Mass Media, Social Media and Technological Evolution Today: A Theoretical Approach

Lucian-Vasile SZABO, PhD
West University of Timișoara, Romania
E-mail: vasile.szabo@e-uvt.ro

Abstract. This study aims to make a synthetic theoretical presentation of the main challenges currently noticeable in the evolution of the mass media and social media in the context of the accelerated development of new technologies. It is a slow, but decided, visible change, one that profoundly affects human society. In this context we put forward the use of the postmedia concept, which defines the transition from classical to new (digital) media, assimilating both the facilities of rapid communication and linking, as well as the tensions arising as a result of the dangers generated and the pressures exerted by various changes. The analysis covers the main types of convergence in communication, the integration of new technologies and equipment, the generalization of interconnection, the extension and diversification of handling arrangements, and the need to rewrite ethical and professional codes for the use of those working on digital platforms.

Keywords: New media; Postmedia; Convergence; Factual; Virtual; Phablet; Robo-journalist.
Postmedia Context

Current communication is marked by profound changes, changes produced at a faster pace than those taking place two decades ago, for example. This requires an adaptation of communicators to new realities, especially in relation to technological evolution. Communication is evolving and diversifying, which is why an analysis of these challenges is needed. The discussion starts from the identification of two stages in the evolution of communication. The first is that of traditional media: print press, radio, television, but also cinema, audio and video recordings in analog system, posters and other types of advertising. The current context is experiencing new types of media, but also a revaluation of traditional ones in the digital system. This second stage is called postmedia, in order to make a theoretical delimitation from the traditional media. The main characteristic of the digital age is given by the ability to interact and converge at the level of content maker, in the realization of communication products and in their distribution on different platforms. The purpose of this study is to highlight these developments by proposing a synthetic presentation of the different types of convergence.

The term *postmedia* was coined by Félix Guattari in 1990, when he considered that humanity would enter an era of freedom, “into a post-media era was acted by the reappropriation and resingularisation of the use of media (Access to data-banks, video libraries, interactivity between participants etc.)” (Guattari, 1995, 5–6). The French thinker understands singularity as the ensemble of elements that gives a specific vibe to a person, group or community, understood as difference from the others, but also different when compared to the characteristics of the earlier stages (Guattari, 1995, 42-43). This differentiation means not only a detachment from the past, but above all a stance concerning the present, affecting and changing the existing order, sometimes even in a radical, revolutionary sense (Conley, 2009).

Guatarri saw the postmedia era as one in which every person and every organization had access to diverse information and cultural products, access facilitated by new technologies. In a classic study, the author stated this with few words: “The junction of television, telematics and informatics is taking place before our eyes, and will be completed within the decades to come” (Guattari, 2013, 26). Unlike other thinkers, who have suggested that digital media development would lead to alienation, acting disruptively in terms of communities, Guatarri argues in the direction of a “collective-individual reappropriation”, which, within the framework of the current study, falls within the limits of technological and emotional convergence (Reisz & Szabo, 2017). This type of development and the modes of collective action do not necessarily lead to the strengthening of freedoms and of liberal democracy, but, as Guattari warns, to totalitarian regressions, giving the example of the Islamic revolution in Iran (Guattari, 1995, 42–43). Of course, the current situation is much more complex, going beyond the predictions made by Guattari, with postmedia needing an appropriate approach to new realities.
Postmedia provides the framework for researching the disruptive elements in contemporary communication, for erasing boundaries between factual and virtual or for ever-thin attempts at influence and manipulation (Jones-Jang, Hart, Feldman & Moon, 2020). Postmedia means not only increased possibilities for the appearance of fake news, but also the need to understand them. In order to combat fake news, it is important to know how to build successful fake news, and this phenomenon can be analyzed both by considering the negative effect within society and by analyzing their ability to ensure the success of activities of manipulation, consolidation or destruction of the public image of a person or organization.

The term postmedia must be understood, in line with the evolution of terms such as postmodernism, posthistory or postindustrial, not as a stage after the media, but as a transformation process of the media. It also signifies a stint of reflection on what was previously and on how things are set up today. It represents both a break from the past (modernism) and a new direction (Lyotard, 1992, 76). The term metamedia may be valid as a working tool in the postmodern context, to which the postmedia explicitly refers. Jensen (2011) reserves the term metamedia for the technological component of communication, directly referring to the equipment items that make it possible, such as the computer and mobile phone. This terminological diversity is a challenge to communication, as it risks restricting it and making it unclear by the multitude of terms used, often in contradiction.

Types of Convergence

Information, whether correct or false, is circulating rapidly in the public sphere today as a result of profound changes in the field of communication. The volume of data and communication products is increasing, with users often drawn into the communication process, where they become content makers and providers of messages. They can also interact with others on digital platforms and engage in interactive processes that aim to distribute, modify, or supplement existing communication products. These communication realities constitute challenges for the professionals in the field, who have to face the competition of very active non-specialists. Understanding these challenges means carefully examining the types of convergence manifested in the current digital communication: technological, media, content and emotional convergence. Convergence dominates the world, making it possible to pursue digital development (Van der Meer, Hameleers & Kroon, 2020). The ability to quickly gather a lot of information, easily manage it and use it (whether important information or summarized one) in communication content, content that is also subjected to profound or surface changes brought about by large user networks, through computer-run programs, thanks to network interconnection, represents the communication environment in which we exist both professionally, but also, especially, in terms of our need for knowledge, training and entertainment.
The five types of convergence that dominate the world are:

1. Technological convergence. It is manifested by the use of one single type of equipment for multiple operations (Szabo, 2016, 12). Thus, with a phablet (phone and tablet) you can take photos, shoot videos, write texts that are also editable;

2. Media convergence. It involves erasing the boundaries between traditional media types. Digital media allow you to edit publications in classic format so that newspapers can be printed or placed on various platforms in PDF or interactive format. Text coexists with photos, video elements, or audio files. Media or social media platforms can be used for all of the above. The boundaries between media types disappear because radios can develop websites, media platforms where video material can be posted as well, and this means television. TV stations can also publish mixed content online;

3. Content convergence. Communication products (publishing content) are structured to achieve optimal efficiency. Thus, titles, intertitles, texts, photos, photo captions, video and audio files, and other graphics are ordered to serve the ensemble and to adapt to the preferred media channel type;

4. Emotional convergence. This targets the emotional behavior of users in relation to messages they receive and when producing their own content in situations of interaction and interactivity with other people who post communication products on digital platforms (Szabo, 2017). Otherwise put, it reflects the ability of people to mobilize (by using communication networks) in order to achieve a common goal;

5. Professional convergence. In a first stage, it concerns the ways in which communication professionals interact with human sources in order to create communication content. It also expresses the ability of some people to produce communication products without specialized training, and often having minimal experience in the field of communication. Obviously, social media facilitates this phenomenon (Szabo, 2014).

Shifts in Various Areas

How will the world change in the near future, in the next five years, for example, as a result of the augmentation of global convergence? The question has several answers, each of which can be nuanced according to various areas of interest. In terms of communication and communications, some elements are highly likely. All users will utilize integrated electronic equipment, such as the widescreen mobile phone and tablet (phablet). Under these circumstances, landlines will see their role diminished, becoming almost obsolete, because this equipment offers only a classic voice service (Balaban & Racz, 2020). Personal computers and laptops will become less and less utilized, even though the latter were still in fashion in 2020 all
over the world. The mobile phone and tablet are remarkably reliable, highly user-friendly and benefit from increased storage capacity, diverse and complex functions, as well as the ability to run a large number of applications (Szabo, 2016, 11).

**Generalization of interconnectedness**

The expansion of wireless connections and access to satellite services will be generalized, also lowering costs. Currently, phablet devices have basic apps that allow them to automatically connect to the internet. It will be almost impossible to opt out of this function, which will keep us permanently online (Gui & Büchi, 2021). Communication will thus be possible in almost any place and under any conditions. Interconnectedness will be possible at a low cost, by including a subscription—based package of services when purchasing equipment or by connecting to public networks, such as those in major cities or those dedicated to public institutions, even ministerial, edu.ro being a good example (Szabo, 2014).

Diversification of the offer of services and applications. The tablet and mobile phone, in the integrated form *phablet* (phone and tablet) will be used both for actual communication and for the production of content. In this case, they will be used to collect, store, and process information, produce communication products, modify and archive them (Ben-David, 2020). The new applications will prove useful in the processes of surveillance and control, monitoring of some activities, essential elements in intelligence. The scope is broad, as programs are already being worked on to increase the degree of media and technological integration (Van der Meer, Hamelers & Kroon, 2020). Health and education are leading areas. Thus, the phone and tablet will perform X-rays, providing the first clues about possible diseases. A lot of people don’t know and don’t need to know how exactly these electronic devices are built, yet they are able to use them efficiently.

**Expansion and Generalization of Cloud Computing**

These services and applications (from website hosting and the need for bandwidth to using mobile phones for medical diagnoses) may be (some have already been accessible for a long time) free, while some may incur a fee (by purchase or rental). In these conditions, the concept of online newsroom is developing, no longer needing a physical workspace (García-Perdomo, 2021). The notion can be generalized, following the route of information from source to recipient, through collection, selection and drafting, and this can be used in other sectors as well, such as education, public relations or intelligence (Szabo, 2016, 12).

Generalized communication, through the exchange of information and the production of content. In theory, everyone will be involved, practically many people will have access to various technologies and equipment and each will decide what,
how and when to use them. Technology becomes easy to handle, so that everyone, even those with a medium education, will be able to produce high-level communication products. This is professionalization on the go, practicing either for pleasure or as a means of production, in order to gain. It will erase the differences between professionals and amateurs (Matthes, Nanz, Stubenvoll, & Heiss, 2020). Up to a certain level, namely college education, all users will be highly familiar with these tools that have become a necessity.

Communication will become a broad area, ranging from the exchange of information to services and products. E-commerce will become dominant and financial systems will increase their dependence on information systems. Physical money (coins, banknotes and others) will lessen more and more, with online bank payments and transfers becoming dominant (Moșteanu, Faccia, Cavaliere & Bhatia, 2020). The education system will benefit from new services even more, becoming interactive and more stimulating. Entertainment is also changing, with great pressure for such products, with visual culture also becoming interactive (Szabo, 2014).

A current issue is the increase in the use of robo-journalists, especially in the field of big data, where there is a large volume of information which needs to be processed quickly. Without such special programs we can no longer conceive stock market or currency-banking activities, the summary data necessary to track markets and quotations thus being provided quickly. It is a huge amount of work, almost impossible to achieve through the involvement of human agents. Software, applications (apps), algorithms, including chatbots, programmed to provide various types of information are under discussion and are widely used by companies that provide various utilities, by medical facilities or by other institutions. Chatbots began to have a therapeutic role, developing real dialogues with people who are lonely or in a special situation. They can call dedicated numbers, with bots programmed to ask questions and provide answers based on data from those individuals (Yang, 2020).

Intensification of profiling activities. It is a user information gathering operation (alone or in groups), establishing their characteristics, and using the data to provide them with the information they need. In the digital environment, the profiling operation is carried out through algorithms (applications, software, programs) specially designed for these operations. Simply exiting (or entering!) into the digital universe involves interacting with these programs. They are being used by major operators, such as Google, Microsoft, Facebook, social networks also functioning as archives (Ben-David, 2020). They are not much different from dedicated platforms, but they require users’ consent to collect data through cookies. The main idea is to retain users’ preferences in order to integrate them into various offers aimed back at them. The information is collected by applications (algorithms, robo-journalists) based on user activities, media platforms, content types accessed, and equipment used. Using a social media account, email or entering media platforms for a specific type of content gives these programs the opportunity to gather information
about interest and preferences. The data will be summarized and reading suggestions for various types of content or the purchase of various services and products will then be provided to the persons concerned. Profiles or other content on various platforms can be accessed from different equipment (phone, tablet, laptop, PC). Subsequently, because the profiling action took place, the user will have offers for products of the kind of the kind that he showed interest in other equipment used. In this context, a discussion should be launched with regard to directed and/or personalized advertising.

Another aspect that we can see at present, and which will certainly develop in the future, concerns the growing role of influencers. These are people of some notoriety, especially won on social media. Often several of them are used simultaneously, to enhance the effect of the presented materials, of the ideas promoted, but especially of the communication content promoting some products or services (Harrigan et al., 2021). Truly influential influencers can make significant gains through advertising on social media accounts, on websites or blogs they own or to which they are a contributor. Of course, important revenues also come from contracts signed with companies and/or individuals for the promotion of products or services. For an influencer it is important to have many followers on social media, and a significant percentage of them actually order the products they promote. The authority of an influencer can come from two directions. In the first situation, he/she may be a specialist in a particular field, so they recommend products they have some knowledge on. For example, dentists can be the promoters of certain brands of toothpaste. In the second situation, which is also more prevalent, the influencer bases his/her notoriety on social media networks, a notoriety expressed by the large number of followers and the confidence they have in that person, without questioning what the influencer said or promoted too much. As Balaban & Mustățea (2019) point out, the attention given to influencers is achieved by their ability to be attractive, consistent, reliable and skilled when it comes to both what they do and the topics they address. Sometimes there are cases when these criteria are poorly met, leading to two situations: (1) the person reduces his or her number of followers, risking being reduced to anonymity; (2) Despite difficulties in understanding the issues brought up, confidence and the number of followers increase, as the lack of factual elements is compensated by emotional arguments, in an obvious attempt to manipulate.

Rewriting the principles of ethics. Deleting differences between professionals and non-professionals also requires a change to the codes of ethics. Obviously, the internet must remain a free space to assert thoughts, ideas and promote people, products, services and values. Since we cannot formulate specific restrictions, as is the case in professional ethics, access and manifestation in cyberspace requires a return to fundamental ethical principles. There is great concern about some aspects considered negative in cyberspace (Szabo, 2016, 13). The problem of ethics on new media platforms is generated by the intense activity of non-professionals, who do
not know the professional ethics, considering that everything is allowed, but also by the communication professionals, who decide that the ethical rules are no longer necessary and that they no longer need to be respected. Emotional arguments are often used to conceal or diminish the importance of factual elements and scientific data, especially in the development of fake news content (Wright & Duong, 2021). It is obvious that the exploitation of new technologies without respecting ethical and professional criteria can lead to the proliferation of fake news as a soft power, as a weapon (Bârgăoanu, 2018). Protection can be achieved, however, not by establishing control, but by resorting to existing legal instruments and by promoting moral values, which are accepted by as many as possible. Rewriting the ethical codes has already begun, being a challenge for specialists in the field (Frunză & Grad, 2020). They must adapt to the dynamics of the digital space and provide working tools for those working on media platforms (Kien, 2019, 211; Plaisance, 2016).

Communication, connectivity, singularity. Human interaction is stimulated by the emergence of new technologies and equipment. Looking from the perspective of pragmatism and utilitarianism, the new paradigm that is developing is that of the “global village”, proposed by McLuhan, Fiore, & Agel (1967, 63), when the phenomenon of globalization (media) was only in its infancy, by generalizing information and entertainment through television. Just a few years later, a negative effect of globalization was also recorded, namely singularity, defined as the threat arising from the loss of control over technology, when artificial intelligence could make humanity dependent on it. Raymond Kurzweil anticipated this rupture would occur in the year 2045, when one will no longer be able to distinguish between man and machine, between physical and virtual reality (Kurzweil, 2006, 9). Of course, this development is possible, but until then the most important effect of technological development will be that of removing communication barriers. In the coming years, most of the world’s population will be able to contact any person, institution or company regardless of their distance. The outbreak generated by the Covid-19 virus, from 2020 to 2021, has highlighted an acceleration of remote communication through new technologies and equipment. Forced to isolate themselves and keep physical distance, most people were able to interact, either in the private or public sphere (professional, educational or entertainment spheres).

Open conclusions

The conclusion that emerges from this panoramic view of the data presented is that we cannot know exactly how communication will evolve in the coming period, but we have sufficient clues about what could happen, at least in the short term. Communication specialists generate change, and the new communication reality is reflected upon it, causing further developments. The challenges seem greater than they used to be, with the multimedia implications more obvious.
Following some coordinates of the new status of the journalist in the digital media age we notice two important characteristics of those who collect and edit news:
(1) Professionals are forced to over-specialization, becoming what is called with an already existing term video journalist or even universal, integrated journalist;
(2) The boundaries between professionals and outsiders, such as a citizen journalist, tend to be reduced by a specialization of the latter. At the same time, we notice the emergence of the concept of virtual newsroom, the old assembly place for reporters and editors becoming a memory. The virtual office and online liaison with colleagues, the public or students has become a day-to-day reality amid the Covid-19 epidemic of 2020-2021, with new technologies and procedures to be further developed to improve the work.

The data presented leads to the conclusion that major changes have taken place in professional communication. Although mass media and social media remain distinct areas, in practice we witness the combination of communication techniques, sometimes the differences being difficult to perceive by the non-specialized user. Convergence is the element that allows such links to be established, making the act of communication easier to achieve. The five types of convergence identified (technological, media, content, emotional and professional) also involve changes in status. Professional communication is in competition with an enormous amount of communication products generated by non-specialized communicators, without specialized training, but able to use the new equipment, sophisticated applications and that have a rich activity on various media platforms. In this complex context, a training and self-training effort is required for communication professionals to continually adapt to technological evolution, an effort doubled by the need for media education programs for users from all categories. The skills linked to using equipment and accessing digital platforms are not enough for effective communication, as one also needs professional skills and ethical principles.

The limitations of this study are brought about by the fact that it is only a draft of a project that can be much broader. Next, each idea is worth developing into in-depth studies, including case studies and analysis of data on how users are managing in the new digital age and what their expectations for the future are. Taking into consideration new research, each aspect presented above would benefit from a detailed interdisciplinary analysis and from having good practice examples, in order to gain a profound understanding of the challenges that communication currently has to deal with.
References


