*Murad Karaduman i Sibel Karaduman**

Nove komunikacijske tehnologije i mijenjanje novinarstva

Sažetak

20. stoljeće je razdoblje u kojem su mnoge promjene i inovacije u sredstvima novinarske prakse uočene radi novih komunikacijskih tehnologija. Proces stvaranja vijesti koji se odvija u novom medijskom okruženju se suočava s promjenom u dolaženju do vijesti, procesiranju, predstavljanju i distribuciji. Sa uporabom novih medijskih tehnoloških alata pri skupljanju i predstavljanju vijesti strukturalne promjene su se počele pojavljivati u procesu stvaranja vijesti. Kao rezultat, promjene i strukturalna pretvorba prouzrokovane novim medijskim okruženjem su važne za novinarstvo. Ovo proučavanje ima za cilj naglasiti promjene u vijestima pripremljenim u tradicionalnom formatu sve do današnjeg dana zajedno sa novim komunikacijskim tehnologijama i privući pažnju na promjenu razumijevanja novinarstva širom svijeta.

Ključne riječi: masovni mediji, vijesti, stvaranje vijesti, komunikacijske tehnologije, Internet, mrežno novinarstvo.

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New Communication Technologies and Changing Journalism*

Summary

20. Century is an era where many change and innovations in means of journalism practices are being observed due to new communication technologies. News production process, which is being carried on in new media environment is facing a change in news collection, processing, introduction and distribution stages. With the new media technology tools used for collecting and introducing news, structural changes started to occur in production process of news. As a result, the changes and structural conversions caused by new media environment, is important for journalism practices. This study aims to emphasize the changes in news prepared in traditional format up to now, together with the new communication technologies and draw attention to the changing journalism understanding worldwide.

Key Words: Mass Media**,** News, News Production, Communication Technologies, Internet, Online Journalism

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Introduction

The fast developments in communication technologies speeded up the information flow, removed the borders and made the time and place concepts to be questioned again all around the world. Nowadays, millions of people obtain knowledge about life via opportunities and facilities provided by communication technologies. In this period where change is observed not only in social dynamics but also in all other fields, Internet takes the leading role as the communication channel of the global order. These changes directly influenced mass media technologies as well as various social structures and organisations and these developments on the axis of information and technology where mass media, telecommunication and computer systems interlocked with each other have also transformed today's publishing concept. Throughout this process, there is no doubt that news production process has also evolved together with the dynamics of this new media environment.

New Communication Technologies

The most important developments that can be considered revolutions in the history of communication are the invention of writing in the 4th century B.C., operation of printing machine in the 15th century and entrance of modern technologies such as telegraph, radio, cinema, television and computer into people's lives starting form the midst of the 19th century (Batuş, 2000:279). Internet, which was invented in 1980's shall also be added to these. The internet had existed for a long time by 1993. It was developed in the 1960s by the Advanced Research Projects Agency, an arm of the U.S. Department of Defense, but few people outside the military, major universities, and defense contractors even knew of its existence. Access was limited to noncommercial traffic, and the interface was confusing and completely nongraphical (Carlson, 2003:38). It is obvious that any revolution will bring a different life style and culture along with itself. In this planet, technology ensures the rationalisation of independency of people and proves the "technical" impossibility of being autonomous and

determining one's life oneself. Because this independency is considered neither irrational nor political, on the opposite side, it is considered being under the yoke of the technical device that increases the comforts of life and improves work efficiency (Habermas, 2004:36). Technology is one the main factors that influences the development of communities and configuration of cultures. Communities are even classified as "developed" or "underdeveloped" according to their level of technological development.

Mass communication has an essential importance for the information revolution these days. In these days where people are in need of knowledge and being informed, new technologies come out in mass communication and people can reach information at once thanks to these technologies (Uğurlu- Öztürk, 2006:17).

Communication technologies were used for information use programs in 1960s and in big media (television, newspaper, magazine, book and radio) and small media (brochures, posters, films, audio records and telephone switchboards) in 1970s. In 1980s, the traditional media had new applications such as cheap video tapes, 100 channels cablecast and satellite supported global journalism. However, digital technologies brought along the most important new communication opportunities in 1990s for information use (Paisley, 1993:222). The fast development in communication technologies that has occurred since 1960s, has caused changes in all fields from individual practices of the daily life to collective practices of public life. A series of scientific and technological innovations that took place between 1960s-1980s shows that a new technological revolution era has started and it is claimed that this revolution has reconfigured the social, economical, political and cultural space (Timisi, 2003:79).

When we say new communication technologies, we make a definition that covers all technologies in communication field. This involves transmission, telecommunication, communication, information, broadcasting, publishing and printing. It is possible that the concept of communication includes technologies of hundreds of devices we frequently come across in our daily lives such as telegraph, telephone, fax, telex, radio, television, satellite, interactive television, cable television, remote control, pager, mobile phone, walkie-talkie/radio, trunked radio, computer modem, video player, video camera, video projector, cassette player, amplifier, tuner, CD-rom, VCD, DVD,

printing, printer, photocopy, etc. (Atabek, 2001:31). Besides, the impact of semi-conductives, microchips was huge in this process and along with the fast development of the computer technology and invention of the Internet, transition to a new world was finally realised .

Computers with a size that wouldn't fit into big halls 50 years ago are now decreased to such a size that can even be put into pockets and the mobile phones that didn't even exist 20 years ago are placed into these computers. The Internet which came into use as a defence project at first and connects the world almost with invisible nets today also took place in this pocket computer. Not only these, but also any kind of programs you would like to use such as television, radio and video player programs, games and office programs can be downloaded into this handheld computer and become an inseparable assistant for you as if it is almost a part of your body. Hence, for the human-being who can carry a computer, telephone, Internet, television, radio and newspapers in a small computer that can even fit his pocket, news has become a phenomenon that carries different meanings than before (Karaduman, 2009:156).

One of the most important features of new communication technologies is the extraordinary improvement in its *production, storage, operation, transmission* and *reception* capacity. Other features that can be considered as important can be listed as follows: (Avcı, 1999:136)

- Firstly, the multiplicity and flexibility of selection options can be mentioned. In a subject where we used to have very few options before, we now have several. For a lot of things that we used to do with hulking, expensive and very professional devices, we now have the opportunity to do the same thing with simple, light, cheap devices that do not require much expertise.

- Secondly, we now have the opportunity to "tack" different technologies, methods and systems to each other. We can try new communication styles thanks to these new compositions.

- A third feature is decentralisation. This means individualisation and independency of communication tools, channels and techniques.

The innovation that technological revolution brought along is related to the production process itself rather than the final product. "New technological revolution is not effective over new kinds of goods but the production process. Developments in microelectronics have transformed production, distribution, transportation and management

processes radically (Şaylan, 1995:114). This case is valid for journalism as well. New communication technologies have influenced news production process directly.

Technology and News

Together with the developments concerning new communication technologies, traditional journalism practices left their places to a new journalism concept that is configured by new communication technologies from the news production to distribution phases. This new journalism concept has three main reflections.

The first one is that ordinary people gained the opportunity to make news and transmit it to crowds. This way, ordinary people think that they are not ordinary on the Internet. http://www.bbc.co.uk/turkce/ozeldosyalar/2010/03/100306_superguc _kuzuloglu.shtml). The second innovation is that everyone has the opportunity to reach their own target group without any mediators. In a certain sense, everyone has his own media and has the freedom to disseminate his opinions through that; without needing the traditional media, being filtered or manipulated by it. The third innovation is the increase of options without any discussions. Hence, in the last few years, technological developments open the way to a big change in journalism practices and news publishing with all these important effects they have that transform the news.

In fast dissemination of online journalism applications independent from the traditional media, it's an essential factor that Internet gives the opportunity to enable content presentation for a much lower price compared to mass communication technologies. Therefore, online journalism which is over-commercialised and under the monopoly of big companies in this media environment offers an field of opportunity for those groups who didn't have any chance of representation before.

Mark Poster determines the process which started with the emergence of the network and Internet that inter-connected computers to each other as the "second media era". Of course, the biggest factor in this process is the Internet which came into use as a defence project

at first and connects the world almost with invisible nets after such a short period of time (Poster, 2001:77). The only communication tool that can give the news instantly, with written text, dubbing, image, comment or deep analysis and that has a structure appropriate for hypertextuality is the Internet. Internet can use all the news-related formats original to all other mass media.

Access power to the news become easier for new media users together with the Internet. Search engines or various search softwares created the opportunity for journalists to access information in a very short time. Therefore, Internet itself has also become a news source itself. Before, there used to ve archive sections for all documents, photos and print materials. However, it took a significant effort to keep them and re-access them when needed again. Now, the case is very different. All archives are transferred into the electronic environment. For a researcher or a reporter, it's enough just to make a research for a few seconds in order to access an old file. Hence, it is easily possible to access all the data and take a copy if desired. This case doesn't cover newspapers and magazines only. For example, televisions keep their broadcasts not in cassettes but directly in computer disks. When required date and hour in entered, it is possible to access a certain program and take a copy of it. This situation strongly contributed to news production as well. A reporter who wishes to access old information regarding a news do not have to go through all the archives for several hours and even days anymore. He can access the archives just with a single click and this creates a huge easiness in terms of writing the news. In the past few years, on the basis of speed in the news concept, the easiness of accessing information behind a news makes news production process much simpler. There is no doubt that the Internet takes the first place among news sources anymore. In this case, there has been a change in the workflow and the working styles of journalists, face-to-face communication among the diversified news sources by the journalists is also transferred into a virtual/electronic dimension. Technological facilities of the media started to become more dominant in news collection methods. Hence, the following sources are used for data collection for the news:

- E-mail, data transfer from a computer to computer
- Speed in picture and photo transfer, multiplicity and diversity in their number
- Fax
- Portable Satelite Phones
- Sattelite Photos
- Laptops
- Live Broadcast Connection Opportunities for Televisions
- Videophone, etc

On the other hand, together with the new communication tools, the photos of the texts and the way that graphics, shapes and statistical information are given and presented have changed and the richness of presentation has increased. The limits of time, place and tools have disappeared with these technologies. "In this communication environment special to the new media, the audience or the reader is able to read the written text that comes in front of him on a computer screen, watch statistical data in graphics, see photos or animated images on his screen and listen to the audio records. The audience-reader can also select a news that includes one or all of the texts, graphics, photos-images or audio forms according to his own will and field of interest, call it to the screen or keep it there as long as he wants; shortly, he determines the content, duration and the rythm of the broadcast stream of the information running through his screen."(Törenli, 2005:161-162)

The most frequently referred study regarding the collection, presentation and the reporting styles on the Internet is Deuze's classification of four approaches. Hence, the most common one among online journalism applications is the mainstream news sites by the traditional media organisations such as *bbc.com, cnn.com, hurriyet.com, milliyet.com, ntvmsnbc.com.* In such kind of news sites, the editorial control is carried out intensively and the mainstream news sites are the closest ones to traditional journalism in terms of the presentation and the value of the news as well as its relation with the user. The second kind of news sites named as the *index and category sites,* are mostly applications realised by search engines, marketing companies or individuals. The

third online journalism application is the *sites of critics and reviews.* These sites mostly give information about the media world and the reporters. The forth application is such sharing and discussion sites as *indymedia.org,* where online journalism is realised in the best way. In sharing and discussion sites, editorial control is minimised and technological features are used in the maximum level (Geray-Aydoğan, 2010:306-307).

New Opportunities

The structuring of the news media based on giving the news as fast and diversified as possible within the new communication environment is a much recent development and a case that could become concrete mostly with the technological facilities of the new media. However, the three main differences of Internet journalism from the very beginning; i.e. timelessness, placelessness, and interaction always take Internet journalism a step forward. According to this, news can be put on the Internet any time and spontaneously and the reader can access it the moment he wants (timelessness), news can be reported and the reader can access it from any place with connection to the Internet (placelessness) and the Internet is the most open news channel for feedbacks (interaction). Thanks to these differences that makes Internet journalism special and fast development of the Internet, significant developments in terms of news production and journalism are expected from it. The Internet offers various new opportunities regarding news production and journalism. If we mention these new opportunities of Internet journalism:

Interaction: The most important feature of the new media configured by new communication technologies is interaction. Interaction process which refers to the case where the source can become the receiver and vice versa, can also be possible by feedback in a wider sense. One of the biggest contributions of Internet reporting over journalism is being open to simultaneous interaction with the reader and receiving feedbacks from him easily.

All these processes show the differences between the new media created by new technologies and the traditional media. Still, it shall be mentioned that the new communication technologies have also helped to further open the feedback channels of the traditional media. It is much easier to access traditional media especially via the e-mails, comment or forum sections over the Internet.

The reader is now much more free than before by reason of contributing to the news by researching, commenting, voting, criticising and causing many changes in the news even with what he clicks. The role change of the reader within the reporter-editor-reader triangle took place in the following way. The reader is not dependent on the choices of the editor anymore. All the news that is selected, arranged, lined up and sized according to the choices of the editors in television news bulletins limited with minutes or the newpapers is now in front of him via the Internet. Next to choosing the news he wants, the reader can also make the news he wants. In this new structure, the power of the reader is different than before. Because there are unlimited options in front of the reader and his choices re-configure the news.

Internationality: It is a very important development especially for local and personal Internet newspapers. In the past, it was almost impossible for a local newspaper to reach any point not only in the world but even in the country. On the other hand, any national, local or personal publication can access all parts in the world via Internet. If we look at it from the reverse side, the readers can reach any publication in the world from where they sit. This is the basis of the freedom of news access with the Internet.

Always/Timelessness: The concept of being timeless creates one of the biggest differences for Internet newspapers. Waiting for a certain date or hour to enter or read the news is not necessary anymore. There is no need to wait for the evening news bulletin for television nor for the next day's edition for the newspapers. A news can be announced over the Internet even from the moment that it started to take place. At the same time, the reader can also access these news by connecting to the Internet, without waiting for the news bulletin hour on TV or the next day's newspaper edition.

Measurability: The measurability of the news on the web gives us valuable information. This data is much different and special than the circulation rate of newspapers or the ratings of televisions. Because it can be observed how many times, from where and when each single page and news was clicked. However, since this valuable feature has started to be used with "the most clicked one is the most valuable" perception by certain Internet sites, there has been a decrease in the quality of news.

Archive: In the past, if you wanted to access the archive of a newspapger, you should have gone to the central office of that newspaper or to the library and search a news for hours. However, all the newspapers have opened their archives to their readers over the Internet now. Certain newspapers have even transferred the newspapers to the Internet that were published in the times before it. For example, it is possible to access all the editions of Milliyet over the Internet, which is a Turkish newspaper starting from 1950s. Researchers can access news from many years ago with just one click, likely, past developments concerning a news can be found with the method of searching and more comprehensive information can be found.

Multimedia: Newspapers can use text and photos in their news, while radios use sounds and televisions use sounds and images. The only news channel that can use all these tools is the Internet. All the texts, sounds and images can be used within an Internet news. This makes the online journalism special.

Finance: It is impossible for an ordinary person to establish or operate a newspaper or television. But everybody can make an online journal and publish any news. Money is not necessary to own a news website.

Unlimited Content: In online journalism, everything is just one click away. This offers new possibilities and opportunities for the journalist and reader. The journalist can give place to all kinds of documents, photos and videos without any place or time limits and present the news in depth. Internet journals would be the application

point for a reader that wishes to learn the details of the news he's interested in.

Hypertextuality: The linking and layering of digital information through a nonlinear hierarchical structure.

Convergence: The melding or blurring of historically discrete technologies and services.

Customization and Personalization: The ability to shape the nature of the content and service to individual needs and desires (Kawamato, 2003:4).

Citizen Journalism: Online news has the potential not only to bring citizens a more comprehensive version of the day's news, but also to empower them to take an active part in the day's journalism (Robinson, 2006:843). Developing technologies and the Internet offers everyone the freedom to make news anymore. If you are a person that has a mobile phone which can take photos and videos and a computer with Internet, you can easily open a blog and start publishing your news. Certain news that even international news networks can not access or publish are transmitted to the world via these personal news sites.

Social Media: Starting from the early 1990s where Internet started to develop, social share sites such as social platforms (facebook, twitter, friendfeed), publishing (wikipedia, blogs, dictionaries), discussion sites (forums), content share (film, video, photo, music sharing sites, youtube, flickr, vimeo, imdb), instant messaging (messenger, skype), social games (farmville, zynga), etc. are the biggest technological innovation. Social media is a channel where ordinary people produce content interactively. The most important feature of this channel is that the resource of its content, i.e. information, news, photo or comment is ordinary people. Social media is a partnership and sharing channel with such a big scale than ever. "Billions of people can establish and share a huge knowledge network on both the global and local scale while the nature of the content changes and becomes much more alive, interactive and comprehensive than it ever was." (Uçkan, 2010:6).

In the last few years, such technological developments as the progress and dissemination of user friendly and cheap hardwares that enable content production and management as well as offering various programs or hardwares that facilitate content presentation over the Internet for free or a very low price have provided users apart from professionals the opportunity to produce a content and share it in the Internet environment (Geray-Aydoğan, 2010:307). Content production and sharing have facilitated the increase and diversification of active participation and applications in this field. The contents produced by users in video sharing sites, personal web blogs, socialisation and sharing sites keep on multiplying day by day. These contents can even become the channels themselves through which journalists access the news materials.

Conclusıon

In the light of all these developments, it is obvious that the news go through a structural transformation along with the technological innovations. Together with technological developments that transform the news and the media, the journalism concept has also changed in the new media where ordinary people participate in the production as well. It is possible to send a news, an image or an audio record through these channels that are coherent with mobile technologies at the place and even during the course of the event. Through these new communication technologies, a news production process and journalism concept have occurred where anyone can contribute, which are open to sharing and realised jointly. It doesn't seem possible to stay out of it in this new media order with the global exchange of knowledge where knowledge is collected and distributed with an unbelievable speed. McLuhan claimed that people in modern societies go to magazines, cartoons and cowboy films in order to escape from problems and it turned into the passion of a "Single-person Crusade" because of the despair created by the unsolved problems of the society in 1950s. On the other hand, the same McLuhan claimed that the television will eliminate the subversions and differentiations between differerent communities and parties and turn the world into a single "Global Village" community. This conflict of McLuhan will determine future's media. A new world of news where

stereotypes are broken, news are quickly spread and redars make news at the same time is already entered. However, it shall not be forgotten that the fastest thing that grows old is the "new" in this world. The communication technologies we consider new today will become ordinary tomorrow and "newer" ones will be produced. However, the content will always be the thing which makes the news original and special. Those who will create this content will be people, journalists.

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