

# BIBLIOLOGICAL COMMUNICATION AND THE WORLD WIDE WEB<sup>1</sup>

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## STRESZCZENIE

### **Komunikacja bibliologiczna i World Wide Web**

Tematem pracy jest komunikacja bibliologiczna rozumiana jako proces wprowadzania do obiegu społecznego książek. Składa się z czterech podprocesów, tj. procesu tworzenia dzieła, następnie produkowania, rozpowszechniania i odbioru książki.

Celem artykułu jest próba odpowiedzi na pytanie: jak zmienia się model komunikacji bibliologicznej i jej obiekt (książka), gdy jest realizowany w środowisku cyfrowym World Wide Web z pełnym wykorzystaniem zdobywczy sieci i hipertekstu.

Patrząc z perspektywy komunikacji bibliologicznej, tj. odwołując się do koncepcji i aparatu terminologicznego komunikacji bibliologicznej, było możliwe scharakteryzowanie i opisanie zjawiska wykorzystania cyfrowych i/lub sieciowych technologii informacyjnych w tym specyficznym rodzaju komunikacji. W artykule przedstawiono własną propozycję modelu komunikacji bibliologicznej oraz opisano rolę i miejsce internetu, w szczególności WWW i technologii informacyjnych biorących udział w tej formie komunikacji.

Książka elektroniczna, książka zdigitalizowana oraz książka sieciowa stały się narzędziami komunikacji, tak jak wcześniej narzędziem tym była książka drukowana. W związku z tym komunikacja bibliologiczna uległa zmianom, a w konsekwencji zaczęła być realizowana w środowisku cyfrowym oraz cyfrowo-sieciowym.

Rezultatem analiz jest identyfikacja nowych form komunikacji bibliologicznej. Pierwszą z nich nazwano cyfrową komunikacją bibliologiczną. Poddano ją analizie i charakterystyce oraz zaproponowano jej model. Drugą nazwano sieciową komunikacją bibliologiczną i również poddano ją analizie, a także przedstawiono autorską propozycję jej modelu.

**Słowa kluczowe:** książka, nowe (cyfrowe) postacie książki, internet, World Wide Web

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*Introduction*

The book as a vehicle of culture has played a role in the development of humankind that cannot be overestimated. It intensified with the advent of the print technology. With time, printing made it possible to duplicate identical copies of books in mass editions. The book became the driving force behind cultural and civilization development, the basic source of information, entertainment, emotions, etc. Its position remained more or less intact until the Internet was introduced. The emergence of the Internet and, especially in the 1990s, the World Wide Web “opened a new chapter” in the media landscape. The convergent nature of the digital medium caused the other, so-called old media, to be in the state of coexistence with the Internet. Communication channels previously reserved only for those media began to be “absorbed” by the Internet. This phenomenon also affected the book.

It has been claimed for a long time that the printed book will disappear, and that the Internet network is a threat to it because it (Internet) takes over the communication area reserved for books. However, the clash of the printed book with the Internet has produced an unexpected result, which is one more proof of its vitality. Not long ago it seemed that hypertext would replace the traditional book in the near future, whereas the new digital forms of book try to imitate the printed book as faithfully as possible (Dobrowolski 2001, p. 201). Without doubt, with the Internet service, which is the World Wide Web, a new quality and a new paradigm in information provision and communication have been introduced. The strength of the WWW is the hypertext. It is thanks to it that the Internet has become popular, which has resulted inter alia in identification of the WWW with the Internet.

Today, after the experiences of the scriptographical and typographical age, writing moves into the digital hypertext space, which results in the emergence of new phenomena and processes, new challenges, threats, and opportunities (Migoń 2009, p. 19). The processes, rules, and techniques of writing and reading, the concept of authorship and editing rules are undergoing changes, language standards change, and the boundaries between producers and consumers of writing are becoming blurred (Migoń 2009, p. 19). The closeness between the World Wide Web and the book world leaves its mark on the book culture. The intrusion of the new medium into the complex system of the book-reader relationships signals deep and extensive changes. All consequences of these changes cannot be predicted. Some have already begun (mass digitalization), others are at the development stage (mass publication of books on the Internet), and many others are yet to come. One of them can be seen in the process of introducing the book into social circulation, i.e. bibliological communication.

### *State of research*

The term *bibliological communication* is comparatively new. It was probably first used in Polish library science discourse in 1980: it was then that Jerzy W. Zawisza presented a schematic diagram of bibliological communication (Zawisza 1980). The proposed arrangement of elements in the schema was meant to reflect the successive stages of introducing the book (specifically, a work materialized in the book) into social circulation, from the creation of a work, to production, dissemination, and to consumption of the book.

In Polish bibliography and information science the term *bibliological communication* appeared already in the mid-1980s. Scholars explained that bibliological communication, which is a kind of social communication, is the process of placing in social circulation the book (p-book – the abbreviation ‘p-book’ comes from the words ‘printed book’) understood as a tool of communication, method of recording information, a way of information presentation, and a method of locating a literary or scientific work. Thus, bibliological communication is one of the forms of communicating culture in the society (Migoń 1985, p. 348).

In the early 1980s the pattern of the process of bibliological communication also appeared outside of Poland. The model presented by the American scholar Robert Darnton was an attempt to comprehensively approach the essence and constituents of history of the book (Darnton 1982, p. 68). The presented approach was personal rather than institutional, processual or functional. In the central position of his proposed model Darnton placed ‘context’ or, more specifically, the economic, social, political or intellectual situation, in which bibliological communication takes place. According to Darnton, the context influences the subjects participating in biological communication, who are closely impacted by economic, social, political, intellectual, and other similar factors.

The scant number of publications on bibliological communication and no indication of the widespread use of the term *bibliological communication* in the bibliological/information science discourse results in that the expression *bibliological communication* has not yet entered the terminological canon of bibliography and information science or the commonly used specialist vocabulary.

In bibliological and information science literature there are hardly any descriptions of bibliological communication taking place using information technologies and the Internet (especially the WWW). No such attempts seem to have been made. It appears therefore interesting not only to refer to the concept and assumptions of bibliological communication but also to use the terminological apparatus, describing bibliological communication, to try to describe the phenomenon of bibliological communication in a clash with the World Wide Web. The main goal of this study is to try to answer the question: how does the model and the object (book) of bibliological communication change when it is realized in the WWW environment.

### *Bibliological communication*

Bibliological communication consists of certain processes including: the process of creating the work; the process of giving the work the form of a book; the process of dissemination, and finally the process of book reception.

The term “work” should be considered as both informative and non-informative literature, artistic and non-artistic literature, the works of written art (written works) and the works presented in other than written graphic forms, such as pictures, notes, etc. The work is given a form of a book. A book (work of a book) in this sense is the materialization of a particular work, i.e. the effect of a given writer’s work. The book is created by a variety of actors, including a publisher, a printer, a graphic artist, a bookbinder, etc. This stage ends with bringing a new book to life. The next step is to disseminate the book. Different institutions (e.g. libraries, television) and people (e.g. literary critics, readers recommending the book to their friends) are engaged in this process. The result of this stage is to take the book to the customer. The stage of consumption, i.e. reception, and the use the book, completes bibliological communication. Bibliological communication also generates the possibility to influence these processes, i.e. the possibility of interaction between the actors involved in the designated processes, thereby influencing the structure and function of the book. The result is (may be) a kind of network of dependencies (relationships) in which there is/can be intercommunication between the entities participating in this kind of communication. Therefore, the following scheme of bibliological communication may be suggested (see Figure 1).

**Figure 1. A diagram of bibliological communication**



Source: own work.

Elementary and mandatory components presented in the diagram (Figure 1) symbolize the successive phases of bibliological communication, i.e. the stages of implementation of the book into the social circulation. The author abandoned the expansion of the scheme, even with the most current trends in the publication market, what seems to ensure its universality. The scheme is open and can be expanded freely with other elements and/or vectors. The emergence of mass media and the Internet led to the situation in which the Internet “absorbed”, in a form of convergence, the areas reserved for other media, including books. Consequently, Internet technologies (information technologies) began to be used in bibliological communication. At each of the implementation stages of social circulation of

the book, starting with the process of creating the work, the achievements of the Internet began to be used.

The overview of digital bibliological communication and network bibliological communication should be prefaced with an overview of the digital forms of a book.

### *Digital forms of book*

Digital forms of a book which will be discussed include: an electronic book, a digitized book, and a networked book. In the statements about electronic books (e-books) there are many explications and definitions of this term. None of them, however, became valid and widely used. This may result from the fact that the term *electronic book* is ambiguous, therefore it is arbitrarily applied. Difficulties of definition may also partially arise from difficulties in the definition of the term *a book*. However, from the point of view of these considerations, this is not the key issue. It is important however, what constitutes the essence of an electronic book. One should not confuse a digitized book, a copy of a traditional book – an object that could be termed as a digital duplicate, with an object that was created from the ground up with the pre-book matter, i.e. from a prepared text of the work. From the point of view of bibliological communication, an electronic book should be considered as a work that at the stage of manufacturing the book was “materialized” with the use of available information technology (e.g. the use of HTML). Electronic book is created in an autonomous way. It is not an exact copy of the printed book, not only because it has active hyperlinks to move to different parts of the contents. A file that is an electronic copy of a book (digitized) cannot be considered an electronic book. To read e-books one needs a proper equipment (hardware) and software. This does not mean, however, that a device or device software is an electronic book (e.g., e-reader, e-book reader). These artifacts are the tools for reading electronic books.

The concept of networked books (the abbreviation n-book) and at the same time, the idea of networked books appeared in early 2005, when the lecturer of creative writing of the Columbia University, Kim White published a blog entry in which she reflected on the possibility to create such books. She called for the creation of books as the network/network books. In her opinion the networked book is one which many authors would co-work on, including the anonymous and/or such one which could consist of comments and annotations added by a large circle of contributors etc. (Thomas 2009, p. 457; White 2005). A networked book is a book created in the network (the Internet) with the use of the network, i.e. network information technologies and Internet users (Adams, Gibson, Arisona 2008, p. 125). Among the features of the networked book, the most striking one seems to be the formation of the text in the hypertext environment, which also allows to create hyperlinks. The hyperlinks in the networked books may direct to other

fragments of the same book and to other network resources, beyond the book. Therefore, the author may establish a hypertext link to the contents controlled by other users. Another important feature of the networked book is the ability to obtain subsequent parts (fragments) of the book by using the Internet information technologies. e.g. RSS, e-mail. The consequence of including the book in the network context is the ability to attach audiovisual content to the written word (digital). Unlike a printed book (and also an electronic book), the networked book is open, i.e. it is unlimited and unfinished (Kitzman 2012, p. 121). It is open in the sense that at the stage of creating the content the author and readers can modify this content together.

The concept of networked book appeared not only in theoretical statements in which researchers from different scientific backgrounds explained what they think networked book should be characterised by, but it also appeared in specific projects that have been implemented and completed. Among the projects (initiatives) which were referred to as the *networked books* one should mention Robert Frenay's "Pulse: The Coming Age of Systems and Machines Inspired by Living Things" (Vershbow 2006). This is a networked book that was available free of charge from a dedicated website. Registered subscribers received subsequent book extracts via RSS channels, e-mails and through a blog (Vershbow 2006). The book was available on the Internet at: <http://www.pulsethebook.com> (today it is no longer available). Hyperlinks lead the readers from the book text to the sources indicated in the text, i.e. to other websites and network resources. Another project was started in 2007 by a media expert professor Siva Vaidhyanathan "The googlization of everything" (Albanese 2007, p. 13). In the project, the author wrote the book publicly on the blog website, which was automatically used as a space for communication with readers and between readers. The selected readers' entries and comments were incorporated into the book (Albanese 2007, p. 13). The project of the networked book entitled "GAM3R 7H30RY" was initiated in 2006 by a media expert McKenzie Wark (Northmore 2006, p. 20; Wark 2006). The chapters were published on the network on a webpage dedicated for this purpose, which is incidentally still available (Wark 2006). The readers helped to write this book and the social potential of the Internet was used. Readers were given the opportunity to speak about what the author writes, to ask questions and to modify the author's statements, etc. through an Internet forum. Comments from the readers have been used in the book (Northmore 2006, p. 20).

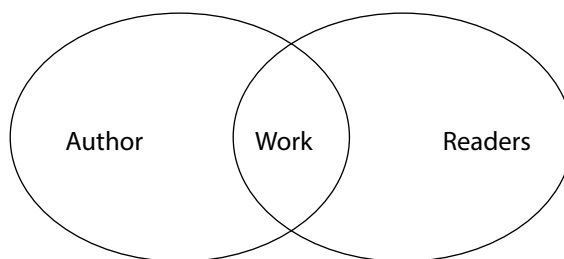
Looking at the projects referred to as networked books, it is noticeable that they were all completed at a certain moment, i.e. they were published in the form of traditional printed books (Frenay 2006; Wark 2007; Vaidhyanathan 2011). Although in some cases the websites illustrating the process of creating the text are still available on the Internet, the interactive functions have been suspended. The texts of the communication can be still followed but they cannot be modified any longer.

Ben Vershbow explained that the projects of the so-called networked books assume that they will be completed in the form of a printed book (Vershbow 2006). Networked book is a “new”, i.e. network-based method of creating a book text with the use of network information technologies together with Internet users (this is also how I am going to examine the networked book). The concept of a networked book is stimulated by the dedication of the readers’ community in the social life of the book. As one can see even though the author’s role is slightly different in the process, he/she is still necessary in creating the text that is finally used in a printed book. Traditionally, the author is seen as someone working in isolation, while in this case he/she creates in front of readers’ eyes in close cooperation with them (Vershbow 2006). Readers – Internet users can speak on excerpts of the book published successively online, and thereby they affect its ultimate shape. Finally, however, the author is responsible for the content as he/she is the one to sign the work. The main idea of the phenomenon of networked books is not to create a new kind of book, but to create books in a specific way. A networked book is a book resulting from intercommunication between Internet users and the author (authors), and thus it is the book which is formed with the use of network communication (synchronous, asynchronous), i.e. it is formed through the Internet.

The term networked books indicates a specific way of creating books or more specifically the creation of the text. In other words, it points to a specific approach to the stage of creation of the work. While speaking about a networked book one falls into a language trap, because what functions on the Internet is only a text which feeds a book, after certain modifications, but it is not a book as such. Since today these books are available in a printed form, it can be concluded that only the stage of creating works, their dissemination, and reception were networked for a certain period of time, i.e. for as long as the content of these books is available on the Internet.

The added value of networked books creates functional network record of all the communication which was held during the work. The text that functions online is much more extensive than what is to be (or was) later published in print. This can be represented in a graphic form (see Figure 2).

**Figure 2. Networked book**



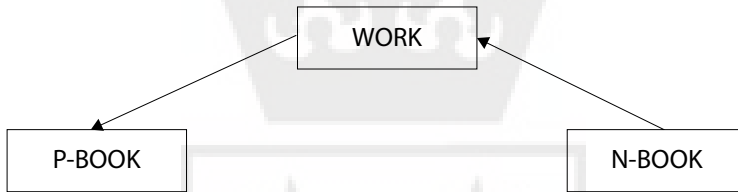
Source: own work.



The author's and readers' opinions were marked with an ellipse. The product of these statements is the work that is to be sent to print. The whole image presented in the scheme makes a networked book. Therefore, a networked book consists of both author's and selected readers' statements which are chosen to be incorporated into the work.

One can propose the following definition of the term networked book – it is a “revealed and recorded (with selected information technologies) process of creating a work, i.e. intercommunication between the author and readers, in which the work is created” (see Figure 3).

**Figure 3. Functioning of a networked book**

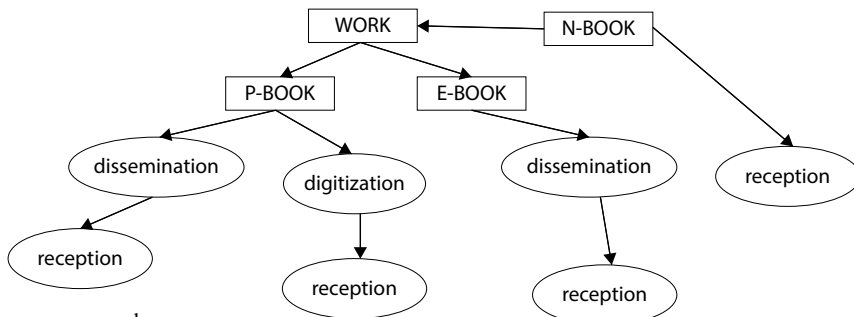


Source: own work.

On the Internet there is a n-book, which is the record of the communication. The aim of the communication is to write a literary work. Therefore, the work is created on the Internet with the aim of publishing it in the form of a printed book.

At the end of this part of the article, it is worth to summarize it with a scheme presenting the relation between the selected “actors” in the book (see Figure 4).

**Figure 4. The relationship between a printed book, an electronic book and a networked book**



Source: own work.



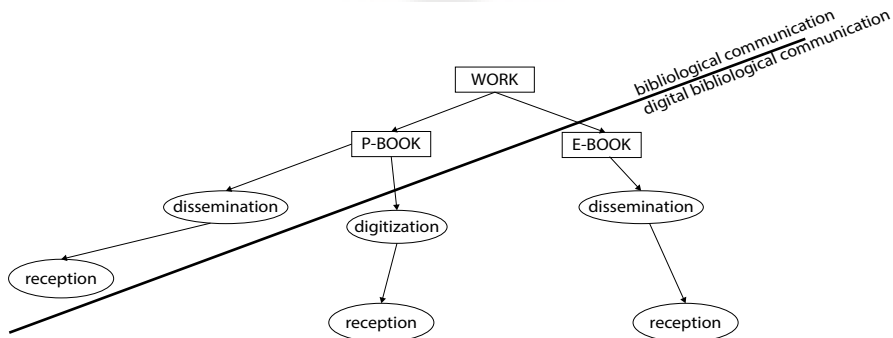
Essentially, a networked book is to be published in print. Despite this, the whole process of creating the text which is meant to feed the printed book is frequently presented on the network for certain period of time. Therefore, the reception of this text may take place on the Internet through selected information technologies. The network is then a kind of platform for both the creation and later reception of the work. The place marked as an n-book is the place of communication. The work is the result of this intercommunication. The reception of this work may take place after giving it the form of a printed book (or an electronic book) or at the place where this work was created. In this case the recipient will be able to see a much larger batch of material than the part which is to be included in the text of the book.

As one can see in the schema (see Figure 4) the starting point (for the printed and electronic book) and the final point (for networked books) is the “work”. It seems to designate a point of contact between specified forms of books. The work is materialised in a printed or electronic form, while network communication can contribute to establishing such works.

### *Digital bibliological communication*

In an attempt to characterise the phenomenon of digital bibliological communication, it is noticeable from the very beginning that digital information technologies are used for the realization of traditionally understood bibliological communication. With slight modification of the above presented diagram (see Figure 4), one can propose a schema, in which the relationship between the printed book and the electronic book in the context of bibliological communication and digital bibliological communication can be observed (see Figure 5).

**Figure 5. Bibliological communication and digital bibliological communication.  
The relationship between a printed book and an electronic book**



Source: own work.

Bibliological communication takes place in the extra-network and extra-digital environment. Yet, digital bibliological communication takes place in the digital and/or network area. In this case, digitality is mandatory, while the network-based functioning is optional.

Digital bibliological communication is concerned with the use of digital information technologies to realize the processes of bibliological communication. It primarily concerns the stage of book production when the work is given an electronic form. One should notice the fact that the process of preparing such publication is identical in different aspects, as in the case of a printed book, i.e. selected entities engaged in bibliological communication evaluate and correct the work. The text is checked in terms of language, contents, and is given appropriate form that ensures its readability. However, the way of text materialization is different. Then, the electronic book is placed on digital media and/or network space. Such an object can be promoted outside the network, for example in the library circulation and/or through the Internet, for example booksellers' and publisher's web pages, websites promoting e-books, social networking sites where people exchange opinions on them, etc. Electronic book is also specified in the form, for example dedicated to specific book readers. The reception of electronic book uses digital information technologies (specific software and hardware). In this case e-book is a means of communication.

In the second variant of digital bibliological communication p-book (more precisely digitized copy of p-book) is a means of communication, and its (digital bibliological communication) essence is to use information technology to implement and intensify bibliological processes. Books that are digitized include those that were transferred into the public domain, whose authors agreed to the transferring of the text into a digital form. Sometimes it is done in an unauthorized way. Dissemination of books by digitizing them is extremely common, if you look at the number of digitalization projects, as well as the scale of the illegal grassroots digitisation, whose effect is adding digitized books in an unauthorized way.

Information technologies are also used at the reception stage. If the book is available in a digital form, it is recorded on appropriate digital media. If the book is in an electronic or digitized form, it is available on the Internet. Every book that is available in a digital form can be published on the Internet. Digitized and primarily digital books that are placed on the Internet are ready for immediate use. The book that is available on the Internet is globally accessible which affects its easier dissemination, therefore, the book is available instantly in the network. However, in the case of books that still function outside the network, the stage of consumption is not possible with the use of network technologies, but it is still possible with the use of digital technologies. The fact of providing information about a book via Internet intensifies book consumption as network services enable a larger number of potential readers to obtain information about the book.

However, if one considers a book in the network, it is possible to notice that every book in this context has a greater chance for intense participation in the

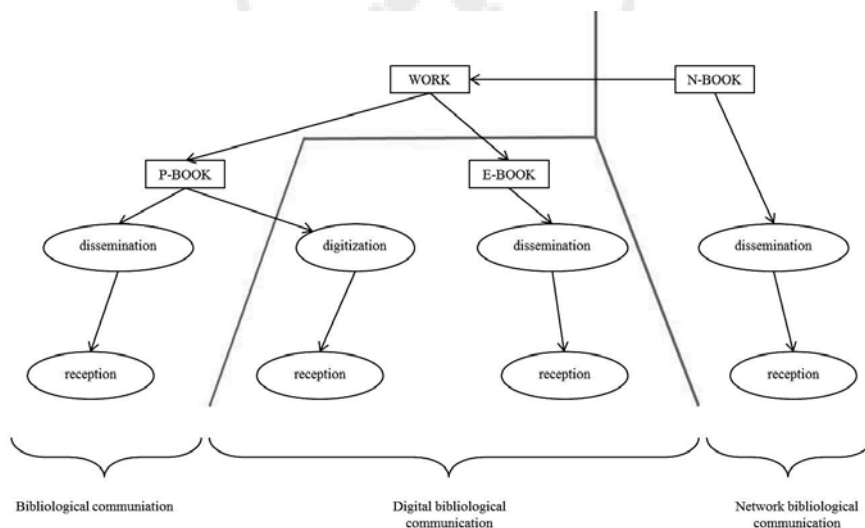
communication exchange. Thanks to appropriate information technologies it begins to take part in communication. Network technologies may bring Internet users to an appropriate book (to its part, page, paragraph, sentence, word). What is more, information technologies allow combining the book with other books, similar in some respect, between which specific connections are defined. “Silent” books on library bookshelves “revive” when put into network (e.g. in a digitized form).

Information technologies (digital and/or network) constitute a context in digital bibliological communication. The key aspect of this type of communication is to strengthen bibliological processes with different information technologies.

### *Network bibliological communication*

The implementation of internet technologies in bibliological communication gave rise to new forms of communication, characteristic only of the network. In the first place one should recall the schema presenting the differences between a printed book, an electronic book, and a networked book (see Figure 4). The schema (Figure 4) will be supplemented with additional elements that make a distinction between bibliological communication, digital bibliological communication, and network bibliological communication (see Figure 6).

**Figure 6. The relation between printed book, electronic book and networked book in the perspective of bibliological communication, digital bibliological communication, and network bibliological communication**

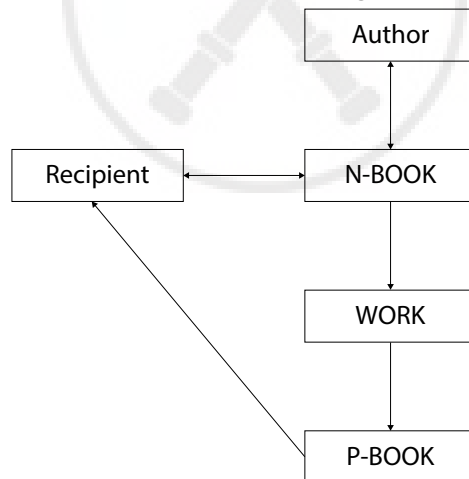


Source: own work.

Red lines separate bibliological communication from digital bibliological communication and network bibliological communication. Network bibliological communication is a variant of digital bibliological communication as it is done with the use of digital information technologies, which are also network-based. They are used already at the stage of creating the work together with the writer (*collaborative writing*). Such an operation seems to accelerate the whole process. Network technologies are used to disseminate and, specifically in publicizing, to make the networked book available, and to facilitate its reception. Certain entities take part in the network bibliological communication. They are the authors in the first place who can co-create the work – the book. They advertise and publicize it.

In the interactive network bibliological communication even broader communication of everyone with everybody is possible in all directions. Therefore, the influence on selected processes, especially the creation of work, becomes even easier. In an attempt to build a schema of network bibliological communication, one may realise that it is impossible to create one universal model. This primarily results from the fact that a different schema should be applied for a networked book that was later published in print (in the form of a printed book), and a different one for a networked book that functions on the Internet only, and, for some reasons, was never released in print (although it was intended to be published). However, one may try to propose a schema of network bibliological communication. Such a schema might have the following structure (see Figure 7).

**Figure 7. A schema of network bibliological communication**

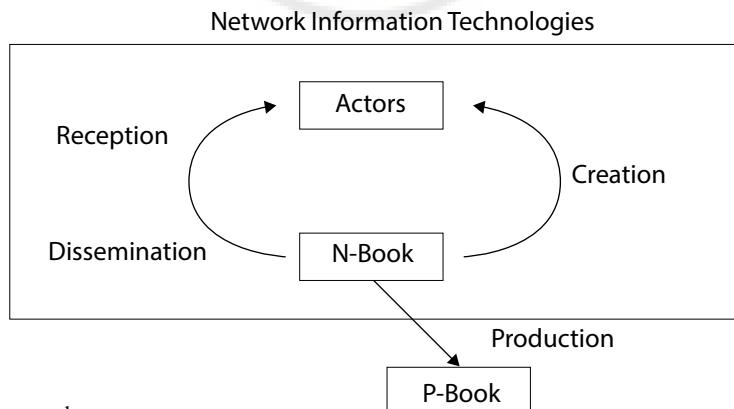


Source: own work.

In the schema (see Figure 7) a bond between the author and the recipient (the reader) is created. A change of the recipient/author roles also happens. Therefore, in the schema there are vectors with two opposite directions, i.e. from the author to the n-book and the other way round, from the recipient to the n-book and the other way round. Both the author and the recipient may add contents to the n-book and read them, at the same time. N-book is, therefore, a platform for communication. The author and recipients communicate via n-book and create the text of the work, which is later published in print (p-book) and reaches the recipient. Additionally, this form of communication involves the network and indirectly appropriate digital and network information technologies. N-book symbolises also the use of network information technologies.

The location of bibliological communication in the network introduces two important elements to the communication model: first, the possibility of communication (interaction) of everyone with everyone, second, the presence of network information technologies, which are used in the communication. Despite all the difficulties in defining a full schema of network bibliological communication model such attempts are made. The network is made of information technologies and entities. While bibliological communication comprises of the entities and stages of placing a book in the social circulation, network bibliological communication combines such understood elements of the network and the components of bibliological communication model. Therefore, the model of network bibliological communication should include the entities functioning in the network and the entities participating in bibliological communication, network information technologies, the process of creation and bibliological processes: production, dissemination and reception of the book. Bearing in mind the implications concerning network communication, it is possible to propose a schema of network bibliological communication (see Figure 8).

**Figure 8. Modified scheme of network bibliological communication**



Source: own work.

Despite the fact that book production takes place outside the network the process was placed in the schema of network bibliological communication (Figure 8), as it seems to be an important part of the communication model. The authors of networked book projects assumed that the books would be (and in most cases were) published in print (p-book). Numerous actors take part in the network bibliological communication. Among them there are authors and recipients, i.e. the people who create the n-book and disseminate it. Certain actors initiate the creation of the n-book. Yet other actors (or the same ones) disseminate the n-book and, finally, the recipients (readers, users) are recruited from the same group of entities. All these processes take place in the network, therefore, with direct use of network information technologies.

Network bibliological communication is therefore concerned with the creation of a work through the Internet and with network users (potentially all) influencing the process. After that the book is published outside the network in print (p-book). The publication is publicized with information technologies and outside the network, and finally, the reception of the book may be realised in both printed and networked form. The communication between the author and recipient as well as the message itself (the published book or the intention to publish the book), i.e. what is communicated, are important. Consequently, network bibliological communication becomes the result of the achievements of network communication and the book culture.

Comparing bibliological communication beyond the Internet and network bibliological communication one may enumerate the following elements. Printed books are the medium of communication in bibliological communication. In network bibliological communication this role is played by a networked book. One should remember that the intention of the networked book writers is to have their book published in print. Therefore, it should be stated that network bibliological communication boosts bibliological communication. The use of network-based information technologies ensures faster creation of work, and consequently, faster writing and publication of the book.

In bibliological communication books are the means of communication, thus bibliological communication is the communication with the whole world of books. On the other hand, digital bibliological communication is aimed at making the whole world of books available *in situ* on the accessible and easy to browse Internet. Networked books, which are intended to be published in print, are part of the network bibliological communication. However, before they are published as p-books they function in the network in a form that cannot be classified as a part of the traditional world of books. Yet, functioning online, they are available for readers and their reception is possible. Network form of this pre-book creation facilitates quicker dissemination of its contents and influences broader spread of the p-book that stems from the n-book.

In traditional bibliological communication the book appears as a system, around which there are specific entities that influence its structure and func-

tions. In network bibliological communication there is a networked book and its surrounding is the whole network. The creation and functioning of the n-book is determined by the network structure. However, it is noticeable that the contents created in the network functions and may function beyond the network (p-book). Thus, traditional communication model of the book closes network bibliological communication.

Bibliological communication and network bibliological communication seem to supplement one another. The models are the example of synergy between two different environments that are frequently considered to exclude each other.

In bibliological communication there are entities (people and institutions) which are engaged in introducing a book into the social circulation. They are frequently people who deal with the issue professionally. In network bibliological communication there are also non-professionals who can take part in the enterprise. All Internet users are/can potentially be engaged in network bibliological communication.

In bibliological communication that takes place beyond the network and in network bibliological communication the following processes can be enumerated: the creation of work, production, dissemination, and consumption (reception) of the book. Network bibliological communication combines the elements of bibliological communication and the characteristics of the network. Bibliological communication is a form of indirect communication in which the book is a medium. Despite the fact that network bibliological communication is also a form of indirect communication, there are certain categories of communication that are unique to it, such as: synchronic communication (a number of people working simultaneously) and active communication (e.g. the network directs the user to the right part of the n-book that had been published on a blog).

Network and extra-network bibliological communication assumes possible interactions between the actors that participate in them. The actors can communicate easily with one another and influence all selected processes of bibliological communication. One should remember that the interactions are optional in case of extra-network bibliological communication and obligatory in case of network bibliological communication.

### *Conclusion*

Communication potential of the book, its clarity and social range cannot be overvalued. On the one hand, the Internet was aimed at incorporating the whole world of books (digital bibliological communication), on the other hand, it is used to increase the volume of the published production (network bibliological communication), as it is being broadly digitized. Network technologies are used to accelerate the process of book creation with the future aim in print publishing (network



bibliological communication). It seems that the book (p-book) is necessary in social communication.

Looking at such objects as electronic and networked books, it appears that they are not books as such, because that they do not have the physical form of a book (p-book). However, if one looks at the process of their incorporation into the social circulation, i.e. looks from bibliological communication perspective, it turns out that the process is similar to the one with printed books. First the work is created, and then it is prepared for publication. Subsequent steps include publication, dissemination, and reception.

Finally, one can state that the Internet and the book do not exclude one another but build a synergy. On the one hand, information technologies facilitate incorporation of book into the social circulation. On the other hand, information technologies are used in creating the text of the work, which is to be published in print, thus they build up the position of the book as a central medium of communication because network technologies are used to bring new books to life.

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## ABSTRACT

### **Bibliological communication and the World Wide Web**

The theme of the work is the bibliological communication understood as a process of placing books in social circulation. It consists of the following stages: creation of work, production, dissemination and reception of the book.

The article attempts to answer the question about changes that take place in the model of bibliological communication and in its subject (book), when it is implemented in a Web environment, making full use of network capacity and hypertext.

From the perspective of bibliological communication, i.e. referring to the concept and terminology of bibliological communication, it was possible to characterize and describe the phenomena of the use of digital and/or networked information technology in bibliological communication. The paper proposes a scheme of bibliological communication and describes the role and place of the Internet, the World Wide Web in particular, and the information technologies in the bibliological communication.

The electronic book, digitized book, and/or networked book became a tool of communication. In addition, the course of bibliological communication changed and began to take digital and digital-network forms. The result of the analysis is a description of the two new forms of bibliological communication. The first of them was called digital bibliological communication. It was analyzed and characterized (i.e. its course and forms it may take) and a model of digital bibliological communication was also proposed. The second was called network bibliological communication. It was also the subject of description, and the author's model of network bibliological communication was also proposed.

**Key words:** book, new (digital) forms of books, Internet, World Wide Web