

THE DEVELOPMENT OF INTERNET AND THE INFORMATION ENVIRONMENT OF CHINA

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Abstract: With the development and popularization of Internet, the possibility of attainment of information has gained huge improvement. At the same time, open Internet does not mean equality of information. Because of language barrier, bandwidth, expenses and especially severe lack of Chinese information resource, people are not satisfied with the condition of the usage of information. Simultaneously, China faces the pressure of culture aggression from developed countries. This thesis carries through discussion aiming at the cause and possible solutions of above problems.

Keywords: Information Environment, Inequality of Information

1 Introduction

In not more than half a century, Internet has developed speedily, and has become “the Forth Media” extremely regarded by all countries. In decades, 186 countries and regions have entered into this huge network, and the traffic increases rapidly with the speed double every 100 days. Since entering into Internet in 1994, China has developed network well, the number of users, computers, domain names and websites are ascending rapidly. And the possibility of attainment of information has gained huge improvement.

However, the imbalance of information consumption has become a focus of attention. The development of Internet is imbalanced all over the world. The percentage of popularization averages 4.27% in the world, and is 34% in Denmark, 33% in the United States, 11.1%, 13.4%, 24.2% in Japan, Hongkong and Australia, but only 0.26% in China. Furthermore, the users are distributed asymmetrically. There are 100 million users in the United States and Canada, about 64% in the world; 43 million users in Europe, about 24.3%; 11 million in Japan, Australia and New Zealand, about 6.3%; and the left are 9.6 million, only about 5.4%. As to many developing countries, Internet and information technology is still luxurious. And inequality of information is obvious among different countries and regions.

2 The information environment of China

It does not mean equal information that Internet is open, interactive and free. Many factors lead to the gap of information expanding. As one representative of

developing countries, China is also not exceptional, which is up against the challenge of practical disparity of information.

2.1 Information accomplishment

People are the most important factor in the information environment because of their creativity and initiative. The problem of information inequality primarily lies in the polarization between the rich and the poor for information. Excellent information users should have keen consciousness, good capability in dealing with information and reasonable knowledge. Because it will take long time to improve the knowledge and skills to acquire information, many people can not enjoy Internet feely. That makes it luxuriously to use Internet, and results that different people benefit much differently from Internet, which leads to the polarization between the rich and the poor for information, and pricks up the inequality of information. So “many people worry about that the world will be divided into different camps by information: the rich and the poor for information, or the first world and the third world”. The digital gap is inevitable.

One study in 2000 showed that The United States is the most strongest country in dealing with information and the second, Japan, Australia, and Canada. China is the 27th of the given 28 countries. The gap will probably be enlarged between China and developed countries without rapid development. Elites at network are in short in our country. Internet makes China face the challenge of lack of person with ability. Many organization are short of CIOs and advanced managers , and correlative training courses fall behind.

2.2 Poor distributed information resource

The unevenness firstly lies in serve lack of Chinese information. Because the inventors of computers and Internet are occidentals, any basic language on Internet is English, and the dominant country is the United States. It is reported that information on Internet is 90% in English, 5% in French, 2% in Spanish, but only 0.01% in Chinese, which shows that such developed countries as the United States absolutely dominate information resource on Internet. Because more than 90% information on Internet is in English, and most of Chinese users' English is generally a little poor. It is blocking using of Internet in China.

The unevenness also lies in that: in the world, developed countries are mostly source of information, while developing countries mainly absorb information. The United States has the most information resource. Statistics show that 86% network software, 70% world databases, and 92% CPUs are from the U.S. Because of technique, language and so on, China mainly absorbs information, and is in the dry tree.

2.3 Information technology

Affected by economy, culture, and science& technology, the information infrastructures of developing countries are generally weak. As to hardware& software, computer possession, many developing countries are still far from the standard of the U.S. in the 90s. Direct connection and dial-up connection both need network construction, while the infrastructure of many developing countries is too weak to satisfy the need of basic communication.

Technology barrier will be strengthened and enlarged in modern society. In

information and network, China has too little technology and products with independent knowledge property right, and the kernel technology is out of control. The software is too poor and shares only 10% in computer market. West countries attempt to control network by their leading status. The U.S., Australia and some other countries have cooperated to construct world network watch system to conveniently collect information outside momentarily. In addition, when exporting technology to developing countries including China, the policy of “absolute discriminate” is carried out. For example, the 40 to 56 bits encrypt technology is exported to China while 128 bits interiorly. Besides, when exporting computers to China, they keep back CMOS chip of cracking encrypted key to conveniently wiretap and watch momentarily.

Simultaneously, bandwidth and expenses affect the popularization of Internet in China. Slow speed and increasing users lead to jam on Internet. Intolerable speed becomes the choke point on Internet and every accessorial user will leave delay to others without relevant measure. The capability restricted, price is high and the number of users is restricted. The expenditure in our country is so high. For example, the income of a middle class American family every month is about US\$3000 dollars, the expenditure of network only US\$20 dollars while in China the income RMB\$3000 Yuan, and the expenditure RMB\$300 Yuan. Chinese burden is 10 times of the American's. The monopolistic market of the telecommunication industry and high cost of bandwidth lead to high price. That High price lessen users, and investment on network can not gain return timely, which obstruct the construction of new network. At present, the telecommunication industry is in reform and the condition of monopoly will be broken. Especially since 2001, China has developed WAN, and charge fixed expenditure monthly. The problem of bandwidth and price has been a little improved.

3 The “culture aggression” on Internet

The culture competition on Internet is far from language, but competition of history and culture of each country. On Internet, many websites on history involve not only just simple introduction about some country or region, but also special scholarship with abundant information, which mostly reflects viewpoint of west academe. Actually, Internet helps to spread west culture, and history and culture of each country is noted on Internet by westerns. The rapid spread of west culture is regarded as “culture aggression”. Still west scholars' research of Chinese history and culture has unique angle of view and reference value and Internet communion provides convenience for Chinese research. Undoubtedly, the theory of “center of west” has dominated for a long time, and many researches of west influence the people. An austere combat of culture has been enkindled.

Simultaneously, information junk, dumping of culture and overthrow of ideology on Internet has come forth. With the slogan of “freedom information”, much filth, piratical, illusory, fuzzy, outdated and wrong information spreads universally, which harms people and the society. The harm that information pollution acts on national culture should not be underestimated.

Furthermore, asymmetrically distributed information resource and developed countries' control of informational spread lead to new information hegemony. Such “information hegemony” impacts on national culture of developing countries. Especially, the U.S. and other west countries make use of Internet to influence other

countries' polity and ideology. With English, advanced technology and the most information, the U.S. pushes hegemonism on Internet, advocates the west value idea, castigates heterogenous culture and tries to carry its point of political, economic and even martial purpose. Since 1997, the CHINANET of long-distance telecommunication office in Shanghai has been attacked by American mails. West capitalistic culture on Internet will heavily impact on our traditional culture.

4 National dominion and international order of information

Currently, there are three kinds of countries: those of information hegemony, of information dominion and of information colony. Because of imbalance of development of Internet, countries in inferior position surely face challenge and threaten in security of policy, economy, military and culture. Internet has become a tool of super countries bucking for strategic superiority. Some utilize e-mail, e-press and other information media to publicize their idea. The "culture aggression" badly threatens the security of developing countries. Under the information tidal wave, the social is webbing, and policy, economy, military, science & technology, and culture are united. The traditional borderline is more and more faint, and countries face austere information security.

The national dominion and international order of information are challenged on Internet. The possibility and destructibility of culture aggression and political infiltration are increasing. Whether national dominion is firm or not mostly lies on controlling information on Internet. International information order is worsening for the gap among countries: asymmetrically distributed information resource leads to the "questions between the North and the South"; information spread is controlled by developed countries which result in acute information confliction. The exploitation of information on Internet has become the focus of international competition.

5 Solutions

Certainly, Internet is a two-edged sword. On the one hand, with the development and popularization of Internet, the possibility of attainment of information has gained huge improvement; on the other hand, opening Internet does not mean the equality of information and information usage is far more than satisfaction. China is challenged on Internet. Currently, some should be thought much of:

5.1 Technology

Above all, devotion should be added to solve problems of information infrastructure, bandwidth, and expenses. The infrastructure of info-highway is as important as increasing national users. China should accelerate Internet construction to help more Chinese people to use this media. Importance should be attached to both technology and management. The revolution of communication system and innovation of telecommunication system should be combined, superior technology and low price caused by which will promote the development of competitive data-communication corporation.

Secondly, compact protective layer should be constructed between interior and exterior network to ensure the fourth domain. In 21cn, information security has become that of "the fourth domain". Exploiting advanced network fireproof wall, and technology of shield, watch and control will help to protect interior network to a certain extent. At the same time, it is necessary to set up "information custom" to

monitor filtration and choice of information, and to strengthen management and control of network.

5.2 Network system and information system

Network system and information system should be optimized to improve the information environment of China. Network system is materially basic, which emphasizes the exploitation of technology and the optimization of the structure of network system. Information system is essential guarantee, which emphasizes management, distribution, collection, organization, memory, search, transmit and service of information. The two systems are interdependent and interactional. Since the distribution and circulation of information are unbalanced, even if information is abundant, favorable benefit will not come into being without scientific management. So people, information, technology and society should be considered synthetically, and the compatibility and coherence of the two systems should be paid attention to.

When optimizing system structure, repeated construction should be avoided and the ambit of open or close on network should be decided suitably.

5.3 Construction of information source and network education

To develop Internet in China, Chinese information should be exploited fully, and the construction of information source should be strengthened. China will promote the popularization of Internet, and fully make use of Internet to spread Chinese culture. At present, users in China mostly have fine economy condition and good education. The number of users is increasing rapidly, but the proportion is still too small. Just as Chinese, barrier to foreigners, English on Internet is also barrier to most Chinese users. Therefore, Chinese information should be exploited fully to promote the popularization of Internet.

Moreover, more Chinese websites on history and culture will be set up which can roundly reflect our academic research with abundant and exact information. Those websites should be not only special but also popular and widespread. More excellent traditional culture information should be put on those to carry forward Chinese culture. Besides, English version should be also involved so as to let world people know Chinese traditional culture and national spirit.

In the face of colonialism on Internet, the construction of information source should emphasize spreading Marxism and Chinese socialism, establishing position of socialistic ideology, broadening space of traditional thought education by network, and leading the behavior of users on Internet. Under the condition of incomplete technology and law on Internet, the education of network ethic and diathesis is very important to ensure and cleanse network.

5.4 Policies and rules of law

The information policies of China should be consistent with international environment. Presently, the information policies and rules of law of China are not systematic and do not accommodate the development of information society. According to existing network laws, the management and law system of interior network should be well constructed, and bylaw should be exerted to the criterion and adjustment of network behavior. The rules of law on network include criterion of releasing information, examination, watch and management of information, treatment bylaw of destroying network security, and property right protection, which will be

revised and adjusted with the development of the network thought work.

The policies and rules of law should be urgently set down. The government should lucubrate, and set down related policies adaptive with the development of network culture to exactly lead consensus on network. Special organization should be founded to take charge of surveying and managing consensus on network, and fathering network culture. Related institution should study and set down laws and rules of law on network to assure that information industry in China would receive standardization timely and that the solution of information property right and network copyright has law to depend on. Especially, rules of law on striking crime should be set down, which harms national safety and social steady by network. Network civilization should be brought into legal system, network action should be standardized, and network crime should be struck confirmedly to cleanse network.

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