[illegible]

PIONEERS IN METHYLENE BLUE TESTING SINCE 1970

National Library
of Canada

Acquisitions and
Bibliographic Services Branch

395 Wellington Street
Ottawa, Ontario
K1A 0N4

Bibliothèque nationale
du Canada

Direction des acquisitions et
des services bibliographiques

395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Your file - Votre référence

Our file - Notre référence

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30, et ses amendements subséquents.

China News Digest:
A Journalistic Attempt on Worldwide Computer Networks

by
Bing Wen, B.A., B.J.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfilment of
the requirements for the degree of

Master of Journalism

School of Journalism

CARLETON UNIVERSITY

Ottawa, Ontario

June 1992

(c) copyright

1992, Bing Wen

National Library
of Canada

Acquisitions and
Bibliographic Services Branch

395 Wellington Street
Ottawa, Ontario
K1A 0N4

Bibliothèque nationale
du Canada

Direction des acquisitions et
des services bibliographiques

395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Votre titre / Votre référence

Numéro / Numéro de référence

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-315-79819-X

Canada

The undersigned recommend to the Faculty of Graduate Studies and
Research acceptance of the thesis

China News Digest:
A Journalistic Attempt on Worldwide Computer Networks

submitted by Bing Wen, B.A., B.J.

in partial fulfilment of the requirements for
the degree of Master of Journalism

FOR
GEORGE FRISKOR

Thesis Supervisor

Director,
School of Journalism and Communication

Carleton University

August 3, 1992

To Dong and Ardie

ABSTRACT

Computer networks have made possible a whole new form of information distribution. The Chinese students abroad have shown a particular aptitude for this form. The China-related news service, China News Digest (CND), which they run from outside of the country on worldwide computer networks, is a successful experiment with a direct readership growing from 400 in 1989 to 12,000 in 1992.

CND shows a remarkable grasp of the principles of organizing a new medium to suit journalistic purposes. It has also originated and defined a technical standard for using network resources for information distribution.

It is unlikely that amateurs, gathering and exchanging information among themselves, will completely replace professional news-gathering and news-disseminating organizations. But CND has shown a new use for the recent phenomenon of world computer networking and has shown that this use is needed, and is valuable.

ACKNOWLEDGEMENTS

In writing this thesis, I would like to first thank Professor Jan George Frajkor, who was my supervisor for this work. Without his guidance and help, it would have been impossible to complete this.

I would also like to express my appreciation to Peter Johansen, the Director of the Carleton University School of Journalism, Chris Dornan, the Director of the School's Graduate Studies, and Professor Catherine McKercher, who encouraged me to go ahead with this project. I am also grateful to Professor Jay Weston for reading my draft over the electronic mail network.

My special gratitude also goes to my colleagues at China News Digest, who made every possible effort to help me in this endeavour.

Table of Contents

Abstract	Page ii
Acknowledgements	iii
Table of Contents	iv
Preface	v
1. Introduction	1
2. Chinese News Media	7
2.1 Ideology and the role of news media	9
2.2 Control mechanism	11
2.3 Media monopoly	14
2.4 "Grapevine"	16
2.5 Press reform and the Beijing Massacre	17
3. Worldwide Computer Networks	24
3.1 BITNET	26
3.2 The Internet	30
3.3 The USENET	34
3.4 Computer networks in China	35
4. China News Digest	40
4.1 Soc.Culture.China	40
4.2 Electronic Newsletter for Chinese Students	41
4.3 Birth of China News Digest	43
4.4 An overview	47
5. "Inside the Newsroom"	52
6. Professionalization - A Process	68
6.1 Format standardization	68
6.2 News selection	76
6.3 List management and maintenance	80
7. Conclusion	91
Bibliography	96

PREFACE

I began reading China News Digest (CND) in March 1990, shortly after I arrived in Canada to join my wife and to pursue graduate study in journalism at Carleton University. I was fascinated by the computer network based news service and wondered who were running it and why and how they did it.

My immediate assumption was CND must be a professional news organization formed by exiled Chinese journalists, as I knew many news professionals left China one way or the other following the government's crackdown on the pro-democracy movement in June 1989. I paid special attention to the names of executive editors of each CND news package I read, hoping to find those I was familiar with or knew of. To my disappointment, I found none.

A year later, I joined CND. It was quite simple: CND posted an advertisement in its second anniversary special edition, calling for volunteers. I replied, offering to help, and I was accepted. In fact, most people joined the group the way I did.

My academic interest then was still in the official Xinhua News Agency where I had worked for four years; I wanted to study its history and its role in the Chinese Communist Party's dictatorship over China. But as my involvement with CND got deeper, I gradually came to the realization that it might be a good idea to write my Master of Journalism thesis

on CND: a unique news organization formed by amateurs but striving to offer professional services. My proposal was approved by Carleton University's School of Journalism; and I was encouraged by many faculty members with whom I had discussed the topic.

Despite its short history, CND has become a milestone in the history of Chinese journalism and it is a successful experiment in using the computer network as an alternative medium for news gathering, editing and distribution. The CND experience has certainly presented many topics for journalistic and academic studies: CND's role in the Chinese pro-democracy movement and its relationship with dissident organizations, its editorial operation as compared with that of Xinhua, possible conflicts between one's voluntary work and one's studies or professional work, utilization of computer network resources by news professionals, and copyright issues -- just to name a few.

Since there has been little literature written on running news services on worldwide computer networks and no previous research had been done on CND, my task was obviously to introduce it and present it against a broader political, social and technological background. For this purpose, I devoted a whole chapter to the Chinese political system and the news media, and I used another chapter to write about computer networks and some networking facilities. The focus of my thesis is on CND's experiment with the computer network and

its efforts to improve services. This thesis has also answered my earlier question: who are running CND and why and how they do it.

There are many more questions to be studied and answered regarding CND in particular and computer network based news services in general. I hope my research, which I believe is pioneering, will arouse the interest of others in this area for journalistic exploration or academic analysis.

Bing Wen

Ottawa, June 4, 1992

1. Introduction

Computer networks have made possible a whole new form of information distribution, not foreseen by societies and governments. The Chinese students abroad have shown a particular aptitude for this new form because many have free access to computers and the Cyberspace they are connected to is "a perfect breeding ground for both outlaws and new ideas."

(1)

It was indeed a new idea to run a China-related news service from outside of the country on worldwide computer networks. The service, China News Digest (CND), has been a successful experiment; it shows a remarkable grasp of the principles of organizing a new medium to suit journalistic purposes. It has also originated and defined a technical standard for using network resources for information distribution.

No other volunteer news group on the computer networks organized so swiftly to work on such a wide basis so smoothly, without revenue and hierarchical control.(2)

CND was founded by four Chinese students in Canada and the United States in March 1989. On March 6, the first CND news package was delivered to about 400 readers in Canada via worldwide computer networks. At the beginning, CND provided only the Canadian regional service. In April 1989, when the student-led pro-democracy movement reached its peak in China, CND established separate news services for readers in the US,

Europe, Japan and Australia; these four areas had a high concentration of Chinese students and scholars abroad.

In July 1989, the Electronic Newsletter for Chinese Students in the U.S. merged into CND and became CND-US section. At the same time, CND-GLOBAL was founded to provide a general news service on a daily basis to areas already covered by separate CND regional sections. On March 18, 1990, CND-EUROPE/PACIFIC section established its regular service to areas outside of North America. All CND regional services broadcast once or twice a week, covering local Chinese activities and providing information about immigration, career development, etc. CND-GLOBAL is dedicated to the reporting of Chinese domestic affairs and China-related international events.

On April 5, 1991, a weekly Chinese language digest magazine, CND-CM, published its first issue in electronic format. It digests Chinese publications in Hongkong, Taiwan, Europe and North America, covering a wide range of topics about contemporary China; most of these publications are banned in the Chinese mainland.

Currently, CND's direct readership is estimated at over 12,000 and more readers are served via 80 local re-distributors. It is difficult to gather an accurate figure because CND news is broadcast in simple computer text format and it is easy to make electronic copies or printouts to pass on to others. In traditional media, however, it is estimated

that one newspaper is read by three or four people. So if that same ratio holds, the total number of CND readers could be very large.(3)

CND has about 50 staff members around the world who get together electronically to work on a voluntary basis in news editing, news distribution and technical support. They elect a manager once a year to take care of the daily operation; the manager then delegates his duties to individual members who can volunteer more time to work as section coordinators.

Most of the CND volunteers are science and engineering majors or professionals; none has previous journalistic experience. But they have demonstrated a strong sense of responsibility as journalists and have made a point of staying objective and politically neutral at work. The CND experience shows that voluntarism in a world of professionalism has its place, and that the end product is no less expertly produced than by news professional and commercial structures.

CND was originally created to serve crisis purposes. Its establishment can be paralleled to the founding of the Red China News Agency by the communists more than half a century ago when China was ruled by the KMT nationalist party. Both the Red China News Agency and CND grew out of amateur attempts to evade censorship and information blockade by their respective authorities. Both of them applied state-of-the-art communication technology to their journalistic endeavour, the former using radios and the latter using computers.

The difference is that the Red China News Agency became a partisan propaganda tool and was itself censored by the communist party, whereas CND has been operating independently without being affiliated with any dissident organizations. CND believes in free flow of information and it strives for news professionalism even though it remains a volunteer organization. The term "professionalism" in this study means responsibility, objectivity and faithfulness to truth.

**

There has been little literature about operating news services on worldwide computer networks. CND is the first of its kind. This thesis is primarily a descriptive account of its journalistic attempt on worldwide computer networks. It focuses on the process of professionalization -- stages of development through which CND members explored the new medium and learned to work as professional journalists.

Since CND is a China-related news service operating on computer networks, research was done to make sure of adequate background information and analysis as to why CND was created and how it operates. It is essential to our understanding not only of the China News Digest service, but of computer networking as an alternate medium of information distribution.

It is unlikely that amateurs, gathering and exchanging information among themselves, will completely replace professional news-gathering and news-disseminating organizations. But China News Digest has shown a new use for

the recent phenomenon of worldwide computer networking and has shown that this use is needed, and is valuable. It can get information swiftly and efficiently to many parts of the world where traditional newspapers, news agencies, and broadcasting outlets cannot.

Endnotes

(1) Reid, Elizabeth M. "Electropolis: Communication and Community on Internet Relay Chat," University of Melbourne, 1991, electronic manuscript, line 160.

It is available for anonymous FTP from coombs.anu.edu.au in /pub/text/IRCThesis directory.

(2) Strangelove, Michael. Directory of Electronic Journals and Newsletters, 1st Ed., July 1991.

This directory is "a compilation of entries for over 500 scholarly lists, about 30 journals, over 60 newsletters, and 15 'other' titles including some newsletter-digests." CND is the largest volunteer news group listed in the directory.

To retrieve this directory, send an electronic mail message to Comserve@Rpiecs (Bitnet) or Comserve@Vm.Ecs.Rpi.Edu (Internet) with the following command appearing on the first line of the message: Send EJournl1 Sources

Send EJournl2 Sources

(3) Interview with Professor George Frajkor, School of Journalism, Carleton University, Ottawa, May 20, 1992

2. The Chinese News Media

China News Digest is a news service that exclusively covers China and China-related international affairs. Its readership includes not only Chinese nationals but also China watchers.(1) Despite its efforts to open up to Western technologies and capitals in the past decade, China is still a politically and ideologically closed country. Its news media are tightly controlled by the Chinese Communist Party.

To understand the significance of CND's existence, it is necessary to review the Chinese news media first; and to understand the Chinese news media, it is important to examine the organization of the Chinese society and the ideology that holds it together.

The Chinese Communist Party, with its effective ideological work among the masses and tight organizational control, defeated the US-backed nationalists in 1949 and drove them to the island of Taiwan. Since then, China has become a land of organization. Everywhere people become members of some unit of organization -- which determines the course of their lives. To get married or to apply for a passport, for instance, one must have a letter of approval from one's work unit in addition to other related documents. What counts for the authenticity and authority of the letter is not the signature of the person who issues it but the official red stamp of the organization -- usually the party committee in that work unit.

The Chinese Communist Party has established party organizations in almost every aspect of the Chinese society -- from the central government to the grassroots work units. The politburo of its central committee is the highest political governing body. From there downwards, each province, city, county or township has a party committee, which controls the local government at the corresponding level. All other non-communist party organizations, including the so-called democratic parties(2), are subject to the leadership of the communist party's politburo. Their local branches are under the supervision of the communist party's local party committees.

The formal structure of the Chinese Communist Party is hierarchical, which means that the whole structure resembles a pyramid. It has a far-flung base ramifying throughout the society and culminating in an apex where supreme power resides. The party stands in alter-ego fashion alongside every organized unit of state and society. Wherever there is a factory, bureau, school, military company, village, there also is a unit of the communist party. This parallelism makes it possible for the party to exercise direct leadership over every unit of the organization to which it is linked. Linkage is created by the fact that leaders of the organizational unit are members of the party and thus subject to party discipline.

(3)

Party officials are very often administrators, executives

or managers. As a means of better control of the people, the communist party has politically organized the Chinese society. The soul of the organization is ideology.

2.1 Ideology and the role of news media

Ideology is generally defined as "the manner of thinking characteristic of a class or an individual." (4) In this study, we regard ideology as a manner of thinking of an organization -- the Chinese Communist Party that has ruled China for the past four decades.

The total structure of Chinese communist ideology consists of a pure ideology and a practical ideology. (5) The pure ideology is derived from Marxism-Leninism, a universal doctrine for communists of all nations. It is essentially a concept of world and man or "world view." The communist world view is that all political and social conflict is basically class struggle and communism must be realized in the world. Pure ideology gives the Chinese communists "a unified and conscious world view" (6); it does not, however, indicate to them how they should act. The "systematic set of ideas with action consequences" is practical ideology. (7) Embodied in the form of party policy and speeches by party leaders, practical ideology is used by the party to achieve its goals. The party has different goals during different periods of time; practical ideology is therefore ever changing.

Since practical ideology is the party's instrument for

action, it must be communicated from the central committee of the party through to its grassroots organizations and further to the broad masses of the people. The party also needs to know people's attitudes, capabilities, relationships and other political, economic and social information. Apart from the internal information and intelligence channels, the most effective means of mass communication is of course the mass media, especially the press.

Although the meaning of news is yet to be defined in China(8), the role of the press is very clear: The press should be "a collective propagandist, a collective agitator, and a collective organizer."(9)

In a letter to two of his journalist comrades, Mao assigned five major functions to the provincial press. They are: "to organize, to stimulate, to agitate, to criticize, and to propel."(10)

1. To organize is accurately to propagate the objectives, policies and directives of the party; it is to mobilize and organize all people into a powerful force to realize and to struggle for the various great tasks prescribed by the Party at different stages in history.

2. To develop fully the function of agitation and stimulation, editors must wholeheartedly integrate the creativeness of the masses with their emotions and energy to reflect accurately and timely the accomplishments of the various fronts; they should further learn to make use of the experience of the people's success to suggest new demands, to agitate the masses to compete with or challenge those who have gained early successes.

3. The most important function of criticism of the press is to be able to select issues and to present convincing arguments to attack the various shades of opportunism, conservatism and destructive capitalism, to assure the establishment of socialism, to conquer pessimism and to mobilize aggressivism.

2.2 Control mechanism

The department of propaganda of the party's central committee is the motor of an immense machine that controls "almost every means of human expression and virtually all the avenues to the Chinese mind." (11) As the central committee has lower-level party committees or party branches across the country, the department of propaganda also sets up its own propaganda departments within party committees at various levels.

While the department of propaganda directly controls national news media such as Xinhua News Agency and the People's Daily, its branches supervise all the local newspapers, radios and TV stations.

China has 30 provinces and autonomous regions, each having its own newspaper, radio and TV station. They are jointly run by the provincial or regional government and the party committee, and supervised by the propaganda department. News media at the city and county levels are similarly operated and controlled. "Mass organizations" such as the women's federation and trade unions all run their own newspapers; and they, too, are subject to the leadership of the party committees and propaganda departments established within their parent organizations.

The party also has an effective mechanism to control individual journalists. It is the bureaucratization of news organizations. All news workers are officially designated as

the party's propaganda cadres and enjoy privileges as other party and state cadres do according to their levels on the scale of the party's cadre system. The higher a cadre climbs up on the bureaucratic ladder, the more privileges he will be given. Privileges include higher salaries, more subsidies, better living conditions.(12)

Which cadre rank a journalist belongs to depends on three factors: a) his education; b) his work experience and performance; and c) the administrative level of his work unit. A university graduate is automatically ranked at the base level. Promotion depends on years of work experience, performance and the degree of trust from the leadership. The administrative level of one's work unit is important only when one is promoted to a certain managerial position.

Take Xinhua (New China) News Agency for example. Since it is officially a department of the State Council, it is at the same level as all ministries and provincial governments. Xinhua's party committee is directly under the leadership of the politburo of the Chinese Communist Party's central committee. Naturally all the officials at the agency level, including the director general and his chief editor, are entitled to the privileges of a cabinet minister or provincial governor.

Accordingly, departments are one level below, which is at the municipal level; and sections are one more level below, which is still at the county or army regiment level. A

department director or section chief at Xinhua is, therefore, way ahead of his peers who have the same position, education or work experience but work for a smaller news organization.

There are four categories for the editorial staff:

a) Senior Editor or Reporter, a title for journalists who have had long work experience and made outstanding contribution to the propaganda work of the party. Such a position is administratively categorized between a deputy minister and a mayor.

b) Chief Editor or Reporter, a title for journalists with at least five years of work experience and a good understanding and mastery of the party's policies and the propaganda discipline. This position is equivalent to that of a deputy mayor.

c) Editor or Reporter, a title for anyone who has a university degree and worked in the profession for five years, or for a person who has a Master's degree and worked for two years, or for anyone who has no university degree but worked for at least 10 years and demonstrated his ability to report and edit news. This position is categorically placed at the county magistrate or army regimental commander level.

d) Subeditor or Assistant Reporter, a title for fresh university graduates or anyone who has been just recruited into the news profession. Although it is the lowest rank in journalism, a subeditor or assistant reporter enjoys much, if not full, political privileges including access to internal

party documents even though they may not be party members.

Under this cadre system in the news industry, professionalism means safeguarding the party's leadership, which in turn guarantees the professional's vested interest. Within this framework, the news operation of the Chinese media is mainly for the promotion of the party's line instead of informing the public. To avoid making political mistakes, or in other words, to avoid being stripped of privileges, newswriters of smaller newspapers have made a point of using stories used by bigger papers and bigger papers have made a point of using Xinhua dispatches.

2.3 Media monopoly

The People's Daily is one of the few papers that have eight pages. The front page is editorial and political (on this page, most important stories are Xinhua dispatches). The second and third pages print national news; the fourth page, theory studies and documents; the fifth page, special international news, usually soft news about foreign culture, education, and sciences; the sixth page, literature; the seventh page, miscellaneous and sports; and the eighth page, international news (on this page, most important stories are Xinhua dispatches).⁽¹³⁾

Local papers and specially designated papers have more or less the same layout, except that they usually have only four pages, with important national news on the front page and

local news on the second or third pages. These papers usually give very small space to international news. Some of them carry only a weekly summary; the foreign stories they use are all Xinhua dispatches. The People's Daily and a few other national papers have some overseas correspondents now. But in any case, Xinhua dispatches are always the final and authoritative version in terms of world news coverage.

Xinhua was founded in 1931 at Ruijin, the then capital of the Central Soviet Area. It was called Red China News Agency. Its founder, the Chinese Communist Party, was still young and encircled and suppressed by the American-backed nationalists. The nationalists wanted to "strangle the communists in the cradle." (14) But the communists did not give in. They started the self-reliance production campaign to break the nationalists' economic blockade. To break the information blockade, the Red China News Agency used radio receivers captured from the American-equipped nationalist troops to pick up foreign stations and made transcripts for news selection. (15) They would send important or confidential information to the party central committee for reference in its decision making and publish only the information that the party thought would encourage the revolutionary masses in the struggle against their enemies.

That was the chief task of the Red China News Agency. The tradition has been kept till today. Xinhua now compiles two kinds of magazine-size "Reference Materials" on a daily basis;

one is about domestic occurrences and the other is about foreign occurrences or foreign reactions to occurrences in China. Each morning, copies of the "Reference Materials" are sent to the central party committee and the State Council and also sent to local government and party organizations above the county and regiment level.

Because of this unique function, Xinhua has become the sole manipulator of the news media in China. Xinhua now has about seven thousand staff. In every province it has a branch and in 99 countries it has bureaux. The State Council has made it clear that all other news media must use Xinhua as the only authoritative source of information in events of political importance. (16)

For each important occurrence, Xinhua files two versions of stories; one is called "general broadcast" and the other the "internal reference." When things become urgent or serious, it files only the "internal reference" for the politburo to decide whether it is appropriate for the people to know about the detail or to know it at all at the moment.

2.4 "Grapevine"

The party's information control has never been fully maintained. In China, where there is a party line there is a way to break it. The "grapevine" is one such way to break the party's monopoly of the news media.

Chinese normally don't buy newspapers or really read

newspapers. There are two reasons: a) newspapers are boring because they lack enough information; b) people don't believe what the newspapers say even though newspapers may not always lie. Nevertheless, Chinese newspapers never have to worry about circulation and profits. As newspapers are all run by the party, all party organizations from the central government to the grassroots work units must subscribe to the party's newspapers. As the communist party is the sole ruling party in China, all other non-Communist institutions or organizations must subscribe to the party's newspapers, too.

Reading newspapers during political meetings makes the meeting a hotbed of hearsay. A typical political meeting in China usually begins with the party branch secretary or the head of the work unit asking someone at the meeting to read aloud an important newspaper article - a party document in the form of an editorial or full coverage of a leader's speech.

When the routine is done but official meeting time is not yet over, free discussion begins. This is the time to share information. Generally speaking, the Chinese hearsay is an unofficial rebroadcasting of the information ordinary people have no official access to. There is often some truth in each piece of the news but it is difficult to trace its source.

2.5 Press reform and the Beijing Massacre

China began economic reforms in 1978 when Deng Xiaoping put forward his famous cats theory: "It doesn't matter whether

a cat is black or white as long as it catches mice." Deng, a veteran communist, was persecuted during the "Great Proletarian Cultural Revolution" (1966-1976) for allegedly trying to lead China onto a capitalist road. He survived and came to power in late 1976. A year later, he restored the system of national university entrance examinations, opening up the door for higher learning to all people regardless of their family backgrounds.(17) Today, most of the dissidents he has either put behind bars or exiled abroad are the former beneficiaries of his liberal education policy.

To pave the way for his economic reforms, Deng initiated a nationwide theoretical campaign against hardline Marxists. The themes of the campaign were "liberation of thinking" and "the criterion of testing truth." The battle was fought in the news media. Its first shot -- an article entitled "Practice is the sole criterion of testing truth" -- was published on May 11, 1978 in Guangming Daily, a national newspaper representing the country's academic community at large. This open theoretical debate created a legitimate need for the press to adjust to new situations. It was in such an atmosphere that the press reform got started.

The reform, however, did not work wonders in the press. The strongest resistance was from journalists themselves. There are three major groupings in the Chinese journalist profession:

- a) Revolutionary propagandists who had fought with the

party and Mao before they founded the People's Republic of China in 1949;

b) News cadres trained in the 1950s and early 1960s with orthodox communist ideology;

c) Young professionals trained between 1978 and 1988.

Most people in the first two categories are either hardline communist propagandists, who insist that the press must be the mouthpiece of the party, or victims of the party's indoctrination, who find it hard to adapt to new situations or are afraid to do so. The third group was trained during a period of time when China was opening up to the outside world; many of them received Western journalism training under academic exchange programs with countries such as the United States and Canada. But they do not hold such key positions as to influence the overall editorial policy of the party's propaganda machine.

Another obstacle that blocked the path was the so-called "four basic principles" -- support for the socialist road, the people's democratic dictatorship, leadership by the Communist Party, and Marxism-Leninism Mao Zedong Thought. It was imposed by Deng himself after his plan of "four modernizations" (modernization of industry, agriculture, national defence and education) was challenged by a young intellectual, Wei Jingsheng, who demanded a fifth modernization -- democracy and freedom of speech. Wei was charged in 1979 with selling state

secrets to foreign journalists and sentenced to prison for 15 years. The "four basic principles" became the sole criteria defining the limits of liberation of thinking and reforms.

Journalists were once again chained with familiar ideological fetters. Nevertheless, the press reform continued under the banner of serving the party's modernization drive and economic reforms. According to the country's leading journalism magazine, the Chinese Journalist, there were three most notable changes in the Chinese press between 1978 and 1988: (18)

- a) There was a great increase in the diversity and volume of information instead of routine work reports;
- b) The closed model of reporting good news only was replaced by an open model of observing things from all angles and reflecting them in perspective;
- c) More areas were covered and more voices were heard; different papers had different coverage of events and different opinions; "many papers with one voice" became "many voices with one goal."

The real voice of the Chinese journalists was finally, although only briefly, heard in May 1989 when the student-led pro-democracy movement hit its peak with hundreds of hunger strikers being rushed into hospitals. On May 17, thousands of news workers took to the streets of Beijing in defiance of the government's martial law. They held high their banners of press freedom and chanted the slogan: "News workers speak truth!" More than one million people joined in, and many more, with tears in their eyes, cheered along the road or provided free soft drinks and popsicles to the demonstrators.

"It is the first time I have felt I live like a real person, not an obedient tool," said a man sobbingly. (19) He

had worked with Xinhua as an international news writer for more than 30 years and had never publicly said anything against the party. The excitement, however, was soon overwhelmed by anger and fear as tanks rolled onto the streets and troops opened fire at unarmed civilians in the evening of June 3, 1989.

Until late June when systematic purges of dissidents began, the Chinese press had demonstrated an unusual boldness in reporting the truth. The boldest of all was a short but startling message broadcast by Radio Beijing's English Service at 1 p. m. on June 4, 1989:

"Please remember June the third, 1989. The most tragic event happened in the Chinese capital, Beijing. Thousands of people, most of them innocent civilians, were killed by fully-armed soldiers when they forced their way into city. Among the killed are our colleagues at Radio Beijing. The soldiers were riding on armoured vehicles and used machine guns against thousands of local residents and students who tried to block their way. When the army convoys made the breakthrough, soldiers continued to spray their bullets indiscriminately at crowds in the street. Eyewitnesses say some armoured vehicles even crushed foot soldiers who hesitated in front of the resisting civilians. The Radio Beijing English Department deeply mourns those who died in the tragic incident and appeals to all its listeners to join our protest for the gross violation of human rights and the most barbarous suppression of the people. Because of the abnormal situation here in Beijing there is no other news of the incident we could bring you. We sincerely ask for your understanding and thank you for joining us at this most tragic moment."(20)

Chinese news media paid a heavy price. The man who wrote the announcement, Wu Xiaoyong, a senior editor at Radio Beijing, was arrested and has never been heard since. According to incomplete statistics collected by John Greenman, 19 journalists have been reportedly arrested or executed since June 1989.(21) Figures about journalists who were expelled

from work or suspended awaiting investigation are unavailable. But according to an internal report, the People's Daily had replaced all its cadres at the department level. In the American and Western European Section of Xinhua's International News Department, 15 out of 40 staffers have left China one way or the other in the past two years.(22)

The news media have returned to the pre-reform period, with a unified voice and an officially designated goal.

Endnotes

- (1) For example, former Canadian Ambassador to China, Mr. Earl Drake, subscribed to CND on March 12, 1991 from this computer account: earl_drake@whistler.sfu.ca
He is doing research on international affairs at Simon Fraser University in Vancouver after his retirement.
- (2) Showcase political parties under the leadership of the Chinese Communist Party.
- (3) Schurmann, Franz. Ideology and Organization in Communist China, 2nd Ed, University of California Press, Berkeley and Los Angeles, 1968, p.139.
- (4) The Oxford University Dictionary, London, 1955, p.952.
- (5) Schurmann, op.cit. p.23.
- (6) Schurmann, op.cit. p.22.
- (7) Schurmann, op.cit. p.18.
- (8) There is no official definition of news in China.
- (9) Yu, F. Mass Persuasion in Communist China, 1964, p.103.
- (10) Yu, op cit. p.103.
- (11) Yu, op cit. p.70.
- (12) China is a poor but densely populated country; it is not uncommon for a three-generation and five-member family to live in a 15-square-metre one-room home in the city. Living spaces are usually allocated by the government and its subordinate institutions. The higher one is placed on the cadre hierarchy, the better and larger apartment he will get.
- (13) Description based on the layout of two issues on January 22 and 25, 1990. Domestic edition.
- (14) This is a household phrase in China. It is taught in the first lesson of the history of the Chinese Communist Party, a must course from elementary school to university.
- (15) Shi, Long. "From the Cave Newsroom to the World," Chinese Journalist, Beijing, Oct. 1989, p.15.
- (16) Handbook of Xinhua News Agency, Beijing, 1988
- (17) Good family background refers to families in which the parents or grandparents are workers, peasants, the People's Liberation Army men or revolutionary cadres.
- (18) Liang, Ruojie. "Ten Characteristics of Our Country's Press During the 10-year Press Reform," Chinese Journalist, Beijing, March 1989, p.20.
- (19) Personal observation.
- (20) Morton, Brian, "Radio Beijing - the Voice of China," M.J. Thesis, Carleton University, Ottawa, 1989, p.3.
- (21) Greenman, John F. "List of imprisoned or executed Chinese journalists," Dateline 1991, an Overseas Press Club of America journal. I got the list from John directly via Email on August 9, 1991.
- (22) Personal experience.

3. Worldwide Computer Networks

The computer network is a "communications medium," just like telephone lines. The mainframe computer one logs onto may be connected to computers at other universities, companies, government departments, and institutions. The connection is usually a high-speed leased line, a special kind of telephone connection. One might say that these computers are always on the phone with each other.

The world's first computer network was established in 1969 by the U.S. Department of National Defence. It was called ARPANET (Advanced Research Project Agency Net). At first ARPANET was connected only to institutions that were related to national defence. But later on, as more and more academic institutions and companies established connections, gradually a new name, Internet, replaced ARPANET. Milnet, a split-off of ARPANET, became the US national defence and military only network.

In May 1981, the City University of New York (CUNY) and Yale University experimented with a new way of file transfer between computers of different types, establishing a new network called BITNET (Because it's there) (1). Although BITNET started late, it has grown very fast in the past decade and has become one of the world's two largest networks. The other one is the Internet.

China News Digest is based on both BITNET and the Internet. Technically speaking, CND is a large mailing list

which consists of many small ones. CND news packages are delivered automatically to its readers by computer programs following the subscription mailing lists.

In addition to direct subscription, news packages can also be accessed at many localities via USENET, where articles are posted to a bulletin board that is divided into columns. A column is designated to a specific group of network users, which is also called a newsgroup.(2) CND, however, is not a USENET newsgroup.

The major difference between a mailing list and a bulletin board is that the former delivers messages directly to its subscribers regardless on which network they reside whereas a bulletin board is set up for posting and its readers must go there electronically before they can read anything. An advantage of reading a bulletin board is that the reader does not have to subscribe to anything, thus saving space in his or her electronic mailbox which is often limited. An obvious drawback is that he cannot get what the bulletin board does not carry. In that case, he has to find a relevant mailing list and subscribe to it.

This chapter provides basic information about two major global computer networks, namely, BITNET and the Internet, and a special news posting and reading network called the USENET. This information is necessary to understand the technical aspects of CND.

3.1 BITNET

BITNET is a worldwide network, linking institutional and departmental computers for over 450 members which include universities, colleges, and collaborating research centres. Chartered to facilitate non-commercial exchange of information consistent with the academic purposes of its members, BITNET is governed by an incorporated Board of Trustees elected from its membership. BITNET consists of several networks; each is administered by its own governing body, but together they form a single logical network serving more than 2,900 computers located in the Americas, Europe, the Middle East and Asia.(3) In addition, it has gateways to the Internet and many other networks worldwide.

BITNET is a "store-and-forward" network; information sent from a given BITNET-connected computer is received by intermediate computers and forwarded to its destination. Messages could be delayed or even lost, if any of these intermediate computers break down. Each of the computers in BITNET is called a "node" and has a unique name that identifies it to the other nodes. A user ID combined with the name of a node is a "network address." It is usually written in the format "userid@node" (read "user identification at node"). The network address of CND-CANADA news service is, for example, CNC-L@UVVM.BITNET. It is read in plain English as China News Canada List at University of Victoria's VM computer in BITNET.

There are three basic methods of communication via BITNET: MESSAGE, FILE, and MAIL.

MESSAGE. The MESSAGE (sometimes called "interactive message") is the fastest and most convenient method of communication available through BITNET. It is the network's equivalent of a telephone conversation. The difference is that the words are typed instead of spoken. The message one types is transmitted almost simultaneously to its destination --the network address (userid@node) of the person one wants to contact.

There are some drawbacks. First, text sent by MESSAGE must be short; in general, a message length cannot exceed one line across the screen. Secondly, communication is possible only when the recipient of the message is logged on. Thirdly, there is also the problem of links. If the connection to the node one wants to contact is broken, he will receive an error message and whatever he sent is gone.

FILE. FILE is another way to communicate over BITNET. The text files and programs that one stores on his computer can be transmitted to users at other nodes. SEND/FILE and SENDFILE are the commands, depending on the actual computer system one is using; they are useful for sending programs or large volumes of data over the network. But they should not be used for everyday communication. The MAIL utilities are much more accessible.

MAIL. MAIL, often called "electronic mail" or "Email," is just like regular postal service mail: the sender provides an address, return address, and text. Mail files are specially formatted text files. The feature that makes them different is the "mail header," containing important information such as the time the mail is sent and received, addresses of both the sender and recipient and the exact return path for automatic delivery of replies to the mail one receives.

MAIL has a number of advantages. The size of a mail file can be much larger than that of a MESSAGE text. If the person at the destination address is not logged on, the mail will be stored until he reads it. If the links to that particular node are disconnected, the mail will be held until it can get through. Moreover, mail is the only way one can communicate with people in networks outside of BITNET. CND news packages are delivered to subscribers via Email.

The disadvantage of MAIL is that it is, indeed, slower than MESSAGE. The longer the mail, the more time it takes to deliver. Besides, programs or binary files sent via MAIL will get corrupted unless they are encoded as textual files.(4) But encoding will increase the size of a program file which is usually already very large.(5)

Besides these three communication functions, BITNET offers a unique service that makes possible the operation of large mailing lists, such as is used by China News Digest. This service is called LISTSERV.

LISTSERV. LISTSERV stands for "list server." Originally, LISTSERV was a mailing-list server which was designed to make group communication easier. People with a common interest were grouped in a list which was then stored on LISTSERV. They could then communicate with each other by sending mail to a special network address. Any piece of mail sent to this special address would then be automatically distributed by the list server to each and every person listed under it. This address is also called a LISTSERV list, a special interest group or a forum.

The advantages of LISTSERV were obvious. First, the person on a list did not have to know all the names and network addresses of other subscribers to that list in order to send a message to them; all he had to do was send it to the list and the LISTSERV would take care of the deliveries. Secondly, people could join a list by asking the "list coordinator" (actually the person who maintains the list server) to be added to the list and it was a very convenient way to meet people and participate in interesting discussions and forums.

Revised LISTSERV retains the basics of the old LISTSERV while offering more sophisticated functions, help files and more user-friendliness. Users can send a command to the server to subscribe to a list instead of going to the list coordinator. For example, if a reader in Canada wants to subscribe to China News Digest, he can simply send a one-line

command in a mail to the list server at the University of Victoria, BC, where CND-CANADA's mailing list is stored. That list also relays CND-GLOBAL news packages.

The subscription command is as simple as this:

```
To: LISTSERV@UVVM.BITNET
From: bing_wen@carleton.ca
Subject:
```

Sub CNC-L Bing Wen

To leave this list, send the command "Signoff CNC-L" in a mail to the same address.

LISTSERV also has an automatic archival and retrieval database. It stores all delivered materials in packages. Users can retrieve any of those packages by issuing a GET command to the LISTSERV.

List servers are essential to the development of network groups like China News Digest. Currently, CND has six lists of readership subscription and news distribution installed on list servers located in the US and Canada. One of the lists, "CHINA-NN", which is used to distribute CND-GLOBAL news packages, has a total of 6,700 subscribers. It broadcasts daily with a package that runs as long as 200 lines. Subscription and signoff requests come in at an average daily rate of 20. It would be a heavy burden, if not impossible, for a human to handle such a large mailing list.

3.2 The Internet

Like BITNET, the Internet is also a logical network but

it is much larger and more complex than BITNET in terms of network structure. It consists of hundreds of computer networks spanning the United States, Canada, Europe and Asian and Pacific Regions. It is best described as a "network of the networks." That is, network A might have 10 computers linked together, network B might have 100 and network C might have 20, and each net could be in a different country. The Internet allows machines in any one of these networks to communicate via specially designated computer links, called 'gateways', with any other.

It is not known exactly how many computers communicate via the Internet. According to the June 1989 Internet Monthly Report, there were 984 domains registered and 1,648 Internet network numbers assigned. Most of these top level IP numbers are further subdivided to address hundreds and sometimes thousands of hosts at each site.(6)

According to figures provided by the US National Science Foundation, which runs NSFNET, the hardware backbone of the Internet, there were 727,000 host computers connected to the Internet by January 1992. Thirty-eight countries are reachable for Telnet and Anonymous FTP and such full services; more than 50 countries are reachable for Email and such store-and-forward services.(7)

Technically speaking, a domain is a full subtree in the name space (usually delegated to a particular organization). The Domain Name System (DNS) consists of a hierarchical

sequence of names, from the most specific to the most general (left to right), separated by dots, for example, "ALFRED.CARLETON.CA." In this example, "CA" is the top level domain and "CARLETON" is the subdomain; under "CARLETON" there are a number of host computers such as "ALFRED."

In the United States, EDU (educational) and COM (commercial) are the most popular top-level domains, with several hundred subdomains delegated to various universities and companies. In Canada, organizations are usually registered under the CA domain, regardless of whether it is an academic institution or a company.

The IP number is another way of naming an organization in the Internet. It is assigned by the U.S. Defense Data Network NIC (Network Information Centre) to ensure that an organization wishing to connect to the Internet has a unique network number. The IP number for "ALFRED.CARLETON.CA," for example, is 134.117.1.1.

The vast interconnection of computers on the Internet provides an unparalleled infrastructure for resource sharing. An Internet user can connect to a computer on the other side of the world as quickly and easily as if it were in the next room. Mail messages can be delivered to any of thousands of individual mail boxes in dozens of countries. Large computer files can be transferred quickly with a few brief commands.

There are three basic methods of communication on the Internet: remote login, file transfer and electronic mail.

Electronic mail. It is the same as Mail in BITNET. Email is a relatively fast, inexpensive, and efficient way to communicate with people on the network around the world. It is possible to send messages or files to another user on the same network or through a "gateway" to a different network such as BITNET.

Remote Login. Remote login service allows a user working on one computer to log into a remote machine over the Internet, as if there was a direct connection between the user and the distant computer. The commonly used command is "TELNET." The following is a remote login session in which I logged into a CND working account at Kent State University in the United States from my account on "ALFRED" computer at Carleton University:

```
telnet djohn-sun.kent.edu
Trying 131.123.1.151 ...
Connected to djohn-sun.kent.edu.
Escape character is '^]'.

SunOS UNIX (djohn-sun)

login: cnd
Password:
Last login: Wed Apr 15 15:38:54 from gauss.casr.fau.e
SunOS Release 4.1.1 (GENERIC)
#1: Sat Oct 13 06:05:48 PDT 1990
djohn-sun:cnd: #51>ls
CND-INFO/      PD-tools/      cm/      man/      tools/
...
```

This functionality offers great convenience for users who need to do certain jobs such as maintaining a mailing list on machines other than their own or who are away from their computers but need to log in to check mails.

File Transfer. The File Transfer Protocol (FTP) allows users to transfer files quickly from machine to machine on the Internet. It is possible to transfer files in various formats, allowing users to retrieve software programs, graphic images, and other files which are not ASCII text. The following is an FTP session in which I logged into a public archive site named "AHKCUS.ORG" and retrieved a compressed package of CND-GLOBAL news broadcast in the third week of September 1989.

```
ftp ahkcus.org
Connected to ahkcus.org.
220 ahkcus FTP server
(The Alliance of Hong Kong Chinese in the United States)
Name (ahkcus.org:s187318): anonymous
331 Guest login ok, send your local username as password.
Password:
230 Guest logged in; for administrivia, email
operator@ahkcus.org.
ftp> cd cnd-g
250 CWD command successful.
ftp> get cnd-g.89-09-week3.Z
...
```

3.3 The USENET

The USENET (also known as news or netnews) is a distributed bulletin board and discussion system, international in scope. "It is the set of people who exchange articles tagged with one or more universally recognized labels, called 'newsgroups' (or 'groups' for short)."(8)

USENET came into being in late 1979 when two graduate students at Duke University in North Carolina, the United States, thought of interconnecting computers to exchange information. The first version of the USENET news software was put together and installed on "UNC" and "DUKE" computers by

Steve Bellovin, a graduate student at the University of North Carolina.

The news software underwent several stages of development. The latest version was developed at the University of Toronto, Canada, to increase article processing speed, decrease article expiration processing and improve the reliability of the news system. It was released in the autumn of 1987.

Today, USENET hosts more than 1,000 newsgroups. USENET groups range in topic from highly technical scientific exchanges to distribution of computer source code to discussions about hobbies and current events.

3.4 Computer networks in China

China's first computer network project was initiated in 1986 by Beijing Institute for Computer Applications (ICA) in cooperation with the University of Karlsruhe, Germany. The purpose was to "integrate Chinese academic communities with the worldwide computer network, and to promote information exchange and technical cooperation with the rest of the world." (9) The network, Chinese Academic Network (CANET), was set up in September 1987 when its central computer at ICA was successfully connected to an Email relay computer at the University of Karlsruhe via a 2400 BPS (10) satellite linkage.

In October 1990, the top level domain "CN" (which stands for CHINA) was registered with the US Defence Data Network NIC

(Network Information Centre) by ICA and computers on CANET began using the Internet domain naming system (DNS) syntax. The network address of ICA is thus written in this way: "ICA.BEIJING.CANET.CN."

But at present, CANET is still a "store-and-forward" electronic mail network and is not really a part of the Internet because it is not directly linked with the Internet via a leased line and those important functions such as FTP and REMOTE LOGIN are not available for CANET users.

China Research Network (CRN), another computer network in China, is aimed at "providing electronic communication means to Chinese scientists, professors and other researchers to facilitate exchange of information and coordinate cooperation with their partners in China and abroad." (11) Currently CRN has eight member institutions across the country and it is interconnected with members of the European Research Networks (EARN) including Germany, Norway and Switzerland.

Besides CANET and CRN, there are a number of small networks established by universities on a local basis. Most of these networks operate under the Chinese operating system and communicate in the Chinese language, which is "entirely graphic due to the nature of the natural character set of China." (12)

The computer is a Western invention and computer keyboarding is based on Roman characters which are also the basis for the American Standard Code for Information

Interchange (ASCII). On an Email system, therefore, one can literally type in any characters and symbols that he can find on his keyboard and have them sent to a recipient directly via Email. But to deliver a graph or a Chinese text via Email, one has to encode it with a program that converts the graph or the Chinese text into ASCII characters and symbols so that they would not get corrupted through Email transmission. After they reach the destination, they have to be decoded before they can be displayed sensibly on the screen or to a printer. The whole process resembles wrapping up a delicate object before sending it to a post office for mail delivery. It increases the size, adds to the weight and complicates the procedure. But it guarantees a safe delivery.

Since Chinese is spoken in China, Hongkong, Taiwan, and Singapore, and the Chinese writing system is the basis of the Japanese language, Chinese computing has become such an important trend that the US computer software giant, Microsoft, developed a Chinese version of Windows in early 1992 with immediate market success. In Canada, an Ottawa-based company, Microstar, is working on a graphic program that would allow Chinese, Korean and Japanese to be used directly in Email communication.(13)

Like most developing nations, China lacks sufficient academic and research funds. It would be unrealistic to expect computer networking to be used there as much it is in the West in a short period of time. But as the country's economy grows,

the need for communication will grow. Computer networking as one of the most efficient means of communication will certainly be more widely used in China in the future. In return, the use of this modern technology will not only accelerate economic development but also help with the country's democratization process since the free flow of information is the basis for a democratic society.

Endnotes

- (1) It is also interpreted as "Because It's Time Network."
- (2) See 3.3
- (3) LaQuey, Tracy Lynn. User's Directory of Computer Networks, University of Texas at Austin, 1989, p.1-2.
- (4) A text file is also called an ASCII (American Standard Code for Information Interchange) or DOS text file. It contains only text which can be displayed and edited on any editor or word processor.
- (5) A commonly used encoding program is called "uuencode." It increases the size of the original file by about 70 percent.
- (6) LaQuey, op.cit. p.3-2.
- (7) Figure released by Steven Goldstein of the US National Science Foundation at a conference in the Czech and Slovak Federated Republic in January 1992. Source: George Frajkor, School of Journalism, Carleton University, Canada.
- (8) Spafford, Gene. "What is USENET," electronic manuscript, line 138. Available on USENET's news.announce.newusers.
- (9) Qian, Tianbai. "A Brief Introduction to CANET," Networking to China, electronic newsletter, April 1992, line 98. Relayed by Bo Xiong <YAWEI@COPPER.UCS.INDIANA.EDU> from AEICNET@WAM.UMD.EDU to CND-ALL on April 18, 1992.
- (10) BPS stands for bits per second. Eight bits form a byte or a character.
- (11) Zhao, Xiaofan. "About CRN," Networking to China, April 1992, line 324. For source, see (9).
- (12) Anderson, G. Ernest, "China Networking Observations from October 1991 Visit," Networking to China, April 1992, line 209. For source, see (9).
- (13) Interview with Dr. Hengsheng Cai, senior software engineer, January 1992.

4. China News Digest

China News Digest began broadcasting under its current name in September 13, 1989. It had, however, undergone several stages of evolution. The earliest phase of development coincided with the creation of a USENET newsgroup, Soc.Culture.China (SCC), and an Email newsletter, the Electronic Newsletter for Chinese Students (ENCS).

4.1 Soc.Culture.China

Early in 1987, a project under the name "ChinaNet" was proposed by a research group at Texas A&M University to connect BITNET to China. This project immediately attracted many Chinese students and scholars. Meanwhile, a mailing list, also called ChinaNet, was created to coordinate the efforts. As more and more people signed up to the list, ChinaNet's popularity increased daily.(1)

The mailing list soon became moderated because of too many irrelevant debates through it. It was clear then that a medium dedicated to China and Chinese affairs was in demand. Most of the ChinaNet readers voted "yes" to the motion of forming a newsgroup called Soc.Culture.China.(2)

SCC was created on November 17, 1987. It reaches countries such as the US, Canada, England, Australia, Germany, Japan, France, and Norway. Its readership amounts to about 9,000 worldwide, and its traffic is about 100 articles daily on average.(3) Such a load was apparently quite heavy for a

regular SCC reader. For readers who did not have access to USENET, the packages sent out by the SCC broadcasting service via Email were "simply too much to digest." (4)

"A package could run as long as 500 to 1,000 lines and it stuffed my mailbox. Besides, many of the items in a package are sometimes either trash or comments with the original article being quoted sometimes in full length," said Dong Liu of Carleton University who used to subscribe to SCC via NCTKWAN@watdragon.waterloo.edu. She dropped off the group because she soon found herself deleting SCC packages without even going over them first. (5)

Liu's experience is not uncommon in the online world. Computer users whose site carries full USENET traffic have an easy option to select which newsgroup to join and which article to read within that newsgroup. But reality is that not all computer network sites carry USENET; even if they do, they may not carry all the traffic. (6) For the majority of network users, the only convenient way to get information on a specific topic is subscription by Email to a newsgroup that is designated to that topic.

4.2 Electronic Newsletter for Chinese Students (ENCS)

ENCS was founded in early 1988 when a few Chinese students in the US felt a need to keep track of news about China but "were all too busy to read all the newspapers and all the network articles." (7)

"Several friends of mine felt it necessary to establish some sort of information exchange system through Email for various things about China," said Zhiyong Shen, founder of ENCS.

It was a "friend-to-friend" mailing list at the beginning. Shen and his friends took turn in finding those "interesting things" and shared them among themselves. It was not meant as a formal news service and there was no exact starting date "because we didn't even date our 'publications'."

Friends of friends started to join in and the readership became too large to handle from their personal computer accounts. They had to distribute ENCS packages in a "tree structure" -- one package would be sent to one person, as if water were delivered to the roots of a tree, and that person would re-distribute it to friends, the way tree roots distribute the water to the leaves.

By the end of 1988, ENCS had about 300 readers, and 13 editors and re-distributors across the United States.

"After the start of the student movement, (8) information about China became too overwhelming for the weekly ENCS to handle. We were talking about either expanding or closing down," Shen said. During the First National Congress of the Independent Federation of Chinese Students and Scholars in the United States (IFCSS), held in Chicago in July of 1989, ENCS members, many of whom met each other for the first time,

decided to give their mailing list to CND, a younger but more seriously organized news group. "Most of our editors have since graduated, some are actively involved with IFCSS or other human rights organizations," Shen said.

4.3 Birth of China News Digest (CND)

On March 4, 1989, two Chinese students in Canada proposed a plan to set up a news service for Chinese students in Canada and asked two Chinese students in the United States for help.

"This cross-border arrangement was intended to evade the pressures from the Chinese Consulate in Canada which had a higher degree of control on Chinese students than their counterparts in the US." (9) Although the Chinese Constitution stipulates that people have the right to publish, unauthorized publications are banned in China. The two students were afraid that the Chinese consulate would intervene should they start the news service in Canada.

After less than two days of preparation, the first news package was delivered to about 400 readers in Canada from the US on March 6. It was written by Bo Xiong of Ball State University, the United States, edited by Ruopeng Zhu of University of Waterloo, Canada, and distributed by Wuming Zhou (10) of Purdue University, the United States.

This small news group, though having no official name at the time, is the predecessor of China News Digest. The four students who started it up are Ruopeng Zhu majoring in

mathematics, Pinglu Qiang (11) in computer science, Bo Xiong in computer science, and Wuming Zhou in physics. Of the four, only Bo Xiong and Ruopeng Zhu are still with CND. Both Wuming Zhou and Pinglu Qiang left CND later for personal reasons. (12)

Until June 15, 1989, they had been sending out edited packages from their personal accounts. "Wuming's system manager had warned him many times not to send out 2,500 mails everyday. My system manager had greatly tolerated my heavy mailing until we set up CND's first auto-mailing list at University of Toronto in Canada," Bo Xiong recalled. (13)

The Beijing Massacre took place on June 4, 1989, shortly after the first Sino-Soviet Summit in more than 30 years. Western journalists who had gathered in Beijing to cover the historical event already noticed the rising student-led pro-democracy movement and many of them managed to stay beyond the Summit. When the troops started shooting at students and civilians in the Chinese capital, those horrible and bloody scenes were broadcast live on television screens in the West.

That event changed how many computer systems administrators felt about Chinese students using the networks. "People are sympathetic to us," says Pinglu Qiang. "If a Chinese student applies for an extra computer account for information exchange purposes, he will very likely get it." (14) In mid-June 1989, Bo Xiong contacted the system manager at the University of Toronto and got permission to base their

mailing list on a Unix system there. Unix is a popular computer operating system; the Email program on Unix systems is much more powerful and multi-functional than that on other systems.

Gang Xu, who later became the first manager of CND, began in May 1989 to re-distribute news packages to his personal friends over the networks and to Chinese students at Kent State University where he was doing his graduate studies in physics. "At this time, I started corresponding with Ruopeng and proposed the name News Digest (ND) for the news service."(15)

While Bo Xiong continued to take care of the distribution of ND in Canada, Gang Xu started to advertise in the US. During the first national congress of IFCSS in Chicago, Gang Yu met Zhiyong Shen, editor of the Electronic Newsletter for Chinese Students. Shen told Xu that ENCS was going to close down and would like to hand over its mailing list and distributors to CND. "I was delighted, of course," Gang Xu said. "The transition was accomplished in August. I got about a couple hundreds of subscribers; some of them were local distributors."

During the same time, Minghui Yao of Arizona State University, the United States, was operating his own local news service called China News Group (CNG). Initially a local group in Arizona, CNG expanded rapidly on a national scale after it was moved to LISTSERV at the end of June 1989. In

early August 1989, Gang Xu contacted Minghui Yao for a possible cooperation between CNG and ND. After a few Email exchanges, they agreed to merge the two groups to make full use of their resources and to make the new news group a more professional one.

Ruopeng Zhu who technically organized the merge drafted an "Introduction to China News Digest." CND was formally named then. It was a combination of China News Group and News Digest. "I guess that I was a little bit too narrow-minded then -- I insisted on using two words from CNG and two from ND so that we get even," Minghui Yao recalled with a smile. "But It turned out to be a real good name though." (16)

As a first step toward professionalism, Gang Xu sent all the distribution lists he collected from ENCS along with ND lists to Minghui Yao, who appended them to his LISTSERV list "CNG" at Arizona State University over a weekend in late August 1989. "From that day on, CND has been operating on LISTSERV," Minghui Yao said.

The initial number of recipients installed on the "CNG" list was about 1500. But it was reduced to 1200 after removing bad or duplicated addresses. The number grew steadily at a rate of more than 200 monthly. Most subscriptions were from individual readers directly and handled by LISTSERV automatically. Some were added in as sub-lists with their own recipients.

Between August and September, 1989, CND got two more

LISTSERV lists --"CHINA-NN" at Arizona State University and "CHINA-ND" at Kent State University. Minghui Yao copied the "CNG" list to China-NN and resumed local functioning of "CNG" LISTSERV list. While "CHINA-NN" was used to distribute CND general news packages, "CHINA-ND" became the distribution list for CND US regional news service -- CND-US.

Although it had a long way to go to achieve professionalism, CND had by then become a much more sophisticated news organization operating on three LISTSERV sites and broadcasting to both Canada and the United States.

4.4 An Overview(17)

Currently, CND has 55 staff members with a manager, a treasurer and seven section coordinators. The manager and treasurer are elected by full members for a one-year term and are respectively responsible for the daily operations of CND and its financial management.

The seven sections are CND-GLOBAL news service, CND-US regional news service, CND-CANADA regional news service, CND-EUROPE/PACIFIC regional news service, CND-SOURCE, CND-TECH and CND-CM, the weekly Chinese language digest magazine.

All CND members are on the mailing list of "CND-ALL." It is, technically speaking, a mailing alias based on a Unix account owned by Yagui Wei at Indiana University. Any message sent to this alias will be automatically distributed to all addresses listed under the alias. "CND-ALL" serves as a

meeting room where discussions are conducted, elections held and announcements made.

Unlike attending a meeting at a physical location, a CND member does not have to be on time to catch everything, nor does he have to wait till his turn to speak or finish before the meeting ends. An Email discussion session usually starts when a member posts a message and others follow up with comments and suggestions. If the rate of response to a proposed topic is low, the initiator either modifies his topic or simply lets it go without further pursuit. Since everyone on the list receives a copy of all posted messages, members can keep their own archives, saving the trouble of having a secretary to take the minutes and prepare reports.

There is no strict line drawn between sections in terms of personnel flow, nor is there any restriction to discourage a member to undertake a task that he wishes to. There are two major tasks that must be done on a daily basis in order to keep CND running: news operation and list maintenance.

The Executive Editor and List Maintainer are open term positions that are regularly posted to "CND-ALL" by their coordinators. Anyone who finds himself available for a certain period of time can sign up for a term.

The length of a term varies depending on what job one signs up for. The CND-GLOBAL editorship usually lasts for two weeks during which news packages are broadcast on a daily basis. CND regional news editors usually sign up for a two-

month term and are expected to produce one or two packages per week. The Chinese magazine editorship is a 15-day term, during which one issue must be broadcast on every Friday. So the number of issues an editor has to edit depends on how many Fridays happen to be in his term.

CND-GLOBAL has an electronic newsroom -- "CND-EDITOR." Like "CND-ALL," it is also an alias based on the "BRONZE" computer at Indiana University. On that list are the manager, the CND-GLOBAL coordinator, the current executive editor, news providers and other interested CND members. The news providers send what they collected from other sources to "CND-EDITOR" which distributes them to all recipients on the list.

The executive editor edits the material and sends the final package to "CND-G-POST," an authorization check point which is also based on the "BRONZE" computer. It checks the sender's ID before forwarding the package to the LISTSERV list "CHINA-NN" for broadcasting.(18) The LISTSERV list is configured in such a way that it broadcasts only packages approved by the "CND-G-POST." The total number of CND-GLOBAL's direct subscribers is around 12,000.

"CND-US" is not only a service name for the CND-US regional news section but also an internal mailing list like "CND-EDITOR" where editors and other concerned CND members collect sources, discuss issues and edit news packages. The broadcasting list for CND-US finished packages is the LISTSERV list "CHINA-ND" at Kent State University. The number of

directly subscribed readership is around 7,700. Like "CHINA-NN" for CND-GLOBAL, "CHINA-ND" is also configured to accept only packages approved by "CND-US-POST."

CND-CANADA, CND-EUROPE/PACIFIC and CND-CM are similar to CND-US in terms of operation. The broadcasting list for CND-CANADA is "CNC-L" at the University of Victoria in Canada, the broadcasting list for CND-EUROPE/PACIFIC is "CND-EP" at Indiana University and the broadcasting list for CND-CM is "CCMAN-L" at the University of Georgia. There is also a similar posting authorization process for these lists.

CND's news providers have a small mailing list called "CND-SOURCE" which is based on the "BRONZE" computer at Indiana University. The list is mainly used to coordinate source collecting and gathering activities to reduce overlapping and gapping in news selection.

The technical support staffers have their own communication list "CND-TECH". Some of them, including the current list maintainer, are put on "CND-EDITOR" and other regional news editors' lists. This is because many readers simply send their technical requests to the editors instead. Their duties include "processing error messages received, deleting entries from the list as necessary and adding entries when requests are received." (19)

Finally, there is a "CND-CORD" list where the manager and his coordinators discuss managerial matters that are of little concern to the general membership.

Endnotes

- (1) Sun, Kang. "A Brief Introduction to Soc.Culture.China (SCC)," Organization Introductions, Issue 1, Nov. 16, 1989. Available for anonymous FTP from ahkcus.org in /cnd-pkgs/orgintro directory.
- (2) ibid
- (3) ibid
- (4) Interview with Dong Liu, former VP External of the Chinese Students and Scholars Association at Carleton University, April 1, 1990.
- (5) ibid
- (6) Computer Centres at some universities do not carry certain newsgroups, such as Alt.Sex and Alt.Sex.Pictures.
- (7) Shen, Zhiyong, "About the Electronic Newsletter for Chinese Students (ENCS)," CND-GLOBAL, March 6, 1991.
- (8) The 1989 pro-democracy movement in Beijing, China.
- (9) Bo, Xiong, "The Making of 'China News Digest'," CND-GLOBAL, March 6, 1991.
- (10) Not his real name.
- (11) Not his real name.
- (12) Wuming Zhou is no longer active on the computer networks and cannot be reached for comments. Pinglu Qiang still requests for anonymity even though he is actively involved in an Ottawa-based Chinese dissident organization.
- (13) Interview with Bo Xiong, Sept. 24, 1991.
- (14) Interview with Pinglu Qiang, Sept. 30, 1991.
- (15) Interview with Gang Xu, Sept 28, 1991.
- (16) Interview with Minghui Yao, Sept. 24, 1991.
- (17) Based on information gathered in 1991.
- (18) Currently, CND-GLOBAL is being broadcast from three more LISTSERV lists besides CHINA-NN@ASUACAD. They are as follows:
 CHINA-NN@UTARLVM1 (Univ. of Texas at Austin, US)
 CNDUB-L@UBVM (Univ. of Buffalo, US)
 CND-OSU@OHSTVMA (Ohio State Univ., US)
- (19) CND-TECH log, 1991.

5. Inside the "Newsroom"

CND has several electronically based "newsrooms." The largest one is "CND-EDITOR" which produces CND-GLOBAL, a daily publication with more than 12,000 direct subscribers in 30 countries and regions.

"CND-EDITOR" is a mailing alias based on a computer at Indiana University which is named "BRONZE." Sites with more than one computer linked to the network identify the computers by names, or numbers. News contributors send their stories to this list which re-distributes them to all its recipients. The person on duty, or the executive editor, reads the news feed carefully and makes selections. Then he proceeds with copy editing and produces a news package. He sends it back to the "newsroom" for preview. People around would do the "nitpicking" if they feel like it or have the time to do it. The executive editor receiving their comments or suggestions will make corrections or adjustments if he thinks it necessary. Then he sends the revised package back to the "newsroom" again for the coordinating editor, usually a more experienced CND member such as the section coordinator or the manager, to post it to the network. In the second half of his term, however, the executive editor will be authorized to post his previewed news packages directly.

Unlike traditional newsrooms where there are fixed work schedules, a routine on "CND-EDITOR" can begin at any time of the day as long as the executive editor has the time or is

able to log into his mainframe computer. This is one of the principal differences between computer distribution systems and conventional news publications or agencies. Just as the reader can log on and read the news whenever there is time, so the editors can log on and edit and post the news whenever there is time. Flexibility can be a real advantage.

The following is taken from a newsroom log to show how a newsroom of this new type functions. The starting date, randomly selected, is Monday, March 30, 1992. Since space is limited, only material directly related to editing is included. All selected messages are presented as is except for corrections on misspellings and obvious grammatical mistakes. There is only one instance in which correction is not made in order to make a point about other people checking veracity. The "-><-" sign is used between quoted messages to separate them visually. Since the "From:" line of each message clearly indicates the authorship, the signature at the end of the message is omitted to save space. In the "From:" line, the country of residency is specified if the author's name appears for the first time. The cited texts have been slightly reformatted to reduce the line width for printing purposes.

Lu Chen. Lu Chen is 15-year old Chinese girl who won a bronze medal at the World Figure Skating Championships held in Oakland, US, on March 29. It was the first medal China had ever got in the sport.

Since it was a single event and only one Chinese athlete was competing, editors decided to report the final results instead of the competition in progress.

Over the weekend, a couple of stories were sent in as editors were preparing for the report on China's final standing in the competition. Bo Xiong, the coordinating editor in Chicago, was apparently watching TV and got the final results before he saw the wire story headlined "Lu Chen second in world championship after short programs" which was sent to the "newsroom" by Charles Mok of the CND-SOURCE group. So he made a note Sunday night to remind the executive editor in Washington, D.C. of Lu Chen's final standing. The next morning before he started his work in his office in Santa Clara, California, Charles Mok logged in and read Bo Xiong's note in his Email box. Immediately, he keyed in a short note explaining the situation.

This note, filed at 8:04 Pacific Standard Time, is the first message in the "newsroom log" of the day. It marked the beginning of another unpaid newsmaking session.

Date: Mon, 30 Mar 92 08:04:30 PST
From: Charles P. Mok (US)
Subject: Re: Lu Chen second in world championship
after short

She was second after the short programs Saturday, third finally after Sunday.

-><-

Date: Mon, 30 Mar 92 08:06:53 PST
 From: Charles P. Mok
 Subject: Re: DRAFT: CND-G 3/30

Please do not change the UPI news I sent in last night, which reported on the competition in progress after Saturday (please note date and time of report), not the final result, where Chen placed third. I will send in an updated final report from UPI soon.

-><-

Date: Mon, 30 Mar 92 08:09:09 PST
 From: Charles P. Mok
 Subject: RE: CND-Global, March 30, 1992

O well, warnings for the Chen news came too late I guess. After all I do operate out of the west coast time zone :-)

-><-

Date: Mon, 30 Mar 1992 13:13:55 -0500
 From: Bo Xiong (US)
 Subject: Re: Lu Chen second in world championship after short

Sorry I was in a hurry last night and didn't read the original news carefully.

-><-

Date: Mon, 30 Mar 92 09:34:03 PST
 From: Charles P. Mok
 Subject: Lu Chen is third
 (this is the report after Sunday final competition)

OAKLAND, Calif. (UPI) -- Olympic champion Kristi Yamaguchi, whipping her home town crowd into a frenzy, Sunday captured her second consecutive women's title and Lu Chen won China's first medal at the World Figure Skating Championships by capturing the bronze. [more deleted...]

Oscar. Popular entertainment has always been a vulnerable target of attack in China when political and ideological struggle is on the rise. Last year, Zhang Yimou's "Judou" was a nominee of Oscar's best foreign film award but the director himself was barred from attending the ceremony in the first place. A short while later, the government ordered the withdrawal of the film from the competition. The film is still banned in China on charges that it is an example of bourgeois

liberalism, a communist code for anything that does not fit into the ruling communist party's ideology.

This year, Zhang Yimou got nominated again for his new film "Raise the Red Lantern." Since the filming was financially backed by Japan and Hongkong and the film was produced by a Hongkong company, it did not go through the official Chinese film bureau for approval to participate in the Oscar contest; and it had been reported that Zhang was allowed to attend the award ceremony. Although the presence of the director at the ceremony was not confirmed and the film did not win, the fact the Zhang's films got nominated twice was significant enough to report.

Date: Mon, 30 Mar 1992 22:36:38 -0500
From: Bo Xiong
Subject: Oscar went to Italy

Just saw on TV that this year's best foreign film went to Italy ...

-><-

Date: Mon, 30 Mar 92 22:18:07 CST
From: Zuofeng Li (US)
Subject: Re: Oscar went to Italy

And they picked Sylvester "Rambo" Stallone to present the award. Curious choice.

-><-

Date: Mon, 30 Mar 1992 22:57:38 -0500
From: Bo Xiong
Subject: Re: Oscar went to Italy

>So did Zhang Yimou come to attend the Oscar?

The ABC didn't show, actually the best foreign movie award was issued in 1 minute, even no part of the nominated was played as those US movies ...

-><-

Date: Tue, 31 Mar 1992 10:15:50 -0500
From: Bo Xiong
Subject: Re: DRAFT: CND-G 3.31

>3. China's Top Movie Nominated for Oscar Best Foreign Film...
>...
>[Editor's Note 3/31] - The Academy Award for Best Foreign
>Language Film went to "Mediterraneo" from Italy.

Excellent!
I was to "bark" if there were no such a note :-)

April Fool's Day. China does not have "April Fool's Day." But rumours and political jokes are popularly used to express feelings or to test political winds. In a bizarre case in late June of 1989, the major Western wire services covered an alleged assassination of Chinese premier Li Peng, who declared martial law and ordered the killing of the pro-democracy demonstrators in Beijing. The story was so widely reported that Li Peng himself had to appear on the national TV in order to clear the rumour. It turned out later that the whole story was made up by a Chinese dissident in the United States because he was anxious to know the results of the power struggle severely fought behind closed doors in Beijing following the massacre on June 4.

A similar incident was about to happen had CND editors not been professionally conscientious about what they were doing.

I leave the spelling and grammatical errors deliberately in the original dispatch so as to make a point about other people checking veracity (although no one has pointed out all the mistakes). I use [sic] after each misspelled or

incorrectly used word like "Router," etc.

Date: Tue, 31 Mar 1992 12:16:19 -0500
 From: Bo Xiong
 Subject: Hardliner Wang Zheng [sic] Died in Beijing 301
 Hospital

WANG Zhen (Not Zheng) is PRC vice president.
 This is from SCC, for CND-Global:

>From bronze!xlli@silver.ucs.indiana.edu
 Tue Mar 31 12:13:57 EST 1992
 >Article 74778 of soc.culture.china:
 >From: xlli@silver.ucs.indiana.edu (xiao-lin li)
 >Subject: Hardliner Wang Zheng [sic] Died in Beijing 301
 Hospital

Router [sic] News from Hong Kong.

Beijing, conservative hardliner Wang Zheng [sic] died last night in Beijing 301 hospital. He is among the second in CCP elders who passed away this year after Wang Renzhong early in Feb. Wang had a nortorous [sic] reputation among Chinese intellectuals and ordinary Chinese people. He was famous for his favor of using "hot stuff" (meaning pistol) against demonstrator [sic]. He was very critical to [sic] Deng's reform. Wang's death will greatly soften the conservative faction in the Chinese government. (Xiao-lin Li)

-><-

Date: Tue, 31 Mar 1992 12:20:36 -0500
 From: Bo Xiong
 Subject: Re: Wang Zhen died ...

I meant to use it as News Brief. Don't include those comments on him, not necessary ... :-)

Just mention that he was dead and his big title (VP and hardliner :-)

-><-

Date: Tue, 31 Mar 1992 12:26:16 -0500
 From: Bo Xiong
 Subject: Re: Hardliner Wang Zheng [sic] Died ...

Just a 2nd thought: Be careful with the news, it's from SCC and the poster sometimes posts unreliable news (I knew him in person:-)

Please our source people keep an eye on wire news.

-><-

Date: 31 Mar 92 17:26:00 EST
 From: JINGHONG LI (US)
 Subject: ?? Wang Zheng [sic] Died ???

Be very careful about this "news" - I was told - it is a 4/1 joke :-)

If the news was from SCC, then it must be a joke. If it is from other reliable sources, it still may or may not be true :-) It's April 1st :-)

-><-

Date: Tue, 31 Mar 92 17:06:35 CST
 From: Zuofeng Li
 Subject: Re: ?? Wang Zheng [sic] Died ???

Jinghong did you set your watch one day ahead? :-)

Last time we had some April 1 news they were not something of this magnitude. :-) Or maybe it's because the Brits [sic] have a different sense of humour. :-)

I am not pushing CND-G to carry it!

-><-

Date: Tue, 31 Mar 92 22:12:58 EST
 From: Charlie Li (US)
 Subject: Re: CND-G 4/1 Draft

I did check UK news from CompuServe in addition to AP/UPI/Xinhua/Tass etc. No that piece of news. I guess the author purposely made this mistake:

>Router from Hong Kong.

I certainly hoped this news was true. But don't worry, WANG's days are numbered.

-><-

Date: Wed, 1 Apr 92 03:34 +0200
 From: Brothers Zhang (Sweden)
 Subject: CND-G 4/1 Draft

Hi, Editors,

Here comes our first package of cnd-g. We didn't notice that it is 4/1. We do hope the news about our beloved president (vice) is true so I included it here. :-) Bo, is that YOU who will post the final to cnd-g-post?

Brothers Zhang

* * * C h i n a N e w s D i g e s t * * *

(News Global)

Wednesday, April 1, 1992

Table of Contents # of Lines

1. News Brief (4 items).....	39
2. Chinese Officials Urge Crackdown on Crime, Political Dissent.....	45
3. China's Conservative Faction Backs Deng Reform.....	67
4. Official Says China Keeping Files On Hong Kong Residents.....	36

1. News Brief (4 items)	39
-------------------------------	----

[Router [sic] News Hong Kong 3/31]BEIJING-- Conservative hardliner Wang Zheng [sic], PRC vice president, died last night in Beijing 301 hospital. [more deleted...]

-><-

Date: Tue, 31 Mar 1992 21:40:58 -0500
 From: Bo Xiong
 Subject: Re: CND-G 4/1 Draft

No, Deming is going to post it.

But, please remove the WANG Zhen news, who knows if it's a (too) early Fool's Day Joke :-) (It looks like true, since WANG has been hospitalized for a long time).

To play safe, take it out please.

-><-

Date: Tue, 31 Mar 92 21:22:19 EST
 From: Chusheng Lin (US)
 Subject: Re: CND-G 4/1 Draft

Now that Bo said the news about Wang Zhen :-) was not reported by any major news agency, I suggest that we drop it. It might be a good joke, but carrying it will, to some extent, degrade the reliability of the news carried by CND.

-><-

Date: Wed, 1 Apr 92 00:44:47 -0500
 From: Bo Chi (Canada)
 Subject: Re: CND-G 4/1 Draft

I agree with Chusheng on dropping the fake news, though I wish it's true.

-><-

Date: Tue, 31 Mar 1992 22:01:00 -0500
 From: Ya-Gui Wei (US)
 Subject: Re: CND-G 4/1 Draft

There is no such news agency as "Router News". (There is one "Reuter" though.) I have also checked all the sources around here and didn't find this news.

Please Bo take it out, or we may end up making fools of ourselves. (CND usually don't carry April Fool jokes, do we?)

-><-

Date: Tue, 31 Mar 1992 21:32:30 -0500
 From: Xiaowen Li (US)
 Subject: It is a joke

I asked Xiaolin Li as a personal friend, he said:
 >Sorry, it is a joke. Have fun on April 1st day.
 >Xiaolin

-><-

Date: Tue, 31 Mar 1992 22:11:41 -0500
 From: Bo Xiong
 Subject: Re: CND-G 4/1 Draft

Li Xiaolin has confirmed it's a joke, 24 hours before April 1.

-><-

Date: 31 Mar 92 21:06:00 EST
 From: JINGHONG LI
 Subject: RE: CND-G 4/1 Draft

Li Xiaolin has confirmed - it was an April 1 Fool. His problem is it's more than 20 hours earlier, not funny at all.

-><-

Date: Tue, 31 Mar 92 20:32:34 EST
 From: Charlie Li
 Subject: Re: Hardliner Wang Zheng [sic] Died ...

> Please our source people keep an eye on wire news.

I checked AP/UPI/Xinhua news, haven't found this one. This must be a fake, a good April Fool joke. See the underlined:

>Beijing, conservative hardliner Wang Zheng died last night...

The spelling is wrong.

>Router [sic] News from Hong Kong.

Why not from Beijing? Have a nice April Fool's Day!

-><-

Date: Wed, 1 Apr 92 12:37:55 EST
 From: J. Gao (Australia)
 Subject: Re: CND-G 4/1 Draft

I've checked: that "Wang Zhen" piece is a fake.

It would have been apparent from the spelling errors, and grammatical mistakes shown below (they are underlined):

[Router News Hong Kong 3/31] BEIJING -- Conservative hardliner Wang Zheng [sic], PRC vice president, died last night in Beijing 301 hospital. He was among the second in CCP elders who passed away this year after Wang Renzhong early in Feb. Wang had a nortorous [sic] reputation among Chinese intellectuals and ordinary Chinese people. He was famous [unusual wording!] for his favor of using "hot stuff" (meaning pistol) against demonstrator. He was very critical to [sic] Deng's reform. Wang's death will greatly soften the conservative faction in the Chinese government. (Xiao-lin Li)

However, that doesn't mean we can't carry it with the caption: News for April Fools Day. :-)

-><-

Date: Wed, 1 Apr 92 23:04:43 +1000
 From: Mingyang Xu (Australia)
 Subject: Re: CND-G 4/1 Draft

Perhaps we can carry the fake news, but reveal at the end that it is fake. A bit of fun to enliven CND.

-><-

Date: Wed, 1 Apr 92 09:59:53 PST
 From: Charles P. Mok
 Subject: April's Fools news

While some suggest that maybe we can carry an April's Fools news of Wang's death, I do not think it is a good idea because 1. as a responsible news source we should not tinker serious news like the death of an important figure with jokes and 2. while most of us do not like Wang, fabricating his death is a little bit too much.

-><-

Date: Wed, 1 Apr 1992 13:15:58 -0500
 From: Bo Xiong
 Subject: Re: April's Fools news

Charles, did I miss something in the cnd-editor?

I don't remember that anyone suggested to carry the WANG Zhen news after it's confirmed to be a Fool's Day joke :-)

-><-

Date: Wed, 1 Apr 92 10:24:50 PST
 From: Charles P. Mok
 Subject: Re: April's Fools news

Well, maybe I misread some of those messages :) Or maybe those are not serious suggestions anyway :)

Shift of Duty. The Zhang Brothers are real brothers. They study in Sweden and recently joined CND. Since only one of them has a computer account, they have to share it to perform CND duties. They call themselves Brothers Zhang or Zhang Brothers when they communicate with other CND members. This is their first time as CND-GLOBAL executive editors. It is a CND tradition for the manager, the section coordinator and the current executive editor to help the next executive editor prepare for his term.

Date: Tue, 31 Mar 92 01:32:57 -0500
 From: Deming Tang
 Subject: Update on the EE Schedule for CND-Global

Dear CND members,

As usual, it is again for me to update the schedule for CND-Global service when near the middle and the end of each month.

I want to thank Youngchul Kim for doing such a good job especially when he was so busy with his work and had to work on CND news packages until sometimes 3:00 to 4:00 in the morning. For those who already ended their bachelor's life, you probably will understand how difficult it is for one to have such a commitment. Thank you, Youngchul.

I also want to thank Bo for allowing me to put him in a situation where "he has to pray god" again :-) to deal with CND internal matters and being the Coordinate Editor at the same time during my absence.

My thanks also go to those CND source people who always get mentioned the least but we all know how important their work is to the operation of CND.

Zhang, Tielin and Yalin will be our next Executive Editors. I was wondering myself as to how they are going to divide the work among themselves :-). Tielin and Yalin, I saw Bo and Youngchul has already sent you some instructions but

please do feel free to ask me any question you may have. Your term will actually begin on Mar 31 (US Time) in order to be posted on early morning of April 1 (US Time) (Good luck with April fools' day if there is such a day in Sweden :-)). Please refer to the time difference which Bo mentioned in his mail.

As you may see from the schedule below, we still need people to fill many empty slots. I hope that those of you who have not signed up for a term for a while and those who recently joined CND consider being an EE for a term of two weeks. Being an EE for CND-G will give you the first-hand experience as to how CND is operated, -- especially for those who have never been an editor before. For those who have already signed up, please check the following schedule and correct me if there is any mistake.

Thank you all.

Deming Tang
CND Manager

[Appended list deleted...]

-><-

Date: Mon, 30 Mar 1992 22:33:45 -0500
From: Bo Xiong
Subject: Re: CND-G Editorship: You are next!

Thank you, Kim, for the wonderful job done!

Now that Deming is back, and I will be busy (so will be quieter:-) in next few weeks, I don't have much to say but just some reminders to Brothers Zhang (I added them into cnd-editor 5 days ago):

1) Please follow current CND-G format (dividers, From/Source/Date lines and etc., CNDers e-address should not be used in the package, only names).

2) Since you are in Nordic country, it's 7 hours earlier than US time, you should post the draft to cnd-editor of next day by 10:00PM of US time (let's use New York time for Deming :-), so the Coordinating Editor will have enough time to review it before sending it out, and everyone else on cnd-editor will have a chance to "pick on" it :-). You'll post directly to readers in the 2nd half of your term. Post it at midnight of US time to reduce network traffic/jamming. (CND-Global is THE LARGEST mailing list in the world :-)

Good luck!

-><-

Date: Tue, 31 Mar 92 11:58 +0200
From: Brothers Zhang
Subject: EE for next CND-Global

Youngchul, Bo and Deming,

Thank you for instructions and tips. We will do our best to edit CND-G. We will send the draft of CND-G 4.1 to CND-EDITOR

a few hours before midnight (NY time).

Youngchul, Thanks for the "leftover" file. Do I need to check the news contributions back a few days or you have them ALL in the leftover file?

Is there any READY format program (for VMS or PC) to convert the raw material to fit the CND-G format?

-><-

Date: Tue, 31 Mar 92 20:14:06 EST
From: J. Gao
Subject: Re: EE for next CND-Global

Dear Zhang Brothers,

Here is a program I saved some time ago. Not my invention, and I have not tried it. Hope it will be of some help.

Good luck!

Gao Jie

>From: Runping Qi (Canada)
Mon Jan 13 08:28:29 1992
Subject: a tip

Hi fellows,

My current EE term is approaching the end. I'd like to thank all of you who have helped me in one way or the other to improve the quality of CND packages.

I do not know how your time was spent when you were EE. It seems to me that news selection needs more than 50% of the time for preparing a package (about 40 minutes). The copy editing part is actually quite quick, although I do not know standard typing. I spend comparatively less time on copy editing largely due to a utility program I wrote for text formatting.

My procedure of preparing a package is as follows:

1. Select desired pieces of news;
2. Save them into separate files;
3. Remove junks from the files;
4. Use the utility program to format them;
5. Include the formatted files into a standard scheme;
6. Finalize the package.

I am not sure whether this is a good procedure for you, but I personally feel it is quite efficient. The source file of the utility program (in C) is enclosed here in case some of you may want to try it.

Have fun!

Runping

[Editing utility source file deleted...]

Letter to Editor. CND news is delivered to readers mainly via Email. Today's Email system is so sophisticated that a reader has an easier time having his opinion heard than readers of any other form of news media. All he has to do is press a letter "r" which stands for reply and write his comments. The computer program will have his message automatically delivered to "CND-EDITOR." Accordingly, a CND editor can get back to the reader with the same ease. Indeed, the editor-reader relationship has been brought so close on the computer network that readers are actually participating in the news making process.

The following is such an example:

Date: Thu, 2 Apr 92 10:17:12 CST
From: "xx-xxxx xxxx" <wuling@sl.msi.umn.edu>

Dear editors:

Thank you for your good job of keeping us informed. However, there are two important pieces of news missing from CND.

1. Both Deng Xiaoping and Chen Yun appeared at the "People's Congress." This is unusual and must mean something. CNN carried the news.

2. Wang Zhen died two days ago.

It would have been nicer if important news like these have not been missed.

Your work is highly appreciated.

xx-xxxx xxxx

-><-

Date: Thu, 2 Apr 92 10:54:46 CST
From: Zuofeng Li
To: "xx-xxxx xxxx" <wuling@sl.msi.umn.edu>
Subject: Re: Your comments to CND

Dear CND Reader,

Thank you for your comments on CND's news reporting. CND's volunteers try their best in bringing timely and accurate news

to CND's readers. However, due to various constraints, we can not guarantee that we report all news that our readers deem important. Readers' support in collecting news for CND will be greatly appreciated.

As to the two specific instances you raised in your comments:

1). The appearance of Deng Xiaoping and Chen Yun in NPC:

We have not received any news report on this matter. Previous news reports have indicated that Deng and Chen did not attend the NPC opening session. However we will try our best to verify the news that you forwarded.

2). The death of Wang Zhen has been confirmed to be an April Fool's Day joke.

Thank you again for your support of CND.

Sincerely,

Zuofeng Li
for CND

6. Professionalization -- A Process

China News Digest is a volunteer group. There are 55 staff members listed on CND-ALL, a general-purpose internal mailing list of the group.(1) Of the figure, 36 are currently active in responding either to calls to sign up for duties or to discussions. Among these 36 members, 33 (92 percent) are majoring or majored in sciences, two in library and information studies and one in English literature. Their geographical distribution is 26 (72 percent) in the United States, seven (19 percent) in Canada, and one (three percent) in Sweden, Australia and Japan, respectively.

Sixty-three percent of CND staff members are full time graduate students or post-doctorate research fellows; the rest are professionals working for private companies or research institutions.(2) In their spare time, they gather together electronically and learn to work as news professionals.

This chapter explains how these amateur journalists have attempted to improve the quality of their service and what they have achieved in the process of professionalization. The term professionalization refers to stages through which CND has progressed to become a quality service.(3) The quoted messages have been slightly reformatted to reduce the line width for printing purposes.

6.1 Format standardization

During the first several months of CND's operation, news

was not broadcast in packages. It was on a "first in, first out" basis, very much like a wire service. The following cited texts were excerpted from the earliest CND broadcasts that had been electronically archived. On March 23, 1989, four items were filed. The first one was dispatched at 8:59 in the morning; about three hours later the second item was filed. The third piece for the day was dispatched at about four o'clock in the afternoon; the last dispatch was sent out to its readers at 8:59 in the evening.

Date: Thu, 23 Mar 89 08:59:09 EST
Subject: Congress Meeting Started

International News
BY: POMFRET, JOHN, Associated Press Writer
March 18, 1989

China's legislature opens its annual meeting Monday, and some observers expect a tough fight between delegates calling for democratic change and government officials stressing stability. [more deleted...]

-><-

Date: Thu, 23 Mar 89 12:43:57 EST
Subject: Zhao Ziyang in Trouble???
Dow Jones NEWS 3/20/89
Premier Addresses Domestic Woes In Speech To China's Congress

BEIJING - Premier Li Peng opened the annual legislative session Monday with a sombre speech on China's economic crisis. He stressed centralized control and the need to halt political reforms. [more deleted...]

-><-

Date: Thu, 23 Mar 89 16:10:28 EST
 Subject: Announcement of HUMAN RIGHT IN CHINA

"HUMAN RIGHTS IN CHINA" Announcement

You might have heard or read about the first meeting of "Human Rights in China." It was a hurried meeting where we didn't have much time to discuss everything. We were not even sure whether we should call it an organization. During the past few days, there has been much tele-conferencing among the participants of the first meeting and some concerned non-participants, now we decide that: [more deleted...]

-><-

Date: Thu, 23 Mar 89 20:59:18 EST
 Subject: Hu Qiao-Mu Will Visit USA

According to Zhong Bao (Centre Daily News), Hu Qiao-Mu, the most powerful theorist of CCP, well-known "King of Leftists," will start his three months visit to the US in the name of "theory exchange and discussion." [more deleted ..]

The format of earlier CND broadcasts was loose, varying from one editor to another. Even the same editor did not seem to pay attention to the consistency of the format of his editions. Look at the following two headers, they look just like ordinary Email messages.

From: xxxx@maxwell.physics.purdue.edu(Wuming Zhou)
 Subject: Entering and Leaving PRC
 --- Passport Knowledge T-2

====Information from Xiaoping Yuan's Friend====
 The messages delivered here are for your information only.
 Read all parts of the series to get entire information. [more deleted...]

-><-

From: xxxx@maxwell.physics.purdue.edu(Wuming Zhou)
 Subject: Announcement of HUMAN RIGHT IN CHINA

Subject: "HUMAN RIGHTS IN CHINA" calls for membership
 Lines: 231
 "HUMAN RIGHTS IN CHINA" Announcement
 [more deleted...]

The editor at that time acted very much like a local radio or TV host, talking to his audience in a free and

sometimes very personal tone. Look at the following notes from two editors at different occasions:

Date: Wed, 22 Mar 89 16:04:39 EST
 From: xxxx@maxwell.physics.purdue.edu(Wuming Zhou)
 Subject: Hello, Friend!

Dear Friend,

I am sorry to have bothered you by E-mail. A few friends told me that most Chinese students in your school do not have access to SCC and are not aware of the ENCS, although many of them have computer accounts. This has motivated me to run this news and information service for you people.

[more deleted...]

Thanks a lot for any help you may grant to me.

Yours sincerely,

Zhou, Wuming

-><-

Date: Tue, 22 Aug 89 13:51:04 EDT
 From: xiong@bsu-cs.bsu.edu(Bo Xiong)
 Subject: Last Message From Bo Xiong
 ***** The Farewell Note From The Sender *****

Dear Friends,

I left school and computer network last Sunday. This is the last service provided to you by me; someone else will take over my job.

In the past six months, we spent a lot of time together on the network, thank you all for reading my news packages. 1989 is the most critical period for the Chinese nation; we all share the tears on China's face and struggle for a better future of our homeland.

As a Chinese, I feel proud that I did something for China when she was at the most critical moment.

I moved to Chicago last Sunday to start a new life in this freeland and am now remote logging in from Chicago to serve you for the last time.

Good bye, dear friends.

Thank you.
 Bo Xiong in the U.S.

On April 27, 1989, CND began to broadcast in packages with a table of contents at the beginning of the package. But

the format was still informal and inconsistent. At the conventional Email subject line, the editor just put whatever he thought was important in the package. See the following examples:

Date: Thu, 27 Apr 89 17:45:19 EDT
 From: iuvax!bsu-cs.bsu.edu!xiong@watmath.uucp(Bo Xiong)
 Message-Id: <8904272145.AA00994@bsu-cs.bsu.edu>
 Subject: News About Our Homeland, Student Movement

Table of Contents:

1. Students asking dialogue, but government return with bayoneted rifles
 2. Donation from Eastern Michigan University
- [more deleted...]

-><-

Date: Sat, 29 Apr 89 16:52:58 EDT
 From: iuvax!bsu-cs.bsu.edu!xiong@watmath.uucp(Bo Xiong)
 Message-Id: <8904292052.AA09408@bsu-cs.bsu.edu>
 Subject: Please Donate \$\$\$ To Support Our Fellows Back At Home

Table of Contents:

1. Donation Plan
 2. Norway: Students donate \$500 to support CSSU
 3. Donations at University of Manitoba, Canada
- [more deleted...]

On September 2, 1989, CND began to broadcast from its first LISTSERV list at Arizona State University. The format of that package was noticeably changed. Personal information that used to appear in the mail header was removed and the subject line indicated only the service name and the date of the issue. This change not only made CND look more professional but also got CND onto the right track for setting up a standard for future automatic archiving program development. But the format was still not consistent as seen in the following examples:

Date: Thu, 7 Sep 89 09:41:00 MST
 From: China News Digest <AOYXL@ASUACVAX.BITNET>
 Subject: News Digest (Sept-7, I)
 Sender: China News Group <CNG@ASUACAD.BITNET>
 Reply-to: China News Group <CNG@ASUACAD.BITNET>

China News Digest

Table of Contents

No.	Subject	# of Lines
1	Chai Ling suggested to be given Peace Prize	14
2	Free Central Daily News (newspaper)	14
3	Troops, Eggs, Songs: for the National Day	30

-><-

Date: Tue, 5 Sep 89 10:25:00 MST
 From: China News Digest <AOYXL@ASUACVAX.BITNET>
 Subject: China News Digest (Sept-5, I)
 Sender: China News Group <CNG@ASUACAD.BITNET>
 Reply-to: China News Group <CNG@ASUACAD.BITNET>

China News Digest

TABLE OF CONTENTS

No.	Subject	# of Lines
1.	PLENUM TO REINSTATE CENTRAL PLANNING	25
2.	ALLIANCE FUNDS USED TO SUPPORT FUGITIVE CHINESE	15
3.	CHINA STEPS UP ITS SALES OF BULLION	26
4.	No Compromise on Hong Kong Troops	12

The major step CND had taken to professionalize its service in terms of format was the drafting of an editor's reference guide by Yagui Wei at the beginning of his term as CND Manager in 1990. "There are good reasons for keeping the format consistent," he said in the preface. "First of all, a format that is pleasing to the eyes is always pleasant to read. Some redistribution centres also rely on certain unchanged formatting information. In the future, if software is to be developed to retrieve CND news, a fixed format would be most important."

The format he proposed is summarized in the following points:

(1) The heading. The heading states that it is a China News Digest package and the date. This is also true for the "Subject" line of the mailed-out packages.

(2) The table of contents. It starts with the line with "Table of Contents ... # of Lines", and then the list of titles, the dotted lines, and the approximate number of lines for each entry.

(3) The ending. It is recommended that the following standard ending be used:

```

+-----+
| Executive Editor of this issue: name of current editor. |
+-----+
| (Subscription and Sign off Information)                  |
+-----+
| For technical help, contact: name of current technical staff |
+-----+

```

(4) Titles/item headings. Each item is numbered, and the title is capitalized. It is placed between two lines of dashes such as below. Immediately below the title, put the provider of the item and the original source:

```

-----
1. China Opens New Military Base for Training Students.....24
-----
From: <IZZYYJ70@OAC.UCLA.EDU>
Source: UPI, June 14, 1990

```

(5) Paragraphs. There is an empty line between paragraphs. It is optional to indent the first line of a paragraph. But consistency through out the entire package is required.

(6) Lines of text. The maximum line length is between 72-76 characters. It is optional to justify the text at the

right margin. But consistency is required.

(7) Spelling check. It is optional since some systems or editors do not have the built-in spelling checker. But it is recommended when it is available and convenient.

Since computer systems throughout the networks are different from institution to institution and from country to country, it is difficult and sometimes impossible to impose a strictly fixed format. But being consistent in format is the basic requirement for an executive editor and under no circumstances should he totally discard the proposed format, according to the editor's guide.

The present format of the CND-GLOBAL news package is an obvious improvement over the originally proposed format two years ago. The basic physical structure, however, still remains unchanged. Look at the following example. It is extracted from a CND-GLOBAL news package relayed from CND-CANADA's broadcasting list, CNC-L, at the University of Victoria, BC.

1. Email header:

From: 'CND-EDITOR'
Reply-to: CNC-L@UVVM.BITNET
Subject: CND Global, May 11, 1992

2. News package header:

* * * C h i n a N e w s D i g e s t * * *

(News Global)

Monday, May 11, 1992

Table of Contents	# of Lines
1. News Brief (4 items)	38
2. China's Media Told Not to Hurt Bush in L.A. Reporting	56
3. Beijing Accused of Persistent Religious Repression	40
4. Japan Seeks Permanent Seat on U.N. Security Council	57

3. News package trail:

Executive Editor:	Gang Xu	(Japan)
China News Digest (CND) offers the following services:		
(1) Global News (Daily) (2) US Regional News		
(3) Canada Regional News (4) Europe & Pacific Regional News		
(5) Hua Xia Wen Zhai (Weekly Chinese Magazine)		
(6) Several Information Packages		
For subscription info., mail to: cnd-info@djohn-sun.kent.edu		
News contributions should be sent to: cnd-editor@djohn-sun.kent.edu		

6.2 News selection

As a news digest, CND has always been selective. In fact, one of the initial purposes of starting the volunteer service was to select "informative and interesting" news items for people who wished to keep informed about China but did not have the time or skill to do it themselves. The following note, written by Wuming Zhou on March 22, 1989, was CND's first official statement of purpose:

Dear Friend,

I am sorry to have bothered you by E-mail. A few friends told me that most Chinese students in your school do not have access to SCC and are not aware of the ENCS, though many of them have computer accounts. This has motivated me to run this news and information service for you people. SCC and ENCS usually have huge volumes. While much of the contents are not related to every people, there do have some very interesting

news and very helpful information from time to time.

Since I have access to both SCC and ENCS (I am actually one of the distributors for ENCS.), I will carefully choose about 5% of news items which are informative and interesting and forward to you by E-mail. The average amount would be around 5 to 10 messages each week.

But Zhou did not explain how he was going to do the selection. A year later when Yagui Wei, CND manager between 1990-1991, was compiling "A CND-General Editor's Reference Guide," he did not specify it either. See the following:

...

2. Principle of News Selection and Editing for CND-General.

Remember that we are trying to put out things that resembles a daily newspaper, rather than a reference book. Moreover, since transmitting information to thousands of readers is expensive to the network, and disk storage space is precious to many readers, we want to create packages that readers would want to read and read it right away.

Some editors have been trying to include as much information as possible in the packages. This is not a good idea. Many readers would not want to read it if the packages/news are too long, especially if the news is not 'major news.' If the readers don't read the news, our whole efforts and the network resources are wasted.

Anyway, some principles:

- (1) Try to limit the volume of daily postings. On a normal day, one package of around 200 lines is about right;
- (2) If you receive several news items on the same or similar topics, try to combine them and delete the repeated parts;
- (3) If the same topic of a news item has been recently on CND, delete the background part that is repeating the previous CND postings;
- (4) If a news item contains excessive background information that is common knowledge among our readers (Chinese students mainly), delete the background information;
- (5) If a news item is unimportant or mostly uninteresting, delete most of the details and only carry the outline on "News Brief".

It seems that there is no clearly defined official guideline regarding news selection. But the results of a CND

headline sampling indicate that CND editors seem to have a consensus about what to choose for broadcasting and how to balance their news selections.

The survey was conducted on CND-GLOBAL, CND's major publication with a direct readership of 12,000 in about 30 countries and regions.

A total of 72 issues was randomly selected between March 1989 and March 1992. Of the figure, 12 issues came from six months in 1989, 24 from 1990 and 1991, respectively, and 12 from the first three months in 1992, averaging two issues per month except for 1992. The rate for 1992 is four issues per month.

There are 244 articles in the 72 selected issues; news briefs are excluded because they carry no headlines. Each of these articles is read in only the headlines. The results are as follows:

Subject category	# of articles	percentage
Political situations in China	70	28.6%
Economic situations in China	25	10.0%
China's foreign relations and trade	51	21.0%
Chinese military	4	1.6%
Overseas Chinese activities	15	6.1%
Chinese culture and education	6	2.4%
Chinese science and technology	2	0.8%
Chinese society and law	9	3.7%
Religion in China	4	1.6%
Accidents and disasters in China	6	2.4%
Chinese sports and entertainment	10	4.0%
Hongkong and Taiwan	17	7.4%
Eastern Europe and USSR	18	7.4%
CND announcements	7	2.8%
	244	100%

"Political situations" refers to power struggles within

the communist party which are often fought behind closed doors, and the suppression of dissidence which is often carried out in secret. Seventy articles out of the total of 244 surveyed covered the topic, accounting for 28.6 percent. The percentage was high enough to keep readers informed of the political conditions in China but not overwhelmingly high to make CND sound like a pure anti-communist propaganda machine.

The Chinese Communist Party has been censoring reports about political changes in those former communist countries for fear that they might encourage dissidents to start another popular pro-democracy movement.(4) Stories about Eastern Europe and the former Soviet Union thus stood good chances of being selected for coverage (7.4%). Chinese nationals residing abroad are a major opposition force to the hardline Chinese Government. While CND's regional services are designated to cover their activities, CND-GLOBAL also carries regional news that has global significance. Of the 15 overseas Chinese activities reports in the survey, 13 were about protests and similar activities by Chinese students bodies and other dissident organizations (less than 6%). But the overall selection of news stories with a pro-democracy nature accounts for less than 50 percent in the articles surveyed.

Despite its hardline position to refuse political changes, the Chinese Communist Party has been flexible in its policies on economic development and foreign relations and trade. Since China is doing well economically and has a

potentially large market, Western nations soon lifted sanctions against China, which they imposed following the Beijing Massacre in June 1989, and resumed, first, trade and, then, official contacts with Beijing. The sampling indicates that CND has adequately covered China's economic developments (10%) and its foreign relations and trade activities (21%). The coverage in these two aspects amounts to 31 percent. There are other topics CND has covered, such as culture and sports, which accounts for about 20 percent.

6.3 List management and maintenance

LISTSERV lists are as important to CND as transmission antennas and cables to a TV station. But unlike a TV station which owns both the hardware and software, CND owns virtually nothing except the files that contain the addresses of its subscribers.

As described in previous chapters, CND's entire operation is based on the computer network by courtesy of individual academic institutions in the United States and Canada. CND's access to LISTSERV sites and its working account where internal mailing lists are based was obtained by individual CND members as graduate students or research fellows at those institutions. This privilege is automatically lost when these individuals graduate or move to other jobs.

An important task facing this volunteer organization, therefore, is to keep the continuity of daily operation while

guarding against possible individual monopoly or sabotage. Indeed, the most successful attempt CND has ever made in the process of professionalization is the so-called centralized list management and decentralized list ownership.

Decentralized list ownership. The computer network is a silent world; all conversation is typed and carried on between computer users sitting in front of their own terminals, workstations or microcomputers that are linked with mainframe computers through telephone lines or cables. The distance between individual users could be as long as hundreds of thousands of kilometres; the time it takes for one party to hear from the other varies from a few seconds to hours or even days, depending on network connection and network traffic. In the event of a mainframe breakdown or network interruption, messages could get lost before they reach their intended destinations.

Although access to computer networks is generally associated with a social and economic status of being in the academic community, computer network users know little else about each other and that little is open to manipulation by the user.(5) A user is generally identified by his email address which consists of his user ID and the network address of the mainframe computer to which he is logged in. The first part is not usually the real name of the user and is easily changed if the user has some technical skill; the second part

is not so easily manipulated, but still open to tampering provided that the user has certain system access privileges.

Taking these characteristics into consideration, computer network users generally tend to tolerate anonymity and refrain from being too imposing or assertive when they interact with each other in an online community. When they form an organization for a common cause, they try not to interrogate each other's background or true identity. And all members have the right to choose to be quiet or quit the group at anytime they wish.

In a technical sense, CND is just one of these electronically organized groups. Although there is no policy regarding the issue of anonymity, it is a consensus that CND members accept each other's given identity as is without asking questions. This is not merely following the general practice on the network; it is more out of the consideration to protect CND volunteers and their families from possible harassment or even persecution from Chinese authorities.

Some veteran members residing in the United States and Canada have met each other in person in the past three years. But for most people in CND the only way to get to know each other is Email, via which they discuss issues, prepare news packages or work on other projects. While trust is a team spirit, precautions have to be taken to make sure CND functions the way it was intended, and for its founding purpose. The most important thing to protect in CND is its

LISTSERV distribution lists.

The idea of a decentralized list ownership gradually took form between 1990 and 1991 when the number of newly recruited members and LISTSERV lists were growing while veterans had to retire from key positions to finish up their studies and attend to their family chores more. Instead of letting a person or an elite group control all the lists, decentralized list ownership requires that a list be jointly owned by up to three people while no one be given the access to all lists. A list owner is the person who has the technical privilege to modify the list or post to it directly.

Centralized list management. LISTSERV is designed to run with little human intervention. It automatically manages as many mailing lists as the computer's capacity allows, processing user requests, distributing mails and making archives.

It is however just a computer program and can only understand predefined and correctly placed user commands. Since there is a confusion between a LISTSERV and a LISTSERV list, users may either write to the LISTSERV for help as if it were a human or simply send all their requests to the list they are on or wish to sign on. In the former case, requests are returned without being satisfied. In the later case, people who created the list are burdened with a job that can be otherwise done by a computer program automatically. In either case, the advantage of using a LISTSERV is not fully

taken.

In the following example, the subscription request was rejected because the LISTSERV SUBSCRIBE command was issued in a wrong format:

```
From sl87318 Fri Apr 10 06:24:56 1992
Subject: Sample of using SUB command in a wrong format
To: listserv@uvvm.bitnet
Date: Fri, 10 Apr 92 6:24:56 EDT
```

Dear Sir or Madam,

I'd like to SUB CNC-L Bing Wen.

Thanks.

-><-

```
Date: Fri, 10 Apr 1992 03:25:45 -0700
From: Revised List Processor (1.7b) <LISTSERV@UVVM.BITNET>
Subject: Output of your job "sl87318"
To: sl87318@ccs.carleton.ca
```

> Dear Sir or Madam,
Unknown command -- "DEAR". Try HELP.

All subsequent commands have been flushed.

For a smaller list with less than a hundred recipients, the list owner may simply take over the job and process all user requests manually. For CND whose global news distribution lists alone are directly subscribed by about 12,000 readers, the manual job is by no means an easy one. Before a customized help mechanism was installed in December 1991, CND members received a daily average of 200 messages from readers, most of which were requests to sign on or sign off, and other technical questions.

The idea of a centralized list management has undergone two stages of development. During the first stage, from 1989 to 1990, CND members familiar with network facilities took

turns serving as list maintainer. In the trail(6) of early CND news packages, the last line went like this:

For technical assistance, contact xxxx xxxx <his email address>

There are two problems with this arrangement:

a) The technical support staffer on duty could take on too much workload since all requests from readers went to his Email address as indicated in the trail. He could continue to receive questions when his term as list maintainer was over or even after he left CND.

b) Email systems have a "reply function" so that a reader wishing to reply to a message need not type in an address. He merely types the reply key and his message will automatically be sent to the original poster of the message he is replying to. Many CND readers would simply use that function when they needed help. In this case, their requests were automatically routed to the editor, who had to forward the requests to the list maintainer or answer them himself. In either case, it took time.

Yagui Wei's efforts to create mailing aliases for all CND sections did help. As aliases eventually replaced addresses of individual CND members in the trail of news packages, readers began to send their comments or requests to specific CND sections. The sections that received most of the messages from readers were CND-EDITOR and CND-TECH. Everyone there would receive a copy of every message sent to these lists and if

anyone replied to a reader he had to send a copy of his reply with the original message to the list he was on so that others would not repeat the work. This reduced the workload of an individual editor or list maintainer but increased the mailing traffic of the two lists and demanded good coordination. Messages from readers fall into the following categories:

- a) Requests to sign on or off a CND service;
- b) Requests to retrieve back issues
- c) Requests for information about other CND services;
- d) Comments;
- e) Contributions;
- f) Personal messages mistakenly sent to CND

There have been two different views regarding whether CND should take the trouble to teach readers to learn to help themselves. The group that says no believes that most readers are not computer science majors and may not necessarily be interested in exploring the cyberspace of worldwide computer networks beyond getting on a few news distribution lists. It is, therefore, a waste of time and network resources to explain to a reader how to get on or off a CND list when the staffer on duty can do it himself within a minute.

But the opinion, represented by Yagui Wei, holds that, while CND advocates and practices freedom of information, it should also consider its duty to promote wider and more efficient use of computer network facilities, which is an important technical basis for an information society.

18000 O'CLINTY ROAD & BIRMINGHAM, MIN 40057 USA
TEL 012 424 7757 FAX 012 424 7002 T.E. 240000000

As an experiment, on December 15, 1991, Wei installed an auto-reply mechanism in the program that controls mailing aliases for all CND sections. The mechanism functions in such a way that it will send a customized help package automatically to anyone who has sent a message to one of the CND mailing addresses. The assumption is that readers sent messages to CND for help mostly because Email is the only thing they know about computer networking and that most user's manuals or technical documentations provided by computer services centres are too technical for a novice to understand. The CND help package is written in plain English with step by step instructions. If a reader still has problems, after studying the help file, he is instructed to contact CND's human help line for further assistance. The document contains seven parts:

1. Introduction to CND Services
2. Subscription and Signoff Information
3. What Do You Need to Read CND Chinese Magazine
4. Basic Responsibilities of Readers
5. How to Retrieve Back Issues
6. If You Can't Send Mail to BITNET
7. How to Get Further Help

Since the installation of this auto-help mechanism, the number of messages from readers has reduced to a daily average of ten.(7) It not only frees CND volunteers from doing repetitious jobs but also makes list maintenance easier. This

is the second stage of CND's centralized list management.

Error Messages. Handling returned mails automatically and properly is also an achievement in CND's professionalization drive. A returned mail is called an error message because the LISTSERV cannot deliver it to the intended recipient. There are many reasons for mail delivery failure, but the following are the most common ones:

- 1) The recipient's computer account expires;
- 2) His mailbox is full;
- 3) His user ID or even the entire address has been changed;
- 4) His mainframe computer is temporarily down;
- 5) Network connection is temporarily cut off;
- 6) Local relay stations are out of order.

Any of the above six problems will cause a delivery failure and the mail will be bounced to the original sender. At the beginning when CND was maintaining its lists manually, technical support staffs sorted the returned mails one by one to extract information about expired accounts and bad addresses. It is easy to take an invalid address off a CND mailing list, but it may not be fair to cancel a subscriber merely because he forgot to clear his mailbox once in a while or because there are some temporary problems with his school's mainframe, a network joint or a local re-distributor.

Local re-distributors are invaluable to CND's development in that they help CND reach more readers. But they also cause

technical problems to CND. A re-distributor is actually a CND subscriber; he receives CND packages and then uses a mail forwarding function on his computer to pass on the information to a list of names he collected in his community. Sometimes a re-distributor can be a school's computer centre which subscribes to CND and then redistributes it to students and faculties on campus. In this case, the redistribution is done through remailing program. Since both methods automatically keep the mail return-path to the original sender, a reader's request to sign off or an error message from his account will be delivered to CND by the Email system instead of to the re-distributor.

Error messages created this way are most difficult and time consuming to trace and fix. The solution is set up a trace program which detects the nodes where error messages come from and send out test messages to the recipients on the suspected nodes. If the test is not returned in a couple of days, or if bounces continue in the meantime, they get tossed automatically. The current policy is "eight strikes and yer out."

Endnotes

- (1) "CND Who's Who," Version 19, updated on December 31, 1991. Available from CND's working account: cnd@djohn-sun.kent.edu.
- (2) *ibid*
- (3) "This term professionalization ... refers to the stages through which an occupation progresses to become a profession." Leroy, David J. Mass News, p.251.
- (4) Notes taken at Xinhua's daily editorial briefing on December 12, 1989. "...news about Eastern Europe and the Soviet Union... must be strictly controlled... All must be submitted for approval before releasing. If necessary, send it to Li Ruihuan for approval." Li is the party's politburo member in charge of propaganda.
- (5) Reid, Elizabeth M., "Electropolis: Communication and Community on Internet Relay Chat," University of Melbourne, 1991, electronic manuscript, Part 1, line 73.
- (6) See earlier in this section for a CND trail.
- (7) CND-TECH log, February 14, 1992.

7. Conclusion

China News Digest was born in North America at a time when China was experiencing a most critical moment in its political reform and democratization process. Chinese nationals studying or doing research abroad were concerned about the fate of their fellow countrymen at home and the future of their homeland. They wanted timely and accurate information; CND was created to meet this demand.

The primary readership of CND belongs to the academic community where computers are generally accessible free of charge to users. Computer based communication is relatively safe, fast and can be easily archived or reproduced. More importantly, in the "netland" where there is little government and no national boundaries one can travel as far as he is technically able to. These are the major reasons why CND was founded on the computer network. They also explain why the people who started CND were all science students and why the major workforce today is still dominated by science or engineering students or professionals.

Few CND members have had previous journalistic experience. Nevertheless, CND is indeed a successful attempt on running news services on the worldwide computer networks. It has been successful because its volunteers are dedicated and have strong desires to learn.

CND is especially successful in two aspects. First, it has set a technical standard of using the worldwide computer

networks for news distribution. Its management of LISTSERV lists is professional and its utility programs to control aliases, to verify broadcasting authorizations and to maintain LISTSERV lists have been running smoothly and can be easily tailored to serve the needs of other news organizations on the computer networks. Secondly, its experience of electronically managing a news organization with staff members scattered around the world adds to our understanding of how much freedom journalists should be able to enjoy if modern technology is widely applied in the news media.

Technically, China News Digest is still a volunteer service. But the past three years have seen a process of professionalization in its news operation and management. Professionalism is reflected not only in its good utilization of free network resources but also in the way they handle news seriously. Bo Xiong, CND global news coordinating editor, who works for 40 hours a week to make a living in a Chicago-based company, spends an average of 50 hours a week to make sure that CND-GLOBAL publishes timely, accurately and without obvious bias. And he is by no means alone in this endeavour. Or CND would not have been it is today.

The Chinese Government was aware of the existence of CND and has been systematically archiving its broadcasts and studying its coverage.(1) But unlike dissident organizations such as Federation for a Democratic China (FDC) and Chinese Alliance of Democracy (CAD), CND has not been openly labelled

by the Chinese Government as a counter-revolutionary organization and accused of engaging in undermining the Chinese Government activities from abroad. The major concern behind this seemingly lenient approach seems to be that CND's balanced news reporting has distinguished itself from the propaganda publications by FDC or CAD and thus has made it hard for the Chinese Government to be antagonistic to CND openly.

CND's primary readers are Chinese students⁽²⁾ and scholars in the West, who have close contacts with their colleagues at home.⁽³⁾ Their status of living in a free world naturally lets them play a role as "opinion leaders." Although there is no official distribution of CND in China, selected news packages and issues of the Chinese magazine are being sent into China on individual and voluntary basis. They are usually mingled with other computer application programs on floppy diskettes and are mailed to China or brought in by visitors. Reports from China say CND, especially the Chinese magazine, is becoming a familiar name in academic communities in large Chinese cities such as Beijing and Shanghai.

Since the fall of the Soviet Empire, China has become the last largest communist state on earth. It is difficult to predict what will happen after the death of paramount leader Deng Xiaoping, who is already in his mid-eighties. Deng recently made an unusual statement about the country's urgent need to continue economic reforms despite his unyielding

hardline position on the four cardinal principles of adhering to the leadership of the Chinese Communist Party and the socialist road. It is clear that Deng wishes to leave behind him an economically prosperous and politically stable country. The only way to maintain political stability, in the eye of Deng and his old revolutionary comrades, is controlling information and suppressing dissidence.

Half a century ago, Xinhua News Agency played an important role to break the information blockade by the US-backed nationalists and helped the communists win over mainland China. Today, CND is facing the same task. But CND is not Xinhua. It does not see itself as a mouthpiece of the overseas opposition forces. Much as it shares with all the dissident organizations abroad a dream of a free and democratic China, CND takes a different approach to realize that dream.

The approach it takes is to strive for professionalism which means being responsible, objective, independent and faithful to truth. As this thesis has presented, its attempt has been so far a successful one.

Endnotes

(1) "CND Live Report from 2nd Congress of IFCSS, Columbus, Ohio, Series II," July 6, 1990, CND-G.90-07-WEEK1, electronic archive, line 1893. Available for anonymous FTP from ahkcus.org in the /cnd-g directory.

(2) Most Chinese students from mainland China are doing their graduate studies in the West, many are doing post doctorate researches. Very few come to study as undergraduates. This is because Western countries require Chinese students to have full scholarship or teaching or research assistantship before granting them entry visas.

(3) The Chinese Government encourages what it calls academic exchanges. But in reality, it is often impossible to draw a line between what is academic and what is not.

BIBLIOGRAPHY

Anderson, G. Ernest. "China Networking Observations from October 1991 Visit," Networking to China, electronic newsletter, April 1992.

Bo, Xiong. "The Making of 'China News Digest'," CND-GLOBAL, March 6, 1991.

"CND Live Report from 2nd Congress of IFCSS, Columbus, Ohio, Series II," CND-G.90-07-WEEK1, electronic archive, July 6, 1990.

CND-TECH logs, 1991, 1992.

"CND Who's Who," Version 19, updated on December 31, 1991.

Handbook of Xinhua News Agency, Beijing, 1988.

LaQuey, Tracy Lynn. User's Directory of Computer Networks, University of Texas at Austin, 1989.

Leroy, David J. Mass News, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1973.

Liang, Ruojie. "Ten characteristics of our country's press during the 10-year press reform," Chinese Journalist, Beijing, March 1989.

Morton, Brian. "Radio Beijing - the Voice of China," M.J. Thesis, Carleton University, Ottawa, 1989.

The Oxford University Dictionary, London, 1955.

Reid, Elizabeth M. "Electropolis: Communication and Community on Internet Relay Chat," University of Melbourne, electronic manuscript, 1991.

Schurmann, Franz. Ideology and Organization in Communist China, 2nd Edition, University of California Press, Berkeley and Los Angeles, 1968.

Shen, Zhiyong. "About the Electronic Newsletter for Chinese Students (ENCS)," CND-GLOBAL, March 6, 1991.

Shi, Long. "From the Cave Newsroom to the World," Chinese Journalist, Beijing, October 1989.

Spafford, Gene. "What is USENET," Purdue University, electronic manuscript, 1992.

Strangelove, Michael. Directory of Electronic Journals and

Newsletters, 1st Ed., University of Ottawa, Ottawa, electronic manuscript, July 1991.

Sun, Kang. "A Brief Introduction to Soc.Culture.China (SCC)," Organization Introductions, Issue 1, Nov. 16, 1989.

Qian, Tianbai. "A Brief Introduction to CANET," Networking to China, electronic newsletter, April 1992.

Yu, Frederick. Mass Persuasion in Communist China, Frederick A. Praeger, Inc., New York, 1964.

Zhao, Xiaofan. "About CRN," Networking to China, electronic newsletter, April 1992.

END

24 | 05 | 93

FIN