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The Internet Age – Journalists' information power is changing

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Abstract

1. Introduction

We are at the turn of the century where the Internet has been growing rapidly and influences virtually everybody's life. The Internet is the largest group of computers ever linked together in the world such as network of networks. The Internet has become a gigantic information warehouse.

Networked communication tools like Internet remove physical barriers to communicate, which is explained by time-space compression. It is not limited to remove geological barriers based on the speed of communication. More broadly, the Internet influences people's way of thinking. Much wider communication area makes people to share information with anybody if he or she is connected to the network and even make it possible to start a new business in the cyber space. It has made new social trends. In journalistic point of view, the Internet made a new media that gives a chance to public to participate in social issues more positively and aggressively than before.

The Internet has various aspects. It is not easy to define only one great feature of the Internet conclusively though. In general, we can point out three major characteristics of the Internet. Firstly, it is interactivity. Interactivity involves two-way communication. Internet users click on linked pages to get additional information. The information itself is not interactive unless it does something in response to what users want. It gives a chance to people to express their interest and also it is a new tool to collect public opinion.

Secondly, it is hypertext connected with other channels via web. The word hyper in hypertext means "extension into other dimensions". In that sense, hypertext consists of nodes of information and links each other in a multidimensional space. Hypermedia is conceptually and structurally same as hypertext except that hypermedia contains not only text but also sound and image information. (Chu, 2003) It makes easy to transit one dimension to another on the web. Thirdly, it is the open space. The Internet is a huge open-network free from network protocol or complicated communicational regulations. Therefore, any Internet users not only could suggest new standards or agenda for better communication but also participate in building requests for comments. It gives netizens equality in the cyberspace. If a user is connected in the Internet then he or she can communicate with anybody who log on to the web. Sharing information becomes much easier.

2. Status of Korean Internet

Korea was ranked top in ITU(International Telecommunication Uion)'s digital opportunity index(DOI) which is disclosed in the World Summit on the Information Society(WSIS) under the aegis of the United Nations.

Table 1 DOI Ranking

country	ranking	Country	ranking
Korea	1	United States	11
Hong Kong	2	Austria	12
Japan	3	United Kingdom	13
Denmark	4	Israel	14
Sweden	5	Australia	15
Canada	6	Germany	16
Singapore	7	Belgium	17
Taiwan	8	Spain	18
Netherlands	9	Italy	19
Switzerland	10	France	20

The DOI is the first e-index based on internationally agreed ICT indicators. The which index. measures countries' adoption and access to information and communication technologies (ICTs), was developed with an aim to utilize it as a gauge in bridging the digital divide and promoting the broad development goals included in the United Nations Millennium Declaration through increased access and use of ICTs.

As regards the DOI rankings, Korea scored the top with 0.76 points while Hong Kong and Japan scored 0.67 and 0.66 points respectively, taking the second and third places followed by Denmark, Sweden and Canada. In the case of the ratios of broadband Internet subscribers to both the fixed and mobile Internet subscribers, in particular, Korea showed conspicuous results. All the fixed Internet subscribers in Korea are connected to the broadband Internet whereas only 52.6% of fixed Internet subscribers in Hong Kong, and 40.6% in Japan, were shown to be using the broadband network.

Also Korea ranked 8th in IDC(International Data Center)'s evaluation for ISI(Information Society Index) readiness among 53 countries in 2004. Korea is the only Asian country which included in top 10 countries. IDC is the global market intelligence and advisory firm in the information technology and telecommunications industries. ISI is one of IDC's annual project groups 4 indicators, such as computer, Internet, Telecom, Social. As a national economic status measuring by GDP, ISI gauge a national information power.

Table 2 ranking international index

	ITU's DOI(2005)	UN's e-government index	IDC's ISI(2004)	
Sweden	5	3	2	
Denmark	4	2	1	
Canada	6	8	-	
Korea	1	5	8	
US	11	1	3	
Japan	3	14	18	
Singapore	7	7	13	

It groups eight ICT indicators, such as the percentage of population covered by cellular telephony, into the five categories(Infrastructure, Affordability, Knowledge, Quality, and Usage). About Internet index of Korea is not ended here. In 2005, Korea also ranked fifth in United Nations' evaluation for e-Government readiness among 191 countries, thanks to its advanced information technology and nationwide broadband network. Korea's e-participation index which assesses government efforts to reflect public opinion in its decision-making process, ranked fourth up from sixth in 2004 and 12th in 2003.

According to the 'Survey on the computer and Internet usage 2005' from MIC(Ministry of Information and Communication) in Korea, Internet users are estimated to be 33.01 million of persons, which have increased by 1.43 million persons, and the Internet use rate is 72.8% increased by 2.6% point since December 2004.

Since year 2000, Korean Internet users have grown steadily. Thanks to the government supporting broadband high speed Internet network, we made world best information society infrastructure in a short time.

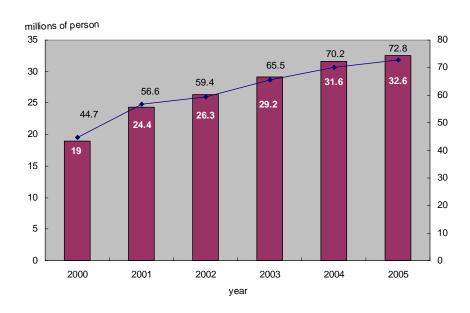


Fig. 1 Annual Internet users and trend of usage(unit:millions of person, %)

Those figures show roughly that how much Korean society is Internet-oriented. It can be possible to people more intended to information into Internet. The first tool for gathering information in Korea is Internet. Therefore news consumer in young generation read articles not by paper but by accessing Internet.

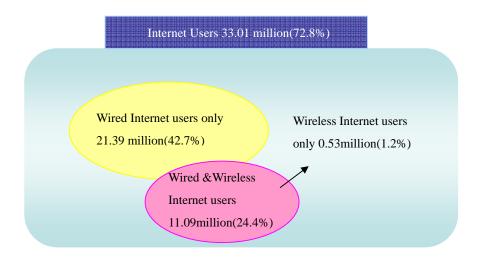


Fig.2 Korean Internet usage by access type(unit:%, million presons)2005

2.1 Status of Korean Newspapers

Strictly speaking, Korea has 123 years old modern newspaper history. In terms of the true meaning of private newspaper, in the history of modern Korean newspapers begins with the appearance of the Independence Daily on April 7, 1896 published by Dr. Suh, Jaepil.

However 13 years before the Independence Daily published, there contained modern style articles newspaper in Korea. It was Hansung Sunbo which was published its first edition on October 1, 1883. Hansung Sunbo was published for enlightening public by reformists. At that time Yi Dynasty that is the last emperor of whole Korean history adopt an open-door policy against Japan's modern political and social machinery for domestic reform. Hansung Sunbo was an official gazette, and its importance lies in not so much in the achievement of its primary mission of publicizing news as in marking the establishment of modern newspaper.

The history of the Korean newspapers is broadly categorized into three periods. The first period ranged from 1892 through 1953. It is defined the dark age of modern Korean history because of Japanese annexation, liberation, and Korean war.

The second period was from 1953 through 1986 that military dictatorship governed people. The third period was from 1986 to the present that democratic government has been settled down.

The aforementioned three periods of the Korean newspaper show different characteristics in each period. A summary of the newspapers' characteristics in each period follows.

The first period marked the first appearance of the independent daily newspaper, and is highlighted by the current mass-circulation dailies Dong-A Ilbo and The Chosun Ilbo. During the first period, the efforts of newspapers were centered on enlightening people and on struggling against the Japanese colonial policy, while setting up the democratic political system and developing the newspaper business.

In the second period, military dictatorship had controlled newspaper by oppressive measures, and the gist of the government's speech policy was the adoption of a two-pronged strategy that provided capital for the organs of expression while mobilizing them for the country's development. The government took the reins of the press by dismissing journalists, controlling the freedom of speech and reshuffling the organization of the press. The government inspected the organs of expression and exercised its influence over them by sending its agents to them. The military dictatorial government that had secured sovereignty in 1961 began to control the press, detaining 960 journalists. At that time, 152 newspapers disappeared from publication.

The important change that was in the press in 1960s was the appearance of financial newspapers. The Seoul Economic Daily was published 1960 as the first financial newspaper in Korea.

A type of report permit system was started, and was put into use with the issue of press cards on Dec. 17, 1971, designed to control the press and a pressroom system for governmental bureaus had been introduced. Also, related laws and regulations had been strengthened. Clauses restricting the freedom of speech, such as the Registration of Publishing Companies and Printing Offices Act and the Import and Distribution of Foreign Publications Act, had been included under the extraordinary martial law provisions.

There had been also the mergers and abolitions of newspapers. In November 1980, the new military authorities conducted the merger and abolition of the press to exercise control over it. The government issued report guidelines to keep it under observation, too.

The third period was of the democratic regime. As the people's resistance against the military dictatorship reached its peak in 1987, the administration adopted gradual democratization measures. Journalists fought to realize the democratization of the press organizing labor unions in each entity. Moreover, newspaper publication became unrestricted. The Hankyoreh was published, and some newspapers of religious organizations such as Kukminilbo(Dec. 10, 1988), Segyeilbo(Feb. 1, 1989) and Pyunghwa Shinmun(1988) were launched. There was a sudden growth in the publication of local newspapers as well.

If we look back on past history, we can say that the freedom of speech has been secured only about for 15 years in Korea. although the first modern newspaper had appeared more than 120 years before. Two to three years of the Yi Sung-man administration, one year of the Jang Myun government and the period after the 6.29 Declaration in 1987 can account for the aforementioned years of freedom of speech. When we consider these historical experiences, it can be premature for us to say that the freedom of speech has planted its roots in Korea. Nevertheless, the level of the freedom of speech that we are enjoying today, though not enough, has been the fruits of journalists' unceasing fights for the freedom of speech, people's support and civil struggles for democratization right up to the present.

2.2 The Korean newspapers in the world and their situation

Traditionally, the newspapers published in Asian countries have had very strong circulations. The 62% of the top 100 world newspapers are of Korea, China and Japan. The Chosunilbo, Dongailbo and JoongAng Daily of Korea were among the top 100 world newspapers.

Table 3 Dailies: countries of top 100 dailies

Ranking	Country	No.top dailies	
1	Japan	20	
2	China	19	
3	USA	18	
4	India	17	
5	United Kingdom	7	
6	Germany	3	
7	Korea, Republic	3	
8	Thailand	3	
9	Italy	2	
10	Australia	1	

However the recent situation of newspapers has reached a critical situation. The overall media environment turned less favorable for the print media sector. The rapid rise of other media outlets, including the Internet has served to diminish the credibility and popularity of newspapers, resulting in a state of crisis for the print media. According to a biennial consumer survey in 2004 by the Korea Press Foundation found that only 48.3 percent of Korean entire household subscribed to newspapers, making the first time the rate drop below the 50 percent level. Responsible for the decreasing popularity of newspapers are the rise of the Internet as a new form of media outlet, which has caused more young people to distance from newspaper. In adopting the internet era, newspaper companies are digitizing news content and providing news bundles to the Internet portal service companies.

One of the known digital news contents service is KINDS(Korean Integrated News Database System) which is served by Korea Press Foundation since 1991. It connects from 181 media organizations and 10,883,357articles up to April 2, 2006.

KINDS is the largest service of news articles. KINDS provides full texts from 14 major national dailies, 7 financial dailies, 8 English 19 internet news. It also provides articles from television network news programs, news bulletins, local dailies, magazines and professional newspapers. KINDS service contributes to the quality of reporting with its vast quantity of articles on many specific topics. Magazine articles provided by major weekly and monthly news magazines and professional newspapers articles are included in our online services.



Fig. 3 KINDS Homepage

Special features of KINDS are followed:

- 1. The Largest News Database System in Korea: KINDS has more than 10 million articles from 181 companies that composed of national dailies, economic dailies, TV news, English language dailies, Internet medias, local dailies, professional newspapers, and news magazines; especially articles from 10 major national dailies that were begun after January 1, 1990.
- 2. Convenient and Accurate Search Service: Users may search articles from 181 medias by typing key words and operators(see chart below), the specific name of newspaper, date of publication, name of writer, column title and/or subjects. For 10 major national dailies, there is an advanced search service available, which utilizes published section, and/or just articles from the front page.
- 3. Diverse News Contents: KINDS covers articles from a wide range of media covering a period of several decades. Our database covers articles not only from national dailies

but also from TV news programs, news magazines, and professional newspapers. Articles produced between 1960 and 1989 are provided in the form of PDF files. PDF files of the Dongnip Shinmun (the Independent) and Daehan Maeil Shinbo are also available.

4. Function of Scrap and Saving Search Conditions: Users may save searched articles in a personal categorized scrap folder, along with any search methods that will be used repeatedly, thereby skipping the need to use the same search process in the future.

2.3 Homepage management of the press organs

As the Internet homepages are used largely, also the newspapers began to offer not only the news directly produced by themselves but various contents like information on real estate and on education, etc. managing homepages of themselves.

Table 3. Number of daily newspaper websites (World Newspaper Trend 2005)

	1999	2000	2001	2002	2003
France	-	30	39	40	41
Germany	179	249	256	259	264
Italy	62	88	89	91	91
Japan	71	79	89	-	-
Korea Republic	52	53	68	-	-
Malaysia	-	-	10	14	-
Singapore	-	-	6	6	-
United Kingdom	97	-	123	-	100
USA	1,149	1,207	-	1296	1,343

According World Newspaper Trend's survey, Korea is 4th ranked in the number of daily newspaper websites. In Korea most of newspaper publishers run their own homepages. The produced news is offered via the Internet. Information specialists including librarians constitute the management body. In the past, the main work of the information specialists that served newspapers were paper clipping and data arrangement. But, since the 1990s when newspapers began to introduce computer systems, digital contents production became their main task. Now, news is offered in HTML and PDF formats on the homepages of the press organs.

To use the organs' homepages one need to become a member of the websites, and then news contents are basically offered for free. The paid information services are offered linking to various contents like information on real estate, on education and on persons, etc., and they offer the functions of Internet portals.

With the Dot-com business booming in Korea, one of the most winning businesses was the Internet portal business. The earning models of this business are Internet advertisements. If we consider the fact that also the main earning sources of newspapers are the advertisements, we can say that the portals and newspapers are in competition with one another. The difference depends on whether they produce news contents or not.

The representative Korean Internet portals are NAVER, DAUM, NATE, etc., and the average number of daily users exceeds 25 million. The contents that the Internet portals needed to increase the number of users were news reports, and since 2000, press publishers began to competitively sell news articles to the portals as much as they could sell the one-source multiuse articles. Today, 5 years after the article contents sale to the portal began for the first time, many of young readers don't read the papers any more. All of them do read daily news on the Internet portals. Likewise, as the feedback culture spread widely, they are actively expressing their own opinions.

3. Press is requested change of research methods for the Internet era

3.1 Past methods of research by reporters

In this historical background, the peculiarities of the news gathering in the Korean press circle have included contact-oriented off the record methods. Writing reports based on the school ties and personal connections were one of the important ways of working, instead of searching for unreported news through gathering and analysis of the existing published information.

Also the type of "announcing journalism" was pointed out as a problem in gathering news. The phrase: "announcing journalism" means a type of report that faithfully uses the information, the analysis and interpretation on this information and the definition of reality offered by the news source - abandoning the method of verification, analysis and interpretation of the facts. A survey revealed that about 93% of the news sources have offered reporters so-called canned news. Canned news offers reporters the utmost convenience, especially because the news sources offer reporters news more perfect than that of the reporters themselves, increasing a tendency toward concentrating more on public relations. As a result, there is every possibility that reporting without examining what the truthfulness of reports will mislead readers.

The "announcing journalism" has been a custom owing to various structural factors in the press. It was a complicated result coming from lack of expertise of reporters, problems in coverage system, manpower shortage, the relaxed professional sense of reporters and the strengthened

publicity of the established power group, etc. This phenomenon was also a legacy of the institutional press that had been domesticated under the authoritarian regimes during the long-lasted military dictatorships.

The coverage system constituted by the beat systems i.e. a closed access system) and press corps built up an exclusive news coverage system. Only the state approved reporters could gather news from the allotted news sources. It had a character of a generalized custom established for the convenience of news gathering rather than an official system. The press corps system came from an intended agreement in the sense that it led journalists to collaboration rather than competition for news gathering. The system secured, through the agreement on the reports, that no reporter of specific newspaper could get scoops by gathering information exclusively, so the risk of an unprinted report could be removed in advance. This press corps system featured pre-intended agreement, as this restrained the competition for news gathering in advance; additionally, this made the improvement in the quality of reports through journalistic competition unlikely.

The problems and opposite functions of the beat system and press corps system:

- The news gathering and report through the beat system and press corps system
 was apt to lead to biased information. The phenomenon of the so-called
 "announcing journalism" that showed uniform and indistinctive news articles on
 most of the papers that could be attributed to the dependence on the beat and
 press corps systems.
- 2. The possibility of corruption, represented by bribes, can be prevalent among these systems. Receiving bribes decisively restricts the right to free access to information of people by weakening the function of independent thought and action of the press, which limited the free and open circulation of information.
- 3. These systems can wholly block the public's right to know that can be satisfied only through fair competitions. Limited information is offered to readers by the beat system, with news being necessarily censored and controlled, and therefore could not be viewed by the public.

3.2 Changes in the environment for the freedom of press information

The fast appearance of the changing environment since the 1990s was a change to the world press. It was caused by the technical revolution in computer and IT(information and telecommunication) areas. Digital technologies were the main engine which drove changes. The Internet built the circulatory system of information by compressing time and space, and as a

result of it, a large part of the information covered by the already existing papers and broadcast media has become to be supplied through the Internet. In addition, since everybody able to have their won Internet homepages, the dispatching capacity of information that has been exclusively possessed by the mass media like papers and broadcasters before the appearance of the Internet is passing now into all people's hands. It became for everyone to have ways to express opinions freely and exchange and discuss these opinions with others through the Internet. This change means a new restoration of the right to freedom of speech that has been restricted till now by the mass media like papers and broadcasters.

According to the Fourth Annual World Press Freedom Index released by Reporters Without Borders(RWB) in November, 2005, Korea ranked 34th among the 167 countries, the 1st in Asia. Korea surpassed the U.S. that ranked 44th by 10 grades. The free environment for communication using the Internet in Korea is considered to have attributed much to the high valuation on the country's current situation. The Internet and computer telecommunication have allowed everyone the freedom of speech. Consequently, a new enforcing power has been constituted and the expectation that there will be a democratic development through it emerged.

The digital revolution has brought changes also to the media receivers such as social members. Owing to the development of computer and telecommunication technologies, big changes are now being caused to the standardization, concentration, synchronization, specialization, maximization and centralization which had been the specific characters of the industrial society. There are changes from standardization to non-standardization, from concentration to dispersion, from synchronization to non-synchronization, from specialization to integration, from maximization to reduction and from centralization to decentralization. These conceptual changes are weakening the unified norms with which the state has bound individuals in every matter with a certain compelling force.

Because of the Internet, the individualization is happening in the demand and supply of information. Each person selects and collects information according to their own wishes. And, the reception of information shows active aspects too. The usage of information and the attitude to the contacts with information change into more independent, selective and active channels, throwing away the passive position from which information has been simply received in unilateral way.

The press is introducing fresh coverage systems following these external changes. The team system, specialized reporter system and expert reporter system are these new methods. The systems that appeared to complement the contradiction of the beat system are the news gathering in teams, specialized reporter system and expert reporter system. The team system is

the way a few reporters form a small group to gather news in classified subjects or issues of society. News gathering centering on the emerging social issues and subjects such as reunification, environment, health and leisure, etc. is a peculiarity of the team system differentiating itself from the usual news gathering way centered on the departments of politics, economy, society, culture and the editorial department, etc. News gathering systems that are sensitive to the current, ongoing changes of reality are being introduced, with existing systems being abandoned. The JoongAng Daily employed 15 specialized reporters with doctorate degrees and attempted to adopt a full-scale specialized reporter system. But, this system has not yet become well established. The report-the Korean Press Situation-of the 2000 Committee on the Korean Press proposed 14 things to the press for the improvement of the Korean press. Among these proposals, they underscored that the standardization of the press that is caused by the alignment phenomenon between the newspaper publishers should be discarded. It was pointed out that the private censorship adopted for survival under the press suppression during the past military dictatorship had become a custom. Changes were necessary to survive under the fast changing press environment. Changes must be attempted according to the tendency that the readers' taste becomes diversified following the changes in their values and moral sense. Specially, in case of the papers with a low market share, if they make papers that satisfy the taste of a certain class of readers after having targeted the class, they will be able to secure their independent market under keen market competitions.

3.3 Changes in the environment for press coverage

During the military regimes since the 1960s, the Korean press had reported filtering information being unable to report the facts as it had been in a mutually favourable alliance with the political regime of the day, adopting a suppression and appeasement policy. Readers received news through the press that was engaged in a unilateral reporting way that the government announced news and reporters transmitted it. In this period, the authority of the papers and the trust in them reached its uppermost peak. There were limitations for reporters to objectively report the facts because of the suppression and appeasement policy of the government. The governmental bureaus restricted coverage using only the reporters selected under the name of the press corps. As the flow of information, then, was conducted through a certain route, reporters could not help but depend on the customary and closed-door coverage based on their personal relationships. This closed way of searching for information of the Korean reporters developed into the press corps whose reporters are limited by the government and powerful companies. The problem that has been pointed out regarding the beat system was that it was liable to mislead the circumstantial judgment as the coverage was done by the same

reporters. In particular, the executives made use of this system as a means of coexistence keeping deep relations with the reporters that mainly worked with high-ranking government officials.

News can be compared to buildings or products. In the press, the expertise based on decision-making can be appreciated greatly in value. With the introduction of the Internet, the environment for news gathering is changing rapidly in Korea. Since 2000, there have been higher appreciations over the planning and inquiry reports rather than over the customary coverage inside of the Korean press. According to the comparison between the coverage reports and planning reports that have won the Korean Reporter Prize, since 2000 the planning reports and inquiry reports came to the center surpassing the coverage reports. This reflects a real shift in emphasis.

With the appearance of the Internet, there are many changes in the coverage custom and search for information of the young generation reporters. As information technologies become to be fully applied to the coverage, the CAR(Computer-Assisted Reporting) appeared as a new coverage skill. Jang(2005), compared and analyzed in classified career grades the ways of searching for information of reporters that are results of the changes in the environment for coverage which have been opened up.

The subjects of the study were composed of 9 executive reporters with more than 15 years' experience and 11 common reporters engaged in the field for less than 10 years from national daily newspapers and Internet papers. It was confirmed that the news sources which were used by reporters were moving from the closed sources to the open ones. It revealed that the executive reporters consider their personal connections the most important news sources and gather important news at closed private tables. On the other hand, the very many reporters spend more time gathering open news and realize that they have to possess the expertise and analyzing capacity rather than the closed-door coverage to survive the competitions for coverage.

4. Conclusion

Entering the digital age, news doesn't remain as the information source that is produced and offered by a small number of people any more. As the receivers of the news can emerge as the suppliers, the environment for news production and its offer is changing. Particularly, as the environment for the use of information of reporters, the functions of analysis and interpretation of the open information are becoming much more important than ever before. In the Internet age,

papers should work out their strategy to strengthen the use of information and analyzing capacity in order to survive.

In the first place, the function of the information specialists in the editorial department must be beefed up. Even though the coverage based on the personal relationships of reporters, *i.e.*, coverage in off-the-record way, has been much appreciated till now, the comprehensive faculty and analyzing capacity of information decide the quality of the articles in the open age. Various information is collected and the articles are written with this information in short time for newspapers. Therefore, it is effective to receive the support from the information specialists in producing the newspaper articles.

The information specialists of the newspapers should not be mere information searchers and should have the comprehensive faculty and information capacity regarding social issues. For more effective use of the information specialists, information support must be offered by the information specialists that are to participate in the editorial conferences and then to grasp the direction of the important articles of each day.

The information specialists of newspapers must let others know actively of their skills and area of work. They should ensure that the decision makers who own and run newspapers understand accurately what the function is of the information specialists in newspapers. For this, establishing the days like 'Information Day' and inviting the members of other departments to introduce their department to them and to let them know how the information support would be possible can be put into practice. And also, the analyzed information support capacity should be improved. All information specialists must be acquainted with not only the Internet but all on-line & off-line information channels to the extent that their capacity could annul the proposition that on the Internet information can be searched out by everyone. And then, all must improve the capacity for supporting the analyzed information for article production. This is the capacity of the information specialists possessing both the know-how and the sources of information, and such knowledge provides a short cut through which information can be recognized to be a good, reliable and trustworthy source for the production of better news.

References

Choi, Jinbong. 2003. Korean Mass Media and Popular Culture. Woojin landom Publishing Co.:Seoul.

Chomsky, Noam. 2002. Media Control. Steven Stories Press: New York.

Chu, Heting. 2003. Information *Representation and Retrieval in the Digital Age*. Information Today: New Jersey.

ITU. 2005. WSIS Thematic Meeting on Multi-Stakeholder Partnerships for Bridging the Digital Divide. ITU.

Jang, Seonhwa. 2005. A study on Newspaper Reporters' Information-seeking patterns. J. of The Korean Society for Library and Information Science. 39(3): 165-182.

Kim Min-Hwan. 2003. The history of Korean Press. Seoul: Nanam Publishing.

Korea Times. "Korea 28th in Human Development". 18 December.

Ministry of Information and Communication. 2005. Survey on the computer and Internet usage 2005' from MIC. Seoul: MIC.

World Association of Newspapers. 2004. World press trends. WAN.