The Transformation of Reading Among the Ageing Population in the Digital Age

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Abstract. The processes of globalization, the Internet, the broadband technologies, and the convergence are among the main milestones tracing the dimensions of humankind's development in the 21st century. They are also the fundamental points that trace the basis of social transformations. Today these transformations are catalyzed by the intense development of information and communication technologies. As positive as their impact might be on progress in all areas of life, it is no less true that they pose challenges for the social stratification of society. The trend of population ageing determines the need for urgent prevention of elderly people's social exclusion from the modern information environment.

The proposed paper examines the European policies in this respect and presents the results of a social survey on changing reading practices (with respect to texts on paper and electronic support) of elderly people in Bulgaria.

Keywords: Ageing population · ICT · E-reading · Transformation

1 Introduction

"Our life is a hybrid between virtual and physical space", Manuel Castells pointed out at the second international forum on The Media of the Future, conducted in RIA Novosti in 2012.

Indeed, humanity today is facing a new stage of its development. Now the local particularities and local interests are a function of the shared goals and tasks of global processes, which are without ideological basis. Modern globalization tendencies are inevitably influenced by multifarious ICT.

In hypermodern times, when technologies are revolutionizing culture, which is no longer in the representations but in the objects, the brands and the technologies of information society [1], information and communication defines the parameters of the mediatized society.

The processes of globalization, the Internet, the broadband technologies, and the convergence are among the main milestones tracing the dimensions of humankind's development in the 21st century. They are the vectors that outline the basic social transformations [2]. Today these transformations are being catalyzed by the potential of the blogosphere and the social networks, as well as of the mobile ICT. The exclusion of analog television broadcasting was accompanied by a number of communication innovations: Facebook appeared in 2004, Twitter – two years later, in 2006, Instagram – in 2010. The most popular site for sharing video YouTube was created in 2005. Smartphone has been on the market since 2007, and iPad – since 2010. The generations of the so-called digital natives Y and Z, i.e., according to the classification by Mark McCrindle and Emily Wolfinger, i.e. the generation of those born after the 1980s, are dictating the new trends in communication processes and the technological platforms in those processes [3].

Many detailed expert studies and public discussions have focused on the problem of overcoming prejudices and negative stereotypes concerning the differences between generations and the degree of capacity of elderly people to take part in, and contribute to social development.

2   European Policies on Ageing

In 2015, mankind commemorated two significant anniversaries – the tenth year since May 17 was proclaimed *World Information Society Day* and 25 years since October 1 was proclaimed *International Day of Older Persons.* Lately the demographic collapse is seen as one of the greatest challenges to the economic and social system of the EU. Perhaps that is why 2012 was proclaimed, unprecedentedly for the second time (the first was 1993), as European Year for Active Ageing and Solidarity between Generations. The aim of these and other initiatives is to enhance the public awareness of the many-sided contribution of older people, and to promote measures that create better opportunities for their active life.

The section on "Silver Surfers" in the statistical portrait of the European Union for 2012, prepared by Eurostat on that occasion, is devoted to the better use of the potential of ICT for a healthy and independent ageing. ICT have a special role in our times as an instrument for dealing with the specific problems caused by population ageing. In order for the life of elderly people to have a better quality, the physical and psychological, but also the social, dimensions of their life are important; these include: social inclusion, access to public services, lifelong learning, social and economic activeness.

Statistics show a growing use of the Internet, in the age groups 55–64 and 65–74, for electronic mail correspondence, for seeking information for goods and services, for health information, for reading online newspapers and acquainting with the news, for

inclusion in education activities, etc. E-banking and e-shopping have become increasingly popular lately [4].

Information and communication technologies can help elderly people improve the quality of their lives, preserve their health and live longer independent lives.

In the communication "Ageing Well in the Information Society" published in 2007, the European Commission presented an action plan for enhanced application of ICT in dealing with problems caused by ageing of the European population. The action plan is oriented to several areas:

– at the workplace – through development of electronic skills and electronic training so that older people may remain active and productive for a longer time;
– in society – through new ICT solutions for contacts in the social media and through more effective supply of access to public and commercial services which lead to better quality of life and reduce social isolation;
– at home – by providing healthier and better quality of life, assisted by ICT for maintaining a higher degree of independence.

The aim of the plan is to give political and industrial impetus to the making considerable efforts for creating and enlarging instruments and ICT services accessible to users, in stressing the need of elderly users, supporting other policy areas, and seeking solutions to the challenges of ageing [5].

The population trends are alarming. Although it is expected that the overall population of the European Union will grow to 532 millions by 2060, the population in half of the member states (Bulgaria, Croatia, Germany, Greece, Estonia, Hungary, Latvia, Poland Portugal, Rumania, Slovakia, Slovenia, and Spain) will decrease. The prognoses show that the ratio of people above 65 to those between 15 and 64 will increase from 27.8 % to 50.1 %. This will practically mean that the ratio between persons of working age and those in retirement age will decrease from 4:1 to 2:1 [6].

It is on these prognoses that many serious political debates about "the graying of Europe" are based, including the comprehensive Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth. The strategy envisages development of technologies that enable elderly people to live independently and to take an active part in society. The program in the field of digital technologies for Europe (A Digital Agenda for Europe) is fundamental for the Strategy and aims to accelerate high-speed access to the Internet and to increase the benefit ensuing from the creation of a unified digital market for households. The ambitious aim is that by 2015, 60 % of disadvantaged people, including those aged 55–74, will regularly use the Internet [7].

The increase of average life expectancy is viewed as the basic cause of population ageing. The demographic challenges that the EU is expected to face in the coming decades can be overcome by introducing a wide range of ICT initiatives at three different levels: the professional – developing new markets based on ICT products and services aimed at the specific needs of ageing individuals; the social - ensuring more effective management and supply of key services for the elderly, such as healthcare and social care; the individual – improving the quality of life of elderly people and supporting their social participation.

The technical options for communication means are increasing in the contemporary information environment, characterized by developing new electronic media forms. Also increasing are the possibilities to choose different reading supports and consequently, the possibility of satisfying specific individual needs. In order to improve the quality of life, elderly people today have a larger choice of means to attain equality through inclusion – a choice provided by the new communication technologies – and hence, to attain individual and social satisfaction.

3   Transformations of Reading

The new media e-forms are constantly enlarging the options for reading. The content can be read in a printed book or magazine, but also on an e-reader, on a computer that has Internet access, on a notebook, tablet, mobile smartphone, etc. Today, the temporal and spatial distance for making media contact is very much reduced. Communication restructurings in the area of reading are becoming increasingly sustainable. But are they irrevocable?

Viewed in a historical perspective – they are. The whole history of culture is a history of restructuring of cultural-communicational artifacts. These restructurings are indicators of reception of the content of the concrete media and forms of communication, and they are the features under which entire historical-cultural epochs are labeled: the age of traditional written culture, the age of electronic culture, etc. Yet the modern restructuring of communications is wider in scope and far more dynamic.

Mobility is identified as the basic measure of modern communication tools; it is an invariable part of communication restructurings. Mediatized mobile communications have proven to be emblematic for mediatized society [8, 9]. Paradoxically, mobility is the stable element of modern media constructs, while reading and writing are the prevalent communication activities.

Transformations are taking place in the cultural models of reading and writing as well. A new written culture is emerging, which uses a national and international vocabulary and combines verbal and non-verbal signs and symbols.

Reading is the activity that is undergoing unprecedented transformation. It is gradually shifting towards electronic forms and Internet sources, thus reducing contacts with paper support – and this can be traced down, not only in professional activities and interaction but in leisure activities as well. People today read far more on their mobile communication devices than on traditional supports. Reading itself is becoming increasingly fragmentary; it is made more complex through the use of specifying terminological and informational links and references that accompany reading, with options for additional search for facts, events, other authors who have written on a given issue, etc.

4   Survey Methodologies

The data on which the present analysis and conceptualization are based are drawn from a complex social survey conducted in April-October 2015 under a research project.[1] The project comprises two types of interconnected surveys (quantitative and qualitative) conducted by the research team:

1. QUANTITATIVE: A representative survey among 1120 people across the whole country, selected on a quota principle.

The results have been verified by means of data from a representative social survey on "Reading Practices in Bulgaria, 2014", conducted by the social survey agency Alfa Research, headed by Prof. Dr. Boryana Dimitrova, in the framework of a research project with the same name.[2]

2. QUALITATIVE: Focus groups specified in one of its variants – the "world café", with moderators Dilyana Keranova and Violeta Nikolova, members of the research team. The world café was realized in the months of September and October 2015 in two meetings, and it included 23 students and 22 older people having attitudes towards electronic reading.

The foremost research questions addressed in the quantitative survey are: what are the changing cultural models and media reading practices; what is being practiced by whom and how; what are the modern proportions and restructurings; what are the preferences; what are the advantages and shortcomings of electronic reading? These questions were aimed at revealing the situation and establishing the regularities and future trends.

The focus group discussions in the qualitative study are related to the search for in-depth information about the causes of the growth of e-reading and e-writing, as well as of the limited use of e-readers.

5   Results

The e-book and its carriers, e-readers, are not largely present in the everyday life of the Bulgarians, especially of the older generation. Even though they have the character of library depositories and are meta-media constructs, as yet few people own them, and they are mainly used when a person is mobile. In Bulgaria, about 70 % of respondents have never handled an e-reader. The reading of books on an e-reader applies to 3.4 % of elderly people and a total of 5.4 % of all respondents.

In fact, only 4.4 % of respondents in the Alfa Research survey indicated they mostly read on an e-reader.

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The relatively high prices of electronic readers, as well as the decreasing desire to read literary texts, are factors that limit the spread of e-readers. In fact, it is a well-known fact that traditional reading is decreasing throughout the world and in Bulgaria as well (Table 1).

Table 1. Most customary ways for people to read

Which of these ways of reading are most customary for you?	I mostly read on paper	67,3 %
	I hardly read at all	19,9 %
	I mostly read on a computer	17,3 %
	Usually I don't read on a computer but do various things	7,6 %
	I mostly read on a tablet or smartphone	6,9 %
	I mostly read on an electronic reader	4,4 %
	I mostly listen to audio books	0,5 %

Respondents chose more than one answer, so the sum of percentages exceeds 100. The above-mentioned social survey of reading practices conducted in 2014 confirmed the continuing decrease of reading in Bulgaria. It was found that only about 1/3 of Bulgarians read books several times a week, and others read a maximum of 5 books per year. It was also found that half of the respondents have not read a single book [17].

However, it was also found that nearly 30 % of readers of books prefer e-reading.

5.1   In the Quantitative Survey, the Following Important Conclusions Were Drawn

1. For all age groups, electronic reading is now predominant over reading on paper. Over 50 % of the respondents above the age of 60 also communicate through the Internet and read and write by electronic devices. The reasons for which the educated elderly population accepts communication innovations are related to facility of access to a much larger variety of sources than the traditional means provide. Given the low income of pensioners in Bulgaria, electronic reading is preferable for financial reasons as well. The ample supply of newspapers and books makes it possible to choose and to fill one's leisure time, which, understandably, is growing among the elderly population.
2. The predominant reading preferences are still for texts on paper. This is characteristic for all age groups in Bulgaria. Forty-four percent of respondents definitely agree with this, and older people are a majority by this indicator.

The answer to the question, "Do you have preferences in reading?" shows that the majority of people prefer to read on paper.

It is interesting to see the causes of preference for reading texts on paper.

This preference is related to habits (36.4 %) of older people. Some leading motives for this preference are that it is easier to assimilate text printed on paper (32.6 %) and easier to remember the contents of reading (29. 8 %).

We also see that when reading on paper, it is much easier to concentrate on the text, to experience the content, to encompass and reread texts. 51.5 % of elderly respondents have indicated this (Fig. 1).
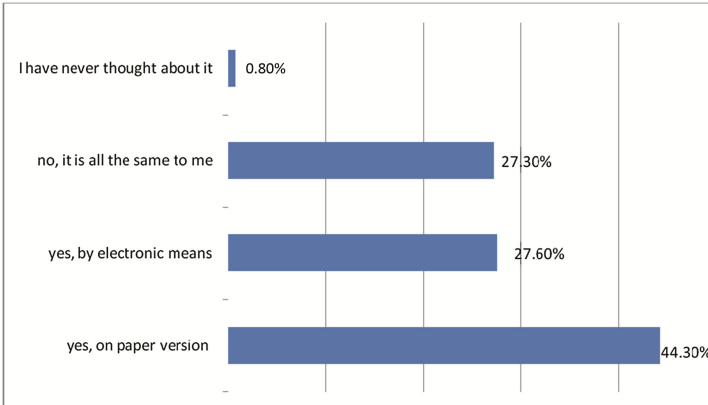

Fig. 1. Reading preferences

Elderly people also indicate the advantages of electronic reading. Over 40 % of them declare they have used this tool (Fig. 2).
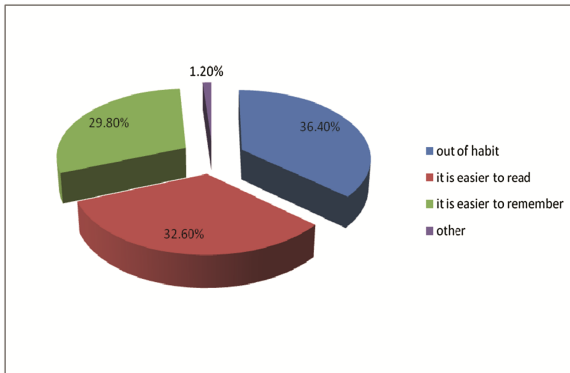

Fig. 2. Reasons for preferring paper support in reading

The preference for electronic reading and respectively, not attaching importance to the support of content (paper or electronic support), are connected to the possibilities provided by e-reading through the Internet, namely: connecting to other texts by using links, the possibility of making all kinds of references, the possibility of feedback

through participation in forums, expressing one's opinion in blogs, on specialized sites, by sending messages to authors, etc.

The preference for e-reading is also due to the possibility of making contact in combination with other communication activities. The respondents have singled out several factors as especially significant: receiving (11.9 %) and writing (12 %) e-messages, combining reading with other activities in the Internet (17.2 %), combining reading with talking with friends (6.2 %) or with creative activity (5.5 %) (Fig. 3). The remaining 47% did not pointed out preference for e-reading.
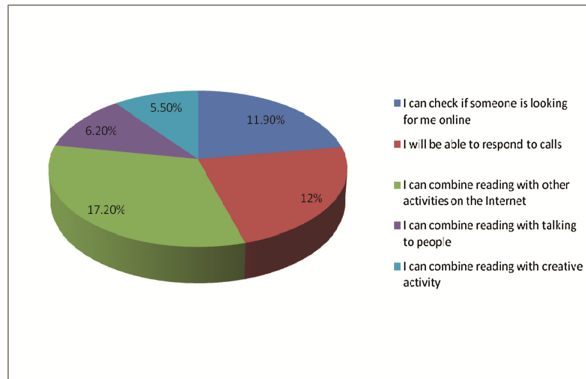

Fig. 3. Combining reading with other communication activities

Electronic reading has both advantages and disadvantages [10–16].

One shortcoming is the overloaded quantity of contacts. Also, it is harder to memorize information. Both of these disadvantages are related to the striving to receive more information, and a large share of electronic texts is of a multi-media nature. Multi-media products make it possible to follow links to other media products containing other types of audio-visual content, and they combine different formats of information. The "fragmentation" of reading and the non-linear perception on one hand, and the possibility of quickly enhancing and checking information through other media products on the other, are some of the factors that "frustrate" the memorizing of this type of information.

Older people, like younger ones, want to receive as much information on the Internet as possible within a given amount of time. They are particularly curious to follow all the references available in a text.

5.2   Discussions in the Qualitative Study Led to Several Important Findings

Apart from nuances, the focus group respondents in the two focus groups had similar representations about electronic reading and writing, and they explained these as due to several causes, among them: the increased media literacy of the population in all age groups; the accessible cost of most electronic carriers disseminated in society; the facilitation offered by the new communication means, which overcome space and time; the simultaneous realization of interpersonal contact and mass communication; the

combining of written text with sound, image and picture; the possibility for achieving various kinds of creativity; the possibility of overcoming isolation; the possibility for personal involvement and solidarity. The respondents also pointed out the compatibility of electronic reading and writing with other communication means as well as their being mutually interchangeable in different spaces and also - their multi-functionality, which includes reading, writing, listening, viewing, recording, etc.

The concrete explanations of focus group participants regarding the limited use of e-readers pointed to several issues such as the decreased amount of reading of books in general in Bulgaria; the possibility of reading books and articles by electronic means that the respondents already have, other than e-readers; the relatively high price of electronic readers and the fact that these are not included in user packages; the idea that e-readers are damaging for the eyes and ignorance of the technical characteristics of e-readers; the lack of the multi-functionality that is typical of other means of e-reading; and finally - the lack of the specific aroma of paper and of the possibility for underlining.

Among the positive features of e-readers that have been pointed out are: the possibility to possess a very large number of books and magazines; their convenience to be used everywhere, even in bed; the fact that they are better for the eyes compared with tablets and computers; and also - the low-cost access to books, including free books downloaded from torrents, etc.

It is evident that the decreasing desire to read literary texts in general, the non-inclusion of these texts in users' tariff plans, and their relatively high price, emerge as the most important factors of their limited dissemination in Bulgaria.

6   Conclusion

The impetuous spread of e-media formats in daily life, as an evolutionary development of mobile and interactive communication means, has brought about a continuous increase in reading and writing in our time. The new media forms, such as blogs, Vlogs, e-books, e-newspapers, electronic radio, television, newspapers, magazines, profiled and institutional sites, social networks, etc., are involving a growing number of people and positioning them in unlimited spatial trajectories. The mediatized reality is becoming filled with unprecedented and incomparable cultural transformations and communication centers, with new cultural and behavior practices. The model of traditional searching for and reading of books, magazines, newspapers, reference literature, etc., at home, in the office, in transport means, etc., has shifted to electronic versions. E-reading and e-writing are the prevalent communication activities and are the new structure-forming elements of communication. It is a challenge for every researcher to know what direction these transformations will take and what will be their effect on the intellectual and physical health of people.

Prejudices and negative stereotypes are current challenges concerning the life of the ageing population in the modern information environment; identifying the ways in which these prejudices may be overcome will help neutralize the rise of barriers to the full participation of older people in socio-cultural processes, including the labor market. Social distancing, discrimination based on age in key spheres of the labor market, in healthcare, education, access to services and information, are not, and cannot be,

productive for society. Communication skills, including reading and writing skills that use the new means of communication, are a prerequisite for inclusion of ageing people and for the use of the elderly population's potential.

References

1. Lash, S.: Criticism of Information. Kota Publ. House, Sofia (2004)
2. Tomov, M., Raycheva, L.: The facebook image of the 2013/2014 social protests in Bulgaria. In: Dobek-Ostrowska, B., Głowacki, M. (eds.) Democracy and Media in Central and Eastern Europe 25 Years on, pp. 166–181. Peter Lang Edition, Wroclaw (2015)
3. McCrindle, M., Wolfinger, E.: The ABC of XYZ: Understanding the Global Generations. UNSW, Sydney (2009)
4. EUROSTAT statistical books: active ageing and solidarity between generations. A statistical portrait of the European Union (2012). http://ec.europa.eu/eurostat/documents/3217494/5740649/KS-EP-11-001-EN.PDF/1f0b25f8-3c86-4f40-9376-c737b54c5fcf
5. European Commission: Ageing well in the Information society: action plan on information and communication technologies and ageing. http://eur-lex.europa.eu/legal-content/BG/TXT/?uri=URISERV:l24292
6. European Commission: The 2015 Ageing Report. Economic and budgetary projections for the 28 EU Member states (2013-2060). http://ec.europa.eu/economy_finance/publications/european_economy/2015/pdf/ee3_en.pdf
7. European Commission: Europe 2020: A European strategy for smart, sustainable, and inclusive growth. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF
8. Peicheva, D.: The Mediatized Reality. The Neophyte Rilski University Publ. House, Blagoevgrad (2011)
9. Peicheva, D.: Restructuring of communications and transformations of reading in the digital age. In: Peicheva, D., Serafimova, M. (eds.) Sociological Spaces. The Neophyte Rilski University Publ. House, Blagoevgrad (2015)
10. Sparrow, B., Liu, J., Wenger, D.M.: Google effects on memory: cognitive consequences of having information at our fingertips. Science **333**(6043), 776–778 (2011). doi:10.1126/science.1207745
11. Alexander, P.A.: The disciplined reading and learning research laboratory: reading into the future: competence for the 21st century. Educ. Psychol. **47**(4), 259–280 (2012)
12. Benedetto, S., Drai-Zerbib, V., Pedrotti, M., Tissier, G., Baccino, T.: E-readers and visual fatigue. PLoS ONE **8**(12), e83676 (2013). doi:10.1371/journal.pone.0083676
13. Lauterman, T., Ackerman, R.: Overcoming screen inferiority in learning and calibration. Comput. Hum. Behav. **35**, 455–463 (2014)
14. Mol, S.E., Jolles, J.: Reading enjoyment amongst non-leisure readers can affect achievement in secondary school. Front. Psychol. **5**(1214), 1–10 (2014)
15. Rouet, J.-F., Britt, M.A.: Learning from multiple documents. In: Mayer, R.E. (ed.) Cambridge Handbook of Multimedia Learning, 2nd edn, pp. 813–841. Cambridge University Press, Cambridge (2014)
16. Jacobs, A.M.: Towards a neurocognitive poetics model of literary reading. In: Willems, R. (ed.) Towards a Cognitive Neuroscience of Natural Language Use. Cambridge University Press, Cambridge (2015)
17. Kyosev, Al.: Readers' practices in Bulgaria. www.abk.bg/attachments/download/420