the only major medium in China not already under state control. In January 2002, in order to "enrich and improve" regulations on telecommunications, the MII launched

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[83] "Online Police Show Up in Xi'an", Xinhua, 9 August 2001
http://www1.chinadaily.com.cn/itchina/2001-08-09/25601.html
[84] "IT Industry to Make up 7% of GDP in 5 years", Xinhua, 14 August 2001,
http://www1.chinadaily.com.cn/itchina/2001-08-14/26593.html

18 regulations which stipulated specific measures covering a wide-range of fields, such as bidding for telecommunications projects and the use of code resources. Under the new rules, general portal sites must install security programs to screen and copy all e-mail messages sent or received by users. Those containing "sensitive materials" must be turned over to authorities. Providers are also responsible for erasing all prohibited content posted on their Web sites, including online chatrooms and bulletin boards.[85] Moreover, the government also accelerates the corresponding technology development. The State Exemplary Project for Secure Information Application, a major scientific task during the 10th Five-Year Plan period (2001-05), recently passed an expert appraisal organized by the Ministry of Science and Technology, marking the official inauguration of the project. The National Cipher Commission will "take charge of implementation. Universally applicable information security infrastructures, which rely on proprietary technologies related to information security, will be built. Typical applications in important administrative and economic fields, including power control and direction and two other systems, will be built as demonstrations." Thus, the self-defense capacity of the country's information system will be remarkably improved through the upgrading of key technologies and applicable integration of proprietary information products.[86]

Will the technology and the corresponding economic benefits speed up political reform? Will the Internet users in China become aware of their own rights and challenge the traditional methods of governance? At this stage, the study is not ready to provide an elaborate response to these two questions. However, an analysis

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[85] "China Orders Net Providers to Screen E-mail"
[86] "The State Exemplary Project for Secure Information Application", BjreviewCom , http://www.bjreview.com.cn/bjreview/EN/200204/Authoritative-200204.htm

of the characteristics of government control is very helpful, as it shows the fundamental crisis behind the scene. Such a discussion further develops the building blocks necessary to prove this study's hypothesis. The following chapter will examine this dilemma from the perspective of the Internet user.

Chapter Four:
The Individual and the Developing Internet

There is an emergence of a Chinese urban "Internet Society". Thus, millions of Chinese people have already accessed the wealth of information from the global community. Will they be aware of their own rights and challenge the traditional system of governance? This chapter will first explore the diffusion of the Internet in China and provide a profile of Chinese Internet user. Then it will focus on the privacy issue, which is important to understand the reality of the Chinese netizens. Once this has been achieved, it will examine two important groups—the student and the Internet dissident.

The Diffusion of the Internet in China

Geographically, Chinese "netizens" are located in the richest part of China, e.g. Beijing, Shanghai and Guangdong. Thus it is very hard to convey their ideas to other provinces. Figure 7 shows the difference between the rich and poor areas.

Figure 7 The Unbalanced Internet Development in China

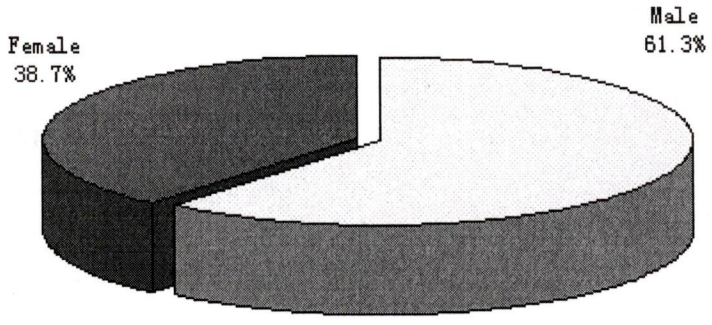
	Rich Area			**Poor Area**		
Distribution of Domain Names	Beijing	Shanghai	Guangdong	Qinghai	Guizhou	Gansu
Number	44304	11913	18000	105	413	451
Percentage	34.8%	9.3%	14.1%	0.1%	0.3%	0.4%
Distribution of "WWW" Websites	21.8%	10.7%	14.0%	0.2%	0.6%	0.7%

SOURCE: CNNIC report in July 2001, at http://www.cnnic.net/develst/rep200107-e.shtml

Chinese netizens are not the majority of the general population. According to the CNNIC July report, if you are a young male, single, well educated, you are more likely to be the Internet user. (See Figure 8)

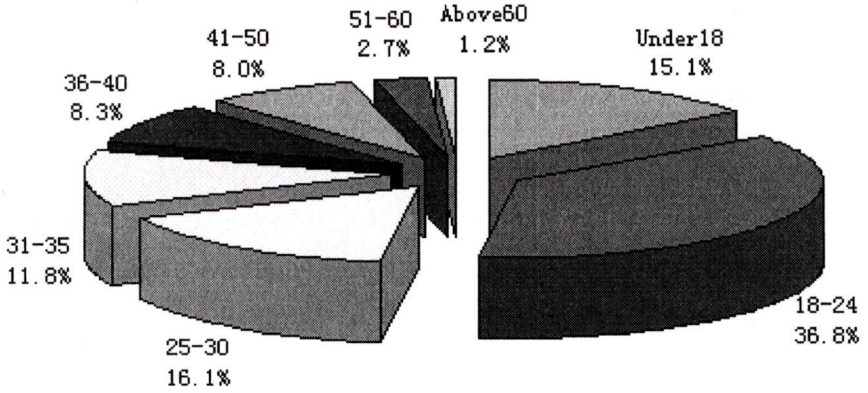
Figure 8 The Personal Information of Chinese Internet Users

1. Gender : Male 61.3%¬Female 38.7%

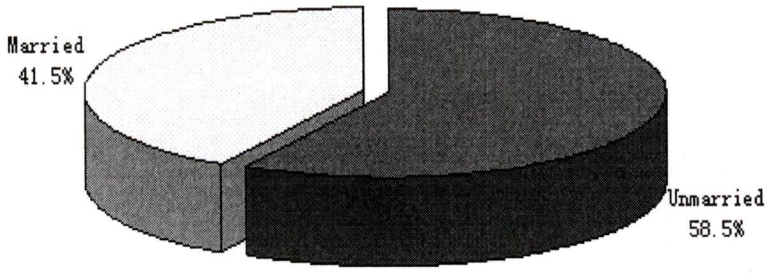


2. Age :

Under18	18-24	25-30	31-35	36-40	41-50	51-60	Above60
15.1%	36.8%	16.1%	11.8%	8.3%	8.0%	2.7%	1.2%



3. Marital Status : unmarried 58.5%¬married 41.5%

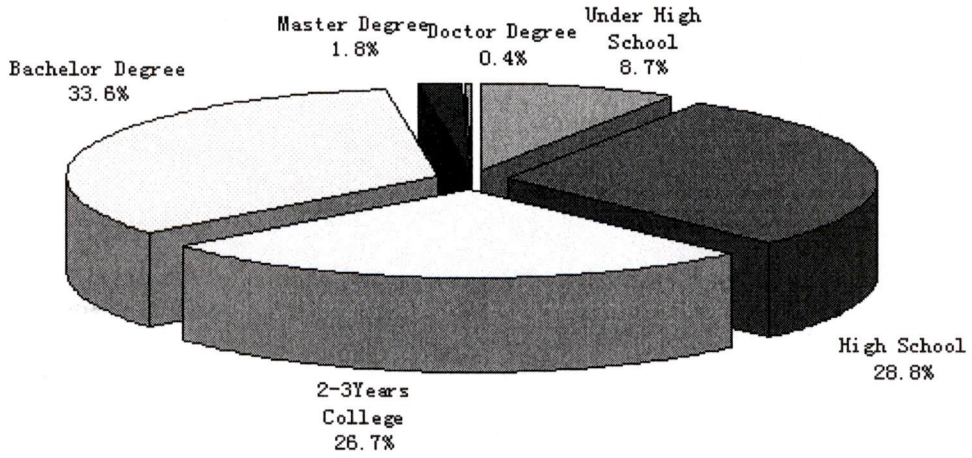


4. Monthly Income per Capita (RMB) :

Under 500	501-1000	1001-1500	1501-2000	2001-2500	2501-3000
20.0%	25.5%	16.3%	9.0%	5.6%	3.7%
3001-4000	4001-5000	5001-6000	6001-10000	Above10000	No Income
3.1%	1.4%	0.5%	0.5%	1.1%	13.3%

5. Education Attainment :

Under High School	High School	2-3Years College	Bachelor Degree	Master Degree	Doctor Degree
8.7%	28.8%	26.7%	33.6%	1.8%	0.4%



The diffusion of Internet technology is still slow if compared to that in developed countries. According to surveys conducted twice a year between 1994 and

2000 by leading academic institutions in China and the USA, the diffusion of the Internet into the general population is faster in developed than developing nations. This study examines Internet diffusion in the two countries by age, gender, occupation and educational attainment. It compares user demographics when the Internet began and investigates whether they have changed in similar ways in the two countries. In the early development of the Internet a similar user profile is indeed found (young, male, with higher education background, from computer/education-related fields). However, user demographics in the USA have since moved considerably closer to those of the general population. In China, on the other hand, things have changed more slowly. It seems too early to predict a dramatic change in the entire Chinese society.

Internet Privacy Issues in China

In order to understand the characteristics of the current Chinese netizens, this section will discuss the issue of Internet privacy. According to the Article 40 of *Constitution of the People's Republic of China (1993)* the citizen's privacy is a right protected by Chinese law: "Freedom and privacy of correspondence of citizens of the People's Republic of China are protected by law. No organization or individual may, on any ground, infringe on citizens' freedom of privacy of correspondence, except in cases where to meet the needs of state security or of criminal investigation, public security or procurator organs are permitted to censor correspondence in accordance with procedures prescribed by law". But few Chinese people pay attention to this issue. In contrast to the West, where privacy is valued as a good indicator of the

relationship between the government and the citizen and the foundation for the civil society, Chinese culture does not connect privacy to individual rights. Rather, the sharing of personal information with other people and providing it to the authority is viewed as a duty of an individual.

As to privacy and the Internet, few Chinese users realize the importance protecting their personal information. The January 2001 survey carried out by CNNIC shows that only four per cent of Chinese Internet users view privacy as a serious problem. Thus when asked about "What is the Most Serious Problems in China's Internet?", people's answers were concerned about "Slow Access Speed" (46.41%), "High Price" (20.83%) and "Insufficient Chinese Information" (6.41%). "Unable to Protect Personal Privacy" only weighs 4.02%.[87] Given that almost no Chinese websites has a privacy protection policy and the government does not have a specific on-line privacy protection law, it is an interesting difference from the West.

The culture reason may contribute to this difference. Privacy in Chinese is *Yin Si. Yin* means "hide or something is hidden" and it can be translated to "concealed", "latent" or "hide". *Si* means "something related to self", "the sexual relation" and "the sexual sense of private part". *Si* can be translated to "illicit", "personal", "private", "secret", "selfish". Since *Si* is usually used to describe "selfish" activities, which it is not considered being good in a moral sense. Since Chinese society is built on a web of personal relationships, the assumption is that everything, if not bad or shameful (even the very secret of an individual) can be shared with family members. *Yin Si* (Privacy) in Chinese contexts, which cannot be told to others, inevitably, is usually limited to something not good or honorable or is assumed to be something related to

[87] CNNIC January 2001 Report, http://www.cnnic.net/develst/e-cnnic200101.shtml

sexual or romantic affairs. To some extent, the sharing of personal information and the sacrifice of privacy become the duty of individual. The ideal model of a person is that duties to family (Confucian)/ to the collective (Communism) and to society/state (both Confucian and Communism) come first and the rights the individual possess derive from duties. In China, one presumes that if you demand privacy, the government will wonder, "What are you trying to hide?" Furthermore, the Internet technology actually helps the government to gather more personal information and be able to efficiently monitor more citizens. Since 1999, for example, the MPS launched a network to collect and monitor city residents' personal information (ID pictures, address, telephone number and relatives etc.). By the end of 2001, this network has already gathered personal information on 650 million Chinese. At the same time this system helped the MPS and other government agencies go though almost 12 million citizens' personal information.[88]

This lack of awareness could also result in Chinese economy. In the West, however, the personal information has its price. The development of Internet enhances the value of personal information. Data generated by everything from web site visits to filling doctors' prescriptions to credit card transactions become grist for computerized trade and exchange. Accompanied by the development of credit system, e-banking and e-commerce, the information technology— in its commercial form, not even a decade old — is affecting the world economy and our day-to-day lives.

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[88] "BaiCheng Lianwang Gongcheng, 6.5Yi Renkou Xinxi Wang Shang Ke Cha" (650 million citizens' personal information are available on the "Hundred Cities Network"), Xinhua, http://news.sohu.com/63/17/news147581763.shtml

In China, however, the concept of personal/private property is not clear. The establishment of PRC further denied the individual's demands for the right of private property. This situation has been gradually changed since Deng's reform. But how far the economic development will push this concept and how far the government will go with the privatization is still in question. Moreover, the idea of the credit system and e-commerce is still a new thing to Chinese Internet user and the impact is still very low. According to a latest survey made by the Hong Kong-based Interactive Audience Measurement Asia (iamasia), only 10 percent of Internet users on the Chinese mainland have made transactions on-line.[89] According to the Chinese Academy of Electronic Information Industry Development (CCID) of Ministry of Information Industry (MII), B2B (business to business) still played a major role in e-commerce, accounting for about 99.5 percent of its revenue by the end of 2001. The B2C (business to consumer) market where ordinary users take part in only played a minor part.[90] Low Penetration of e-commerce directly affects China. China had 667 B2C (business to consumer) dotcoms at the beginning of 2000, through following mergers, acquisitions and bankruptcies, only 205 had survived by the end of 2001.[91] The credit system and credit cards are still not popular. The January CNNIC report shows that most people use cash and carry to pay bills and few will pay on-line via credit card. This situation may also help to explain why few people in China worry about their "privacy"—they have few things to lose, no one can get money from them and they can always give the fake name, telephone number and email address.

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[89] "Survey Shows Low Penetration of E-commerce", http://www.china.org.cn/english/6738.htm
[90] "Nation's Internet Fever Cools Down", http://www.china.org.cn/english/8152.htm
[91] Ibid.

There is also a gap between the rich and the poor and the Internet may potentially widen this gap. Thus rich and well-educated people get more information from the Internet and therefore might be stimulated by democratic ideas while the poor are still in the dark. This phenomenon is common elsewhere. For example, as 1992 the EKOS: Canadian Privacy Survey observed, knowledge and familiarity is one the factors that related to privacy concerns:

> In general, fears tend to be highest when the citizen is in the dark about the process and its purpose. Paradoxically, people arrive at the most extreme concern positions either because of knowledge or ignorance. Some fear privacy abuse because they believe they know about the sheer capacity of information technology to threaten their own interests. Others are fearful because they have no idea about the consequences of technology are. [92]

The weight of personal privacy in the lives of individuals actually grows according to their economic and social status. The survey further observed that a "class cleavage" in the nature and impact of privacy issue. "For those in the less powerful and less privileged classes, privacy threats are seen as vague yet threatening".[93] For people in the middle class, who have several credit cards, house mortgage, auto and life insurance and investments, since they are the targets of many businesses, the threat is very real. In contrast to Canada, however, China is still a developing country with a large population, the knowledge and wealth gap may separate those Internet users from the majority at the grass roots. This comes back to the problem of Internet diffusion. Thus without the support of the majority, it is impossible to carry out large-scale political reform.

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[92] Privacy Revealed: The Canadian Privacy Survey, (EKOS research Associate Inc. 1992), p. ii
[93] Ibid. p. iii

Individual Attitudes to Censorship

The government's efforts on the control of the content of the Internet face challenges from the user of the Internet. This section will first explore the role of the Internet as a tool to meet the individual's demand for information. Then it will examine two dominant groups of the Chinese users: the campus student and the Internet dissident.

The Internet as a Tool to Obtain Information

Traditional mass media (TV, radio, newspaper) in China do not provide independent information. The mass media is working for the government. A well-known slogan in China shows this unique characteristic: "Mass media is the throat and tongue of the Communist Party" (*Meiti Shi Dang De Houshe*).

But while the government monopolizes the information, some Chinese citizens try to gather independent information from nonofficial channels. According to Tianjian Shi's survey[94], among all respondents, 27.6 per cent reported they tried to gather information through "grapevine rumors". This figure is nearly identical to the percentages of respondents who reported they read the newspaper and listen to the radio (see Figure 9). It is no wonder the Internet attracts so many Chinese users. In the CNNIC 1999.1 survey, 95% of the people surveyed chose to "get information" as their main reason to surf the net and among them, 66% want to know political and economic news.[95]

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[94] Tianjian Shi, "Cultural Value and Democracy in The People's Republic of China", The China Quarterly, June, 2000,pp.542-546

[95] CNNIC reports in January 2001, http://www.cnnic.net/develst/e-9901.shtml. The question is multiple

Figure 9 Reports of Public Affairs in the Various Media by Nations

Percentage who follow accounts	U.S.	U.K.	China
In newspaper at least weekly	49	43	24
On radio or television at least weekly	58	36	65.4
Through the grapevine last month	_	_	26.7

SOURCE: From Table 1 in Tianjian Shi, "Cultural Value and Democracy in The People's Republic of China".[96]

The June 2001 survey of CNNIC also shows the strong desire for information especially the news[97] :

***Primary Goal for Accessing the Internet (Multiple Choice):**

Get Information including news	42.9%
Education (Learning computer and other new technologies)	4.3%
For Work/Business needs	5.8%
Entertainment (online chatting, making friends, playing games, etc.)	34.4%
Get free Internet Recourses (free e-mail account, free Personal homepage hosting, free resources download services)	3.1%
Communication (receive/send emails, short information; send faxes, etc.)	4.1%
Accessing Stock Trading and Information Retrieval	4.1%
Online Shopping	0.3%
Jumping on the Bandwagon	0.5%
Others	0.5%

***Primary Information Gathered Online (Multiple Choice):**

News	63.5%
Computer Hardware and Software	44.2%
Entertainment Information (sports, music, art, etc.)	44.1%

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choice

[96] Tianjian Shi, "Cultural Value and Democracy in The People's Republic of China", The China Quarterly, June 2000. The Chinese data come from 1993 nation-wide survey on political culture and political participation. Data from other countries come from Gabriel A. Almond and Sidney Verba, Civic Culture: Political Attitudes and Democracy in Five Nations (Princeton: Princeton University Press, 1963)

[97] CNNIC June 2001 report

Electronic Books	32.8%
Science and Education Information	31.4%
Financial, estate Information	19.0%
Job Listings	19.8%
Trade and Commerce Information	10.4%
Travel Information	12.5%
Advertisement	6.5%
Medical Care Information	7.6%
Matchmaking Services	4.7%
Laws, regulations and Policies	12.2%
Others	1.0%

The Internet does help the Chinese to know more, and more quickly, and has become the fourth media in China. It will probably outweigh traditional media - newspapers, radio and television - within one or two decades. Prior to 2001, thousands of news websites or web pages have been set up for 2,000 newspaper offices, 8,000 magazines, 290 radio stations and 420 TV stations in the country.[98] These websites can directly use foreign news sources, and some big news providers, like SINA.COM and SOHU.COM, had their own reporters and wrote news themselves before *The Provisional Regulation on Internet News Service* (December 8, 2000) was put into effect. After all, it is the independent sports news service, which broadcasts hot games by pictures and vivid text explanations (usually those international games that the Chinese national TV/Radio stations do not have broadcast permits), which makes SINA famous. But there is a language barrier that limits the sources of news. The CNNIC's surveys show that most users read news in Chinese and concentrate on domestic news. (Figure 10) Thus the English dominant Internet world naturally stops Chinese users.

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[98] "China's Media Rush", Beijing Review 4 December, 2001, p18

Figure 10. The Distribution of Information

The distribution of Information that had been viewed	2001.7	2002.1
Chinese Language Information	78.7%	78.1%
Domestic Information	71.3%	69.3%

SOURCE: CNNIC repots 2001.7-2002.1, http://www.cnnic.net

Therefore, Internet users who cannot understand English well find it is difficult to get more information after the news control law. Moreover, as Yurcik and Tan pointed out, the unique Chinese language may help the government to control the content of Internet information:

> The Chinese government has been supporting the development of Chinese language encoding standards. This represents a potential vulnerability to government control of Internet communications since the encoding standards are vital for interoperability. The Chinese government is aware of the importance of language use on the Internet.[99]

There are two groups of Internet users, which are more active and eager to seek and exchange information from independent sources. One is the campus student and the other is the dissident. The following two sections will separately explore their activities.

The Campus Network and the Internet Cafe

The campus computer center and the Internet Café are the two popular places for young students. The unique characteristic of the campus computer centers is that they can provide the service of national-wide Bulletin Board System (BBS). The building of the campus network was initiated by the three most prestigious academic

[99] Yurcik and Tan

institutes in China: Chinese Academy of Sciences, Beijing University and Tsinghua University. Funded by the State Planning Commission and the World Bank, the government began to build the National Computer Networking Facilities of China (NCFC). The three individual campus networks were constructed in 1992.[100] Since then different universities through out China began to build their own campus networks. With the help of CERNet, those separate BBS units joined together and quickly become popular among young university students. Since BBS is widely available and is cheaper than traditional communication tools, it quickly took the place of the telephone and the fax machine. (The cost of a student use campus BBS is only around 2 yuan per hour, or less than C$0.30.).

The potential power of the campus network is enormous. On May 8, 1999, campus students throughout China received the shocking late-night news from some Chinese news websites, which at that time could freely and directly use foreign news services or foreign websites, that NATO planes had bombed the Chinese embassy in Yugoslavia. They contacted the officials at the universities, telephoned the higher officials of government, wrote protest slogans, and posted organizing plans on different campuses' BBS. After a few hours, university students in various cities set up their protest plans. The incredible speed of information dissemination and the efficient communication methods shocked the government. Most officials were still in their slumber when students across the country were already well organized! The power of the Internet impressed the government so much that they had to reject the traditional agency and put announcement on campus BBS to communicate with students and supervise the protest movement.

[100] Mueller and Tan, p. 83

The "May 8" protest campaign got the government support at last—some universities even offered school buses to students. But it also sent a signal to the government. The government launched *The Provisional Regulation on the Bulletin Board System* on December 8, 2000 to exert control. According to Article 14 and Article 15 of this regulation, the providers of news, publishing and BBS services are required to keep records on the materials they post on-line, the uploading time of those materials as well as their contents; and the provider's Internet address or its domain address. The Internet access providers (who provide connections such as dial-up to Interconnecting Networks) are also required to keep records on the individual user, such as the connecting time, the account and the telephone number used to dial in. All these records are to be kept for 60 days and must be submitted to the authorities when requested. Correspondingly, every campus network made its own regulations. Since most of those BBSs have their own news sector, which sometimes directly gets English news from foreign media, the government also tightened the news services as well. According to *The Provisional Regulation on Internet News Service* (December 8, 2000), no website can upload news without the permission from the corresponding governmental propaganda or news branches. No website can directly use foreign news sources. Both BBS and website are also prohibited from reporting or writing news themselves, and must rely on State media.

The role of the Internet in current Chinese campuses may recall the memories of the powerful role of the fax machine on the 1989 student protest, which helped the students to organize protest meetings, fund raising and speaking tours. Via fax, students transmitted the most vivid reports instantly to people throughout the world

and the government had to cut the telephone line to control the situation.[101] However, some scholars have argued that the political ideals that animated the student movement in 1989 have lost their currency in a nation eager to get on with the business of economic growth. Current Chinese people are obsessed with consumer products, soap operas, and tabloid gossip, all of which signal a stunning absence of political awareness. The urban Chinese are keen on getting rich and eating well, totally alienated from the more noble goals of nation building found in the previous period.[102] The deep structure of the silence could result from the horrible memory of the political scare tactics developed under Maoism and Cultural Revolution. The history of class struggle, mass mobilization and Tianmen continue to shape the reform today in different ways. [103] The phenomenon that many young users only use the café to surf pornographic sites and play games may directly and negatively affects the future of Internet development in China.

Since many Chinese do not own a computer or regular Internet access account, soon after China Telecom began to open Internet cafés in the mid-1990s, this convenient surfing quickly became popular. Different from the campus network, the Internet café serves everyone who drops in. Most of the cafes are dimly lit one-room shops with a few personal computers, where also various foods and pop drinks are also served. (It is common to see a young person typing with only one hand while eating a big bowl of hot noodles.) The number of young people frequenting Internet

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[101] Howard H. Frederick , Global Communication in International Relations, (Belmont, CA: Wadsworth, 1993), p. 235-236

[102] See Jianying Zha, China Pop: How Soap Opens, Tabloids, and Bestsellers Are Transforming a Culture.(New York: New York Press, 1995) and Orville Schell, "China: The End of an Era", Nation, 17-24 July 1995

[103] Ibid.

cafes has significantly increased over the past couple of years. Up to 15% of children in large cities such as Beijing, Shanghai and Guangzhou are now said to be using the cafes.[104] However, 50% of the young generation is only keen on using the Internet to find partners and play games. As official studies observed: nearly 50 percent of all teenage cyber-surfers in Beijing browse the Internet for study purposes, while the other half indulges in online games, chats and even porn websites.[105] Litzinger has argued that the Internet cafes are "arguably providing spaces for the construction and pursuit of new desires, closely linked to China's burgeoning consumer economy and to be fascination with certain kinds of commodities:

> Based on my own preliminary research, these cyber cafes do not seem to provide spaces for subversion or radicalism, and most users do not look for sites such as Amnesty International or HumanRights.com. Many of the young students we talked to mostly used the café to download various kinds of video games. The rave among male college students in the fall of 1998, for instance, was a World Cup soccer game…[106]

The arguable role of the Internet cafe and the law on the Internet café (2000) provoked fierce debates. On the one hand, the government claims, "so-called internet cafes scattered around the country are particularly blighted by the 'online poison'. Some teenagers are so deeply entrapped by such Internet cafes that their minds are severely distorted." [107]Official media widely publish related articles and warn of the dangers of "online poison", saying access to pornographic sites and "illegal games" in Internet cafes pose a threat to the country's younger generation.[108] Since early 2001 the government has carried out several nation-wide crackdown campaigns, including

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[104] "China Internet Cafe Debate Hots Up", CNN News , http://news.bbc.co.uk/hi/english/world/monitoring/media_reports/newsid_1302000/1302309.stm
[105] "Concerns Rise over Internet Ill-Effects", Eastday.com 13 February 2001 http://210.77.134.148/pls/wcm/Show_Text?info_id=7448&p_qry=Internet
[106] Ralph A. Litzinger, "Screening the Political: Pedagogy and Dissent in *The Gate of heavenly Peace*", Positions; 7 (3) winter, 1999, p.833
[107] "China Internet Cafe Debate Hots Up"
[108] Ibid.

re-registering existing cafes, regularly checking on the activities, and installing "information purifiers" software. Moreover, there are signs of more severe rules in the future. Some members of Beijing Municipal People's Congress have urged the government to clamp down on all Internet bars/cafes, following the example of Shenzhen in the south, to protect youngsters from falling into bad habits.[109] Simultaneously members of Zhejiang Provincial Committee of Chinese People's Political Consultative Conference (CPPCC) laid out a draft on Internet cafe supervision. In the draft, they mentioned that though the province issued regulations on the administration of the Internet cafe, there were no explicit terms on how far an Internet cafe should be away from a school or whether a teenager is prohibited from entering such places. They suggested an immediate investigation of local Internet cafes, setting up an overview authoritative organization and working out related laws and regulations to lessen the adverse effects over the whole society.[110]

While the government is seeking to curb Internet cafés, on the other hand, some intellectuals argue the merits. Thus the convenient and abundant information on the Internet plays a positive role in developing intelligence among youngsters and widening their horizons. They point out the Internet café not only plays a role as the gaming arcade but also promotes the development of human civilization. Since even in large cities, less than 30 percent of families own computers, cafes have become for many people their only means of access to the net and have "made an undeniable

[109] "Concerns Rise over Internet Ill-Effects"
[110] "Adverse Influence of Internet Arouses Attention", People's Daily 12 February 2001

contribution to the popularization of the internet in China". Simply to close them down is not a good solution.[111]

The future of the campus network and the Internet café is still not clear. Who will lead the trend? Will the majority of the young users pay more attention to the building of the country? Or was May 8 just a random accident? The following section will focus on another group-the Internet dissident-to supplement this discussion.

The Internet Dissident

Article 35 of *the Constitution of the PRC* announced the protection for "freedom of speech, of the press, of assembly, of association, of procession and of demonstration". But most Chinese choose to hide their opinions in order to protect themselves. This silence directly damages the political development of China since chatting with other people about public affairs is one of the most important steps towards political participation. It implies a degree of self-awareness and responsibility to take further political actions. Chinese Internet users, however, begin to understand how to take advantage of this new communication technology to exchange opinions and form discussion groups.

For example, according to the government news reports, this technology helps the Falun Gong Cult[112] organize their movements in three different ways (They are also the typical ways that are used by dissident groups):

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[111] "China Internet Cafe Debate Hots Up"

[112] Since the government's desperate hunting, Li Hongzhi-led Falun Gong sect has become one of the most famous religious sects in China. The reason I choose this case is that it is the most recent case that also has profound impacts. However, judging from an analysis of their "bibles" as well as my personal experiences in China, I don't think Falun Gong is a democratic dissident group. Rather, this sect is a transitional enterprise that pursues the economic profits from their followers.

1). Help the Falun Gong leaders in foreign countries to communicate (via email) and control the followers to carry out "destructive" activities in China.[113]

2). Advocate Falun Gong by downloading materials published by the banned cult from the Internet.[114]

3) Use online BBS access Falun Gong materials and communicate with Falun Gong members[115]

As illustrated above, those activities touch the very nerve of the government. The government not only applied its own filtering and tracking agencies but also urged large websites like SINA, NETEASE and SOHU to take measures to stop the activity of Falun Gong on each BBS. Thus each website has to set up a special team of technical experts to work under shifts and monitor their bulletin boards. If any subversive slogans are posted, the offender is sent a warning message. If the warning goes unheeded, their access to the system is blocked.[116] But will those actions track down all that "illegal" information? As a bulletin board host of 21ddn.com, a leading Beijing portal remarked, those actions are "under difficult circumstances".[117]

The nature of the Internet becomes an obstacle to government censorship. The principle of the Internet is fault tolerance. Thus within a network, if a link or a

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[113] "Falun Gong Practitioner Not Sorry for Killing Father, Wife", ChinaOrg, http://210.77.134.148/pls/wcm/Show_Text?info_id=24135&p_qry=China%20and%20Internet

[114]" Cult Follower's Diary A Revelation", China Daily, http://search.chinadaily.com.cn/isearch/i_textinfo.exe?dbname=cndy_printedition&listid=17152&selectword=FALUN%20GONG;INTERNET;

[115] "Internet Bulletin Boards: A Hotbed of Evils", China Daily, http://search.chinadaily.com.cn/isearch/i_textinfo.exe?dbname=cndy_printedition&listid=17032&selectword=FALUN%20GONG;INTERNET;

[116] Ibid.

[117] Ibid.

computer fails, then packets can adaptively recover and automatically detour around faults. So in theory, if one route is blocked the user can bypass censors simply by changing names of newsgroups or sending Email via chains of anonymous remailers. If the user is concerned about the content filtering, he can intercept and decipher information such that it is virtually unreadable except for the intended recipient. Jason Lacharite examined two Internet dissident movements that began in 1997. One is the publishing of a Chinese language journal of dissent named *Tunnel*. This journal is managed and edited in China. Once an issue is ready to be published, it is secretly delivered to the United States and then emailed to China from an anonymous address. The Internet provides a safe space for its staff and contributors. The second one is the operation of a dissident website named Bignews.org. Bignews successfully escapes the government's block and provides news via email to more than 10 million online users. Given the achievements of the two groups, Lacharite pointed out, "Anti-blocking software, mirror sites, remailers, secret Usenet groups, and anonymous e-mail services have all contributed, in one way or another, to a noticeable breakdown in Beijing's enforcement mechanisms".[118]

But there are also many cases, which show that the government did seize some groups. The question is how efficient the government would be. Firstly the government is efficient on non-technological censorship, which is combined with traditional methods. Voice of America reported the government's nationwide crackdown on Internet cafes in 2001.[119] It said that since only about half the nation's

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[118] Jason Lacharite, "Electronic Decentralization in China: A Critical Analysis of the PRC's Internet Filtering Policies", CAPI China IT Workshop, October 2001.

[119] "China Shuts Down Thousands of Internet Cafes", VOA News, 21 November 2001 http://www.voanews.com/article.cfm?ObjectID=6522B1D8-E616-4B1D-

Internet cafes have installed the necessary software to block restricted sites and keep track of user activities, the government ordered more than 17,000 cafes to shut down while another 28,000 have been ordered to install monitoring software. This movement will affect around four million Chinese who use them to surf the Internet. [120]

Secondly, the government is facing more and more technological challenges. The wireless Internet technology has already become a function of the mobile phone. As a country with a large number of mobile phone users; the burden of censorship could be incredible. Moreover, China has a bifurcated communications platform: terrestrial and satellite links. With the help of dynamic re-routing technology, data encryption and various other services, satellite communications could help the user to keep their surfing absolutely private. [121]

Thirdly, as Chapter Three discussed, the conflicts among different government branches and the inefficient bureaucracy, put doubts on the enforcement of the central government's Internet policy. Moreover, there are sympathies towards Internet dissidents among those technology experts working for the government. For example, during my interview with a chief engineer who was in charge of the Internet monitoring in the Heilongjiang Province government, he said that he usually just sent warning notes to those groups. As to hackers, he even made friends with some of them, who in return even helped him to fix the holes of the network. "We (including

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BECFA74A1E2FC930&Title=China%20Shuts%20Down%20Thousands%20of%20Internet%20Cafes&db=voa

[120] Ibid.

[121] "Electronic Decentralization in China: A Critical Analysis of the PRC's Internet Filtering Policies"

his workmates) seldom turn them to the Public Security Bureau. Those police know nothing about the Internet. We deal with it by our own methods".[122]

Finally, the foreign participation puts more pressures on the Chinese government. Since the government has blocked a number of sites including the BBC, CNN, ABC and Voice of America, those websites developed Anti-censorship technologies. For example, in order to foil the Chinese government's efforts to ban the site, Voice of America plans to purchase Triangle Boy software from Safe Web, Inc. for its new Web site, www.voachinese.com. Triangle Boy, will act as a deflector for Chinese citizens who want to access banned Internet sites. The technology attempts to fool the government by sending the signal outside the government's firewall to a "friends" site, and then bounces that signal to the "banned" site and back to your computer.[123]

In summary, the government's control on the Internet faces many difficulties. The studies of two dominant Internet user groups proved this reasoning. However, it is still too early to be optimistic about a dramatic political reform of China. The low level of Net diffusion and the lack of political awareness in general set barriers for future development. Moreover, as the privacy issue discussed in this chapter showed, the inadequate economic condition also slows down the changing progress. The next chapter will further this discussion and draw a conclusion of this paper.

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[122] Notes of a interview with Li in July, 2001

[123] "Voice of America considers anti-censorship tech", CNN News, 29 August 2001 http://www.cnn.com/2001/TECH/internet/08/29/voice.of.america/index.html

Chapter Five:

The New Model of Chinese Government and Citizen Interaction

This Chapter will first refine the claims made in the earlier part of the study. It will then summarize the relationships among the Internet, the economy, the government, the individual and the foreign participator. Furthermore, it will also introduce a model of Chinese government and citizen interaction in the Internet era and confirm the study's hypothesis: the Internet not only promotes the new information economy, but also may foster Chinese political reform. If a future economic or political crisis spurs a challenge to party rule, this shift in information control may decide the outcome.

The Government's Proactive Strategies

Since Chapter Three focuses on control and regulation of the Internet, this section will examine some positive methods the government took to counter the challenge of the Internet. For while regulations were being developed, the Chinese government also carried out some corresponding reforms. The government applies proactive strategies to guide Internet development and use this technology to serve the government's interests and priorities.

First, the government has tried to use the Internet to improve efficiency. The Chinese government launched an e-government plan since 1998 and some big cities already try to use the Internet to increase efficiency and transparency. For example,

under rising demands, Beijing, which hosts 3 million Internet users accounting for one-fourth of the total residents, plans to use online process and interaction with citizens. Thus, around 15 government departments will process some of their work online by the end of 2001.[124]

Furthermore, this advanced communication technology empowers the government, especially the central government. China is a big country with widely varying geographical conditions. How to efficiently govern and communicate with local governments are headaches for the central government. With the help of the Internet, however, the central government can hear and see more. Tibet provides an illustration of the relationship between the central and the local government. In order to "break the monopoly of spreading information on Tibet by foreign countries on the Internet", Chinese central and local government will increase investment in information facilities in the region and build a "digital Tibet". This plan includes the construction of official websites and optical fiber cables. (The optical fiber cables will reach each county in Tibet by 2004) Thus the Internet helps the government to reach the "roof of the world" and to secure its control.[125]

Thirdly, the government has also begun to use the Internet to listen to the opinions of the citizen. For example, the official websites use mini polls to gather information, especially the opinions towards most recent and important issues. The January polls on ChinadailyNet give us a better understanding. The poll questions are: 1) The Japanese yen's continued devaluation has recently exerted tremendous

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[124] "Government Websites to be Appraised", China Daily, 9 August 2001 http://www1.chinadaily.com.cn/hk/2001-08-09/25520.html

[125] China Building Digital Tibet on Internet", ChinaOrg http://210.77.134.148/pls/wcm/Show_Text?info_id=24659&p_qry=China%20and%20Internet

pressure on Chinese RMB. If the yen/dollar ratio slips to 140:1, should China devalue the RMB in order to promote exports? 2) The "East Turkistan" terrorist forces have engaged in bombings, assassinations, arson, poisonings, and assaults in northwestern China since the 1990s. It is imperative for the country to thwart these evil activities. Do you agree?[126]

In addition to online polls, the government has also set up online forums and has used the Internet to broadcast some policy-making meetings. On May 9 1999, in order to protest the NATO attack on the Chinese embassy in Belgrade, the Chinese official website for People's Daily launched, for the first time an online forum ""China Forum" http://202.99.23.237/cgi-bbs/ChangeBrd?to=14. Within a month, posting volume hit 90,000 pieces from both domestic and overseas Chinese. This new media tool and the huge impact, attracted attention from officials from the Information Office of the State Council, the Ministry of Public Security (MPS), the MII and the Ministry of Foreign Affairs. They publicly praised this forum that "has by its rich content attracted many overseas and domestic Internet users". By taking full advantage of the Internet's interactive role and the authoritative influence of People's Daily, focusing on major events and hot issues, inviting experts from various circles to meet and chat with netizens through the Internet on the forum and publicizing national related policies, it has become an online bridge to link netizens with the Chinese government".[127] This year, the forthcoming fifth annual conference

[126] The results are unavailable.
[127] "China Forum Cements National Spirit", People's Daily, http://english.peopledaily.com.cn/200005/18/eng20000518_41126.html

of the Ninth National People's Congress will set up special official email boxes and websites (e.g. Guangxi province set rdzx.gxrb.com.cn for this meeting).[128]

Finally, in order to distribute propaganda on the Internet domestically and internationally, the government created the state-run Internet media. The state-run content providers are linked to China's traditional media to form on-line news networks and to continue to develop and expand their web sites. These include traditional Chinese media such as China Central Television, the People's Daily, Xinhua news agency and the China Daily. Xinhua, the premiere official news agency of China and the fourth largest news agency in the world, built its own web site www.xinhua.org. With financial support from the government, Xinhua's web site boasts a much stronger information collection network than other domestic media units. It has eight language editions, 35 local web sites and other network systems.[129]

Therefore, by implementing electronic government services that increase citizens' satisfaction with the government and engaging in information warfare against the opponents of the government, the Internet helps the government to strengthen state power.

The Current Model of the Communication Between the Government and the Citizen

The empowered government makes this study more complicated. What is the model of government and citizen interaction in this Internet era? Will the Internet, as

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[128] "Lianghui Wangzhan Kaitong" (Website Launched for the National People's Congress Meeting), http://news.sina.com.cn/c/2002-01-23/453679.html

[129] "Traditional Media Units March Into The Internet," Beijing Review, 2 October 2000, p.15

U.S. President George W. Bush pointed out, bring freedom to China? First, it is necessary to look at the four factors discussed in earlier chapters.

Economic reform not only promotes the Internet revolution across the Chinese society but also helps the individual escape the authority's manipulation on the thought work. Thus with the help of telecommunication technologies, the individual can obtain information from unofficial sources and safely exchange opinions. As Lynch described:

> Why did thought work escape the Center's control to such a degree? In the early 1980s, to unleash the forces of economic development, reformist leaders around Deng Xiaoping saw no choice but to decentralize administrative decision-making, devolve significant economic property rights to enterprises, and promote technological advance across society. These macro-decisions did certainly produce the desired effect of stimulating transformative economic growth, but when applied to the mass media and telecommunications sectors, the secondary, unintended consequence was an evisceration of the central party-state's ability to control the construction of the symbolic environment.[130]

Economic reform also interacts with the government's administrative reform. The decision to break MPT's monopoly and the property reform on mass media and telecommunication sector, to a certain extent, set free the force of the market. But since economic development mostly benefits the urban and coastal area residents, its influence is limited. Moreover, the accompany consumer culture it brings with may potentially slow down political reform. Thus Chinese people are keen on getting rich and are fascinated with commodities. They pay less attention to the political issues.

The government uses both technical and non-technical methods to secure control of information and counter the decentralization of power through Internet technology. But the technology is not; it should be emphasized, the only factor undermining the government's control. The government's control also faces challenges from the market-oriented economy, the individual and the foreign

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[130]"Dilemmas of "Thought Work" in Fin-de-Siecle China", The China Quarterly, March1999, p 174

investor/politician. All three of them want less censorship and more free flowing information. The government's enthusiastic desire for a booming economy and sufficient foreign investments, conflicts with the desire to maintain traditional governance and political stability. The later desire is associated with a planned economy and strict control over information. Therefore, the government's policy, which is guided by two different criteria, highlights the dilemma faced by Chinese leaders: How to promote the Web's economic benefits while preventing its use as a tool in spreading opposition to Communist party rule. To date, the government has shown itself to be adept to economic change. But each time that the need for far-reaching political reform occurs, Beijing has backed away, hoping that the traditional governance will be able to confront the social and political consequences that arise from the change. Despite the achievements in foreign trade and investment, the government's approaches towards technology and the outside world mirrored predecessors in the nineteenth century. The "self-strengthening movement" at that time is famous for its selective adaptation strategies. Thus, they failed to see that Western technology is embedded in its social and cultural matrix and sought to import Western technologies and equipment while keeping out alien cultural and political values.[131]

The individual benefits from economic reform, which provides financial security and the advanced communication technologies. The government's administrative reform also offers citizens a chance to take part in policy making. But the different level of education and income, broaden the gap between the urban and

[131] Tony Saich, "Globalization, Governance, and the Authoritarian State: China", Governance in a Globalizing World , Ed. Joseph S. Nye Jr. and John D. Donahue, (Washington, D.C. :Brookings Institution Press, 2000), pp210-224

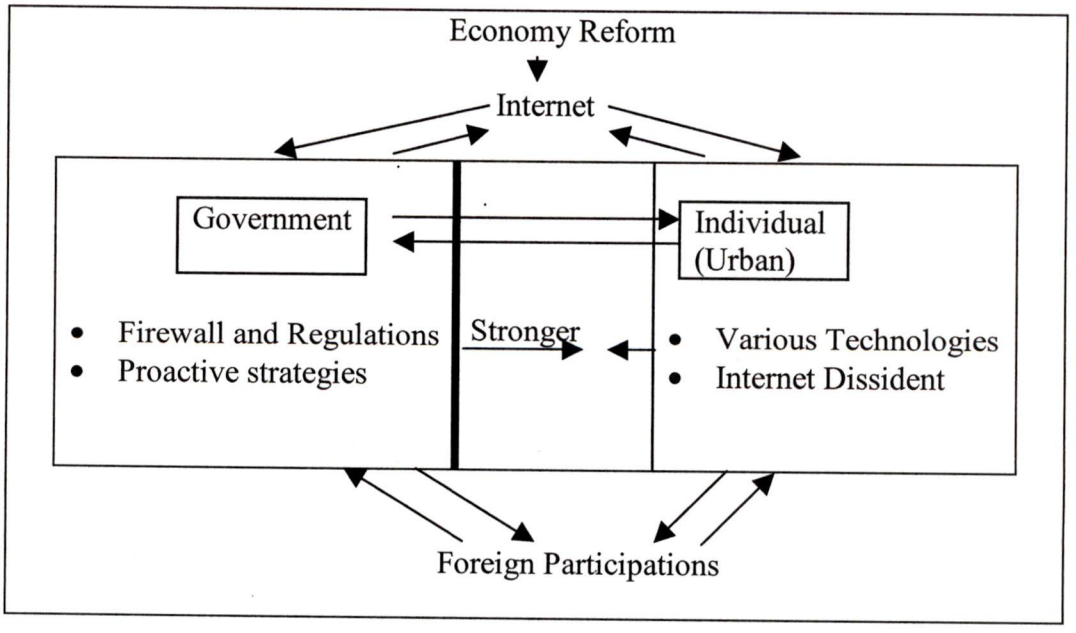
the rural and the gap between rich and poor. On the one hand, Internet elites are seeking for more individual rights and organizing autonomous groups. On the other hand the majority of Chinese are still not familiar with the new technology. Moreover, the uneven development can also be seen among Internet users. Some of them, especially teenagers, just view the Internet as a game tool and the resource of pornographic materials. Since the theory of democratic government is based on some basic assumptions that have grown out of Western liberal assumptions about the role of the individual and his/her relations with the state, the limitations of Chinese Internet users, put doubts on the statement that the Internet will bring rapid political change and democracy to China. Compared to the individual, the Chinese government is more powerful. The recent study carried out by Washington-based Carnegie Endowment for International Peace (CEIP) revealed: "many authoritarian regimes translate a long and successful history of control over other information and communication technologies into strong control of Internet development within their borders." Thus, through a "combination of reactive and proactive strategies", Beijing may counter the challenges posed by Internet use and even utilize the Internet to extend its reach and authority. [132]

WTO and foreign participation in the Chinese economy have directly injected the government into crucial global competition. Since the further development of the Chinese economy remains problematic due to a lack of investment, it is necessary for the Chinese government to attract foreign investment, which directly conflicts with the traditional monopolistic model. Moreover, accession to the WTO means the

[132] "Study: Net Fails to End Political Repression", CNN, http://www.cnn.com/2001/TECH/internet/07/19/political.repression.idg/index.html?related

government's actions, decision-making and the enforcement of those decisions will be increasingly governed and bound by WTO rules. Now the government is analyzing its existing laws, regulations, codes and other policy measures to be sure they meet WTO requirements, although WTO agreements cannot be directly applied in China. The State Council has already abolished 12 administrative regulations, and drafts and revisions of more than 40 laws and regulations have been completed or are expected to be completed soon.[133] Besides, the concerns of the economy sector, the government also worried that the opening of the telecommunication sector will make the control of information impossible. The "offensive" foreign websites, the concerns over backdoors in foreign software, and foreign-based Internet dissidents groups, already sent alerts to Beijing. Figure 11 shows the relationships discussed above.

Figure 11. The Current Chinese Government-Individual Communication Model



[133] "WTO Demands Massive Government Adaptation", China Daily , 12, December, 2001

Future Possibilities

The Chinese Communist Party is simultaneously promoting the development of the Internet and constructing a strict censorship and licensing system to limit network content and use. The Chinese government's development of the Internet fits the pattern that Andrew Walder calls "Neo-Traditionalism". According to him: "The neo-traditional image shares with the totalitarian one a focus on the distinctive communist institutions that foster organized political control, and it shares the premise that these forms of organization shape patterns of association and political behavior in distinctive ways. But the neo-traditional image departs from the totalitarian one, even its latter day versions."[134] Neo-Traditionalism stresses the positive incentives offered for compliance and posits a rich subculture of instrumental-personal ties. It is at odds with the idea that communist societies evolve in a pattern that represents convergence with the advanced capitalist societies. There is an evolution toward a neo-traditional pattern of authority based on citizen dependence on social institutions and their leaders. As to this case, with the help of the advanced technology, the Chinese society and economy are indeed "modernizing" in many respects, but as political communities they are becoming more "neo-traditional"; they are transformed from within by their patterns of economic organization and the ambiguities of their official ideology and political institutions.[135]

As illustrated in this study, it is too early to predict a rapid and large-scale

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[134] Andrew G. Walder, Communist Neo-Traditionalism. (Berkeley, University of California Press, 1986). pp 5-9

[135] Ibid.

political reform in China. The Internet is a useful *tool* to decrease government secrecy, and to help civil society to empower individuals both politically and economically. However without liberalization, the Chinese government as well as developed awareness among the general population, technology alone will not lead to better governance. The government will continue to adopt measures of control to counter effectively the challenges of future changes in information and communication technologies. This will prove difficult and wider, non-state use of those technologies will play a role in democratic evolution, as has been widely predicted. It is most important to take efforts to understand the nature and the possibilities of the transformation in Chinese politics as it proceeds. Internet technology will continue to evolve and will have an increasingly profound impact on Chinese society. But it is not likely that the technology will transform China into a Western-type liberal democracy even in the long run. A more probable outcome is that a modern Internet will have strong Chinese characteristics, and diverge from the capitalist-oriented model of the advanced industrial countries in significant ways.

Glossary

BBS 留言版 (Liuyan Ban) Bulletin Board System. A computer system that functions as a centralized information source and message switching system for a particular interest group.

BIG5 大五码 (Dawu Ma) The official Chinese language encoding system adopted by Taiwan.

CANET Chinese Academic Network

CAS 中国科学院 (Zhonggu Kexue Yuan) Chinese Academy of Science

CASNET The Interconnected Network of the Chinese Academy of Science

CERNET 教育网 (Jiaoyu Wang) China Education and Research Network. One of the Interconnected Networks in China.

CGWNET China Great Wall Network. A military Interconnected Network.

CHINAGBN 金桥网 (Jinqiao Wang) China Golden Bridge Network. One of the Interconnected Networks in China.

CHINANET One of the Interconnected Networks in China.

CIETNET China International Economy and Technology Network. The Interconnected Network of the Ministry of Foreign Trade and Economic Cooperation.

CMNET China Mobile Network. One of the Interconnected Networks in China.

CNCNET China Netcom Network. One of the Interconnected Networks in China.

CNNIC A branch of the Ministry of Information Industry. It is also under the control of

the Chinese Academy of Science. China's governing body that oversees the development of the Internet in China. In 1997, the State Council's Information Office and China Internet Network Information Center (CNNIC) Working Committee determined that the CNNIC, incorporation with the four major inter-connecting networks in China, would be responsible for collecting the statistical data by conducting user surveys in China. The CNNIC now conduct the survey semiannually,

Connected Network/Access Network 接入网络 (Jieru Wangluo) Domestic computer networks that connect to an "Interconnecting Network" to carry out international networking. Equal to Internet Service Provider (ISP) in the Western world.

Campus Network 校园网 (Xiaoyuan Wang) The building of the campus network was initiated by the three most prestigious academic institutes in China: Chinese Academy of Sciences, Beijing University and Tsinghua University. Funded by the State Planning Commission and the World Bank, the government began to build the National Computer Networking Facilities of China (NCFC). The three individual campus networks were constructed in 1992. Since then different universities through out China began to build own campus networks and corresponding BBS. With the help of CERNET, those separate BBS units jointed together and quickly become popular among young university students.

CSNET China Satellite Network. One of the Interconnected Networks in China.

CSTNET 科技网 (Keji Wang) China Science and Technology Network. In 1996, the CANET, IHEP and China Research Network(launched in 1990 and hosting more then 10 research institutes), were combined and joined the auspices of Chinese Academy of Sciences Network (CASNET), to form the China Science and Technology network (CSTNET).

Gateway A computer that acts as a host for two or more networks. It can function as a "protocol translator" between two networks with different protocols. Currently, most of China's Interconnecting Networks go through the MII's gateway.

Guo Biao 国标码 (Guobiao Ma) The official Chinese language encoding system adopted by mainland China.

ICP Internet Content Provider

IHEP The Institute of High Energy Physics.

Interconnected Network/ Interconnecting Network 互联网络 (Hulian Wangluo) The computer network directly linked to the global Internet through international leased lines.

Internet Café/Pub/Club 网吧 (Wangba) Provides public Internet access service. Most of the cafes are dimly lit one-room shops with a few personal computers, where also various foods and pop drinks are also served. The number of young people frequenting Internet cafes has significantly increased over the past couple of years.

ISP Internet Service Provider

MEI Ministry of Electronic Industry

MII 信息产业部 (Xinxi Chanye Bu) In March 1998, the government decided to create the Ministry of Information Industry (MII): MII was set up by merging the existing Ministry of Posts and Telecommunications with the Ministry of Electronic Industry.

MPT Ministry of Posts and Telecommunications Ministry of Electronic Industry

MPS Ministry of Public Security

Thought Work 思想工作 (Sixiang Gongzuo) Originally denoted the exertion of influence in small study groups, but is now used to refer to propaganda and persuasion in general.

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