

Digital Humanities and Modern Libraries

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ABSTRACT: According to the Digital Humanities Manifesto 2.0, the first wave of digital humanities in the late nineties and early 21st century was primarily focused on large digitization projects and the establishment of technological infrastructure, which resulted in expecting the cooperation, interactivity, interdisciplinarity, multifunctionality, multimediality, dynamism, speed, accessibility and searchability from libraries as cultural and educational institutions. They are, along with museums, archives, theaters, cinemas, nowadays, as well as throughout the history, active agents of intercultural and interethnic communication. Primarily due to their general ethical and aesthetic values, characteristics of particular cultures that they are profiling, and then due to the standardized professional peculiarities that allow permeation of library science with other disciplines, as well as horizontal connectivity within the profession in the interest of the nation and its culture. Through forming a digital collection of our humanities, we are returning debt that we have towards its creators, previous generations, and commit the following generations to continue to preserve our cultural, spiritual and national identity.

KEY WORDS: librarianship, digitization, digital humanities, culture, information.

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“History of libraries is the history of serving” - this is how Frederick Friend, one of the initiators of The Scholarly Publishing and Academic Resources Coalition (SPARC) summed up his own and general knowledge. “It is also the history of changes (...) there is only one value that is retained from the past in the new environment. The mission of the library can be simply explained as enabling services essential to users. This mission

is shared by all libraries in every generation and throughout the world.”¹ Until recently, we approached the mission of the library in the traditional manner, and nowadays, for its fulfillment, we expect: collaboration, interactivity, interdisciplinarity, multifunctionality, multimediality, dynamism, speed, accessibility, searchability, hence, a set of these properties and activities led contemporary theorists to name such a library virtual or

¹ Frederick J. Friend, “New Mission? Or Old Mission with a New Face?”, SPARC – the Scholarly Publishing and Academic Resource Coalition, accessed March 15, 2004, <http://www.lib.pku.edu.cn/98conf/paper/a/FredFriend.htm>

postmodern. Even nowadays, and with time it will be increasingly the case, libraries are going beyond the scope of the centralized, physically bounded, static, formally organized units and receive the epithets of problem-oriented, technologically advanced, and, due to their association, financially unfettered, efficient and professional institutions.

The need and desire of both libraries and individuals to comprehend and present information on everything that was published worldwide dates back long ago, it is embodied in bibliographers' efforts to compile and publish international bibliographies, and with each new technological step it seemed all the more reasonable and more achievable. Despite the fact that the tendency for creating a universal international bibliography was increasingly present from the 15th to the 19th century, individual, and during the 19th and the 20th century collective efforts, have not been able to reach that dream. Bibliography was not seen at the time, and neither should be now, as a product of describing the manuscript or printed publications, summary of data on publishing production, but it also included bibliology and history of literature. In the late 19th and early 20th century, when Charles Amy Kater succeeded at promoting within the American libraries difficult to implement, inspiring and controversial idea of cross-catalog and cross bibliography, which includes unification of several until then, and even nowadays, known author, subject and professional catalogs, as well as many other forms of queries that were answered by a corresponding determinants, we can say that the idea of databases was conceived, only the technological solutions of the time could not live up to his theoretical lucidity. Therefore, this hypermodern idea was accompanied by a technological realization only a century later. Neither then nor later, cross-card catalogs were not implemented within the European libraries, and besides the ones existing in the US, they were only partially realized in the Australian libraries.

In the twenties and thirties of the 20th century, the idea of centralized cataloging occupied at the same time libraries from the less and more developed countries, including the former Yugoslav national libraries, which, after the country became independent, followed all the European and international projects with a delay of only two to five years.

In the period from the sixties to the eighties of the 20th century and within the projects that were proposed by international or local communities and organizations, libraries gathered around certain ideas, and those were the following within the IFLA organization: unified procurement, international standardization of catalog and bibliographic description, international unique numbering of serials and monographs, introduction of cataloging in publication, developing inter-library loan, comprehensive bibliographic control, universal availability of publications, protection and conservation of library materials, shared cataloging, respect towards the copyright, universal flow of information and telecommunications.

On the territory of Yugoslavia, the fifties of the 20th century were particularly associated with the completely synchronized state activities in this field as a form of democratization of knowledge, spread of literacy and enlightenment. The beginning of the seventies of the 20th century was marked by the new initiative of establishing a consortium of libraries (present in the literature since the fifties), representing more freer community of members and integrating all the previous forms of association, branch and functional, as well as geographic, demographic, regional, professional type of associations. Technological advancement certainly did not cause the appearance of the consortium (known as a form of association within the industry, economy and education since the mid-19th century), but it did facilitated its emergence, accelerated and contributed to the prevalence and complexity of its work during the nineties. Jordan Scepanski analyzed the purpose of linking libraries in the consortium: "Consortia are mainly established in order to improve the purchasing power of the institutions - associates, availability of different resources (sometimes printed, nowadays digital, in the future maybe even human resources) and the development of automated services. (...) The consortium is not a library association, although some of them are involved in its work. The consortium is not a system of higher education, nor regional or state public library system (...)".² There are no local, national, economic, technological, typological, human, political, psychological nor federal boundaries for consortia, which is why it is so hard to define

them. They are based on common goals and interests achieved through agreement, cooperation and flexibility of their network. Voluntary association, centralized administration and economic benefits are three basic principles underlying the operation of the consortium, which focuses mainly on procurement and cataloging.

Both the consortium and digital library are dependant on the education and professional commitment of the librarian. In his welcoming speech and visionary words at the opening of the International Book Fair in 1935 José Ortega predicts: "The librarian will in future have to guide the uninitiated reader through the necessary jungle of books, and to be a therapist, hygienist of his reading. This confronts us with the opposite situation than the one we had in 1800. Too much is being read nowadays: comfort enabling that with negligible or almost pitiful effort people may adopt a bunch of ideas stored in books and journals has slowly accustomed a man, and has already accustomed the average man, not to think for himself and to review the read, which is the only true way of adopting the ideas. It is the most damaging and essentially the most negative feature of the book. (...) A good part of nowadays growing egregious public problems stems from the fact that the average man is crammed by inertia with adopted ideas, half-understood, impaired - burdened, therefore, with pseudo ideas."

The invention of the press, classification of human knowledge, development of standards and recommendations for the management, organization and bibliographic description, were just as demanding as it is nowadays new computer technology. Similar to the book which was, at the very beginning of its creation, the privilege of highly educated and wealthy social classes, databases shall nowadays only be used by the same layer of the society if the libraries do not act as intermediaries between individuals eager for knowledge and knowledge itself. During the last two decades, libraries are dealing with serious technological and educational requirements, and many found it difficult to follow them. Identity crisis that the libraries are facing with for nearly twenty years, from trying to place the new media under the

name of mediatheque, and now under the title of information center, disappears in front of the fact that the libraries cherish the knowledge above all, not just the information, and that they make it democratically available, regardless of the form in which it is transmitted, no matter what age, gender, race, economic status, physical or mental disability. Library of the 21st century will resemble the self-service shop of information, if we allow it. Its advantage can be found in its democracy and openness, freedom of access to heterogeneous data, foreshadowed in the acknowledgement of self-service, while the lack is seen in the fact that it often offers placement of information rather than knowledge, with the lifetime conditioned by the economic, political and other social laws. Information can be independent, while the knowledge requires the context; information can be rapid, while the knowledge is acquired slowly. It seems that the Internet has mastered the world. Internet relies upon the power of ideas and, after the first phase of its development which was directly dependent on the security of the system, in the second phase, before its commercialization, it was based, as we all know, amongst other things, on scientific contents, meeting the university needs and inter-scientific communication. There are two issues, discouraging in its intonation and meaning, related, firstly, to the withering away of the traditional in front of electronic books, and secondly, to the retreat of the Cyrillic alphabet and Serbian language in front of the English language and the Internet. We should understand the message that the letter is doomed if it does not find its place on the internet, and at the same time we should not allow the Cyrillic to become a symbol of opposition to European integrations and modernization of the society, as an exaggerated national statement, but rather as an expression of diversity, determining factor of a nation, which uses two letters, and as the evidence of multiculturalism and multilingualism. The superiority of the Internet is reflected in the fact that when capitalized it recognizes singularity, uniqueness, non-repeatability, but when written with the small letter it indicates, democratic, common denominator of opportunities and the right to

2 Jordan M. Scepanski, "Collaborating on New Missions: Library Consortia and the Future of Academic Libraries", SPARC – the Scholarly Publishing and Academic Resource Coalition, accessed March 15, 2004, <http://www.lib.pku.edu.cn/98conf/paper/c/JordanScepanski.htm>

information. It is our right is to be objective and present two types of information. The ones demonstrating that the electronic media and internet suppress traditional forms of communication and learning, since more than 60 million people worldwide are now communicating via electronic networks, which is increasing every month for up to 10 to 15%, while 500 000 books (up to 200 pages) are transferred on a daily basis. We should oppose to this the comprehension, often not pointed out, that only one percent of the existing information is now available in digital form worldwide. To what extent is then realistic the fear that the book will recoil in front of this form, when there is the necessity to transfer the remaining 99% of the information towards other actors. Bill Gates himself recently declared that the users still prefer to print out the text, than to read it from the screen, if it exceeds 3-4 screen pages, which means that the Internet is just a faster system for the distribution of conventional records. As for the navigation on the Internet, often offering numerous totally inadequate responses to cross queries, it is ever more akin to the need, established in the earlier centuries, to classify the human knowledge. Libraries, which were always ready to suit the requirements of the time, are now adapting to the new carriers of information, and offer both hard copy and virtual information, as they are, as Marilyn Gell Mason wrote, "yin and yang of learning, male and female principle, active and passive, dark and light, the sun and the moon."

The volume, complexity and diversity of information outgrown the ability of individuals and library funds, as well as polarized perceptions of librarians of the time as universal connoisseurs or subject specialists. They are all united in trying to master the skills of using telecommunication, computer and reprographic equipment, if possible better than their users, and to bear the burden of responsibility not only for selecting and distributing information, but for training their users for accessing mutual catalogs, databases, electronic publications. For the first time in the history it became possible and, as Besser said, the "divorce" happened, between the digital and physical access to information (Besser 2010). I would say there was a divorce between access to information and knowledge.

Librarianship, on one hand, information science, on the other; traditional forms of organization and management against the globalization of information to which contributes their digital form, and almost surreal and atypical forms of association in order to offer more complex information; economic and political influences on the social status of libraries and digitization of information as the prerequisite for distance learning and globalization of knowledge - are opposites amongst which both librarians and users now found themselves in. Motivation and origins of the spread of knowledge, as well as the pleasures of reading and learning are the same, it is only the technological prerequisites and tools for achieving them that are different. Mutually approaching and overtaking each other, electronic, virtual and digital libraries carry real differences, but they are all synonyms for providing information quickly, which does not recognize the ethnic, geographical and historical boundaries, but is essentially based on the economic ones. The very essence of both traditional and digital libraries is the intellectual product, not its digital form, the meticulous bibliographic data and normative files, not a collection of bits, care for easy storage, cross-sorting and timely presentation of data. Digitized form is actually a surrogate for the original, which was created with the desire to remember its current image, so that the external influences could not hurt it, as well as to open, in the spatial, temporal, legal terms the use of that copy. Informativeness, attractiveness, searchability and legality should be the overall quality of the digital library.

Areas in which the practice of certain scientific and artistic disciplines permeates with the computerization (Schreibman et al. 2004) are opening the ways to the digital humanities.

Susan Hockey sees the beginnings of digital humanities in the efforts of the Jesuit priest Robert Buse to compile an index of all terms (Index verborum) represented in the works of Thomas Aquinas and his contemporaries, a total of 11 million of Latin medieval notions. At the beginning of the collaboration with IBM the publication of the first printed volume of the dictionary was enabled in 1974. Due to the persistence and Buse's visionary insistence on the lemmatization of words, a hypertext version was published on the CD in

1992, which included Latin, English and Italian language (Hockey c2011). A similar approach has been applied by Roy Visby during the eighties for early medieval German texts, by Stephen Parish for the poetry of Matthew Arnold and Yeats, while Mosteller and Wallace confirmed or disputed authorship of a certain literary work by means of the methodology of computational linguistics. Faced with a possible simplification of guarded and processed materials, conditioned by the medium, underdeveloped even according to the expectations of the time, punch cards and their linear order, researchers, and amongst them Paul Bratley, developed especially for the needs of the archives of old Scottish texts, a cost-effective and comprehensive structured COCOA program, which still left out the names, dates and abbreviations (Russel 1967, Hamilton-Smith 1971, Schreibman et al. 2004). A series of international conferences on the subject started with the one organized in Yorktown by IBM in 1964, causing primarily the establishment and scope of activities of the Association for Literacy and Linguistic Computing (ALLC), and then the Association for Computers and the Humanities (AHC) that organized in 1970 the conference in Cambridge during which the role of computers in the areas of lexicography, preparation of text, language teaching, study of stylistics and developing new methodologies for filing, maintenance and use of electronic resources was clearly stated. (Schreibman et al. 2004). The journal *Computers and the Humanities* (ed. Joseph Raben, 1966) and the Centre for Literary and Linguistic Computing (Cambridge, 1963) opened the way towards the consolidation of practice, number of conferences and conference proceedings, establishment of centers at universities in California and Pennsylvania, and consequently to creating deposit of electronic texts, such as the Oxford Text Archives (OTA, 1976; CAFS - Content Addressing File Store). The following decade was marked by electronic discussions and journal *Humanist* published by Brown University, while the Internet, the Web and Mosaic, as the first graphical browser, conditioned appearance of new projects, software solutions and university educational programs in the field of electronic publishing, educational technology and multimedia development (Kings College, London; McMaster University in Canada,

University of Virginia). As in all the sciences, the reliance in the arts in general is on textual, audio or visual information, entirely searchable with no time and space constraints, based on queries that are no longer the author or title, but the key words. Digital humanities are now prevailing not only in the research and education, but also in the commercial aspect. In Epstein's manifesto *The Transformative Humanities*, the establishment of the Center for Innovation in Humanities (CHI) is recommended within concluding remarks, in order to "develop entirely new branches of the humanities able to cope with the rapid variability of the intellectual climate of the 21st century, and especially with the scientific and technological progress." In this sense, Epstein includes amongst the tasks of the Centre the following two: "to explore as to how the new information technologies are radically changing, by defying and encouraging the humanist profession, traditional concept of text and knowledge, translation methods, and ethics of the academic community; to develop a new electronic portal IntelNet for intellectual innovation, which would allow the accumulation and circulation of new ideas within the humanities and transhumanities." Humanities, which, as Sander Gilman said, are "slandered, underfunded, abandoned, increasingly seen as irrelevant" are again related to the man in Epstein's vision. Digital Humanities, consequently, emphasizes Jeffrey Perl, allows abandonment of the concept of self-pity and developing of inventiveness.

Sciences such as library science, library informatics, computational linguistics, and digital humanities, which have reliable empirical or technological basis, retained the status of auxiliary disciplines for a long time, with constant proving of indigenous terminology and methodological specificities. As Hayles explains it, the shift to the term "digital humanities" was supposed to indicate that this field is raised from the not-so-prestigious position of auxiliary science to a true intellectual endeavor with its own professional procedures, rigorous standards and exciting theoretical research (Hayles 2011). Schnapp and Presner have explained in the *Digital Humanities Manifesto 2.0* that "the first wave of work within the digital humanities was (...) quantitative. It mobilized the possibilities of databases for

searching and extracting data, automated corpus linguistics, laid HyperCards in critical sequences. The second wave is qualitative, interpretive, empirical, emotional, generative in its character. It puts digital toolkits in the service of fundamental methodological advantages of Humanities: paying attention to the complexity, specificity of media, historical context, analytical depth, critiques and interpretation. The first wave of digital humanities in the late nineties and early 21st century was primarily focused on large digitization projects and establishment of technological infrastructure, while the current second wave, which can be called "digital humanities 2.0" is deeply generative.³ Electronic literature (e-lit), interactive fiction (IF), Web artifacts, Twitter, social media, sms novels are just some of the products on whose development and analysis can be applied the methodology of digital humanities. Easy access to digital materials, ease of research and sense of progress created a parallel reality from the world of digital humanities. In it, however, parallel doubts coexist: doubts in relation to imprecision, uncertainty and transience of presence of digital texts; in the institutional soundness of scientific communication, in which we often call upon to multiculturalism, multilingualism, interdisciplinarity, collaborativity, while in fact we did not change anything in our scientific methodology. From the beginning of the creation of digital humanities, we are guided by one goal: to protect, preserve and make available in electronic form as many of the cultural heritage of the world. We are nowadays approaching a stage where we should start thinking on how to delete or forget what is less or not at all necessary. Digital humanities, as indicated in the book of Anne Burdick, Johanna Drucker, Peter Lunenfeld (et al.), is actually a collective singular, created as a result of the challenges and a link between the concept - digital and the notion - humanities.

Due to the focused efforts of the United Nations Educational, Scientific and Cultural Organization, the cultural heritage is emphasized as an essential factor of globalization and the pledge of international dialogues, while the usage of new information and communication technologies, through which the cultural heritage is preserved

and promoted, should contribute to the affirmation and achievement of Education for All (EFA) goals, development of democracy of knowledge and enable distance learning. Metadata, descriptive, structural and administrative, are the key to interoperability, accessibility and openness to the use of digital content, they are valuably equipped information that provides physical and intellectual access. Which are the primary requirements when digitizing cultural heritage, i.e. library, archival and museum funds? The primary archival and library requirement is the access to the fund as an independent entity and in its structure, relationship to other funds, in its social role and significance. Detection, identification and retrieval of digital resources will seem simple to any user, who will remain in that belief, if they are well prepared for digitization, neatly and efficiently transferred into electronic form and equipped with appropriate indices and consistent metadata enabling multiple searches of their content. The fulfillment of the following expectations and requirements will contribute to this: cooperation between cultural institutions in the affairs of digitization of national heritage, protection and sustainability of legibility of information independent of changes in hardware and software solutions of the digitization process, originality and creativity of digital databases, preservation of copyright and satisfaction of user demands without economic barriers. The fulfillment of all of these conditions allows us to really call the contents that are thus transferred, sorted and made available digital humanities.

Facing the challenges of education, each digital collection contributes to the spread of information literacy and general enlightenment, digital preservation, storage and use of documentary-historical, cultural and scientific heritage. Between the "idealism" and the "aspiration for efficiency", efforts are taking place, within the educational, scientific and cultural institutions, to answer the demands of today's society as a whole, as well as of individual and institutional users, through education of the staff, organization and disposition of traditional and electronic sources and the so-called virtual world of knowledge. Along with the phrase "open road", which indicates modern

³ Digital Humanities Manifesto 2.0, accessed August 15, 2014, <http://www.toddpresner.com/?p=7>

mastering of information, "the mythology of the open road" is also mentioned, introduced by Cox (Cox 2000). The later could be treated as an expression of admiration and appreciation of vast and varied possibilities of information. It also expresses the irony due to the illusion of freedom of access to knowledge, illusion, because the access is shackled by technological, economic, national, political, legal, geographic, linguistic barriers, of which none remained unknown to us.

On that road, individual products will gradually shut some of our small, or large, but in any way freedoms to which we previously got used to. "Digital technologies are not", Charlie Gere said, "just ordinary tools any more, but they are, for better or worse, progressively becoming participants in our increasingly participatory culture." Within that culture, language becomes an increasingly important need, identification and divergence, and therefore any research in the field of digital culture must begin and end with the issues of presence of conditionally smaller linguistic communities.

We are used to perceive librarians as accurate and reliable collaborators in the process of scientific research, as "the curator of books", and information scientists as efficient and skilled interlocutors, which offer fast, versatile and interdisciplinary information, although they often do not lead towards the knowledge. Can they still retain their polarized roles at the present time, or is the "marriage" between them necessary, as suggested by Colin Steele and Mechthild Guha?⁴ With the inclusion of the new media in the library funds there was a need to harmonize the terminology, so the terms in use are also media library, music library, photo archive. A similar process can be seen in the English language, in which the phrase "teaching library" follows behind the term "teaching cybrary",⁵ currently untranslatable into Serbian language, which means teaching the use of information technology and the use of information technology in teaching. Not only terminologically, but essentially, this process was started at the University of Southern California in 1994,

by accompanying a different approach to understanding the role of libraries with the new distribution of space. Specifically, the space in which the mutual communication of students, teachers and library staff is achieved by means of modern computer equipment, the latest software and technical support staff, is two times bigger than the storage space of the library. All this acts as a disincentive to innovation in the teaching process, and therefore the library serves as an experimental testing ground. Merger of two functions of the library, educational and entertainment function, has led to the creation of a new term that refers to this unexpected combination of qualities, "edutainment", remaining untranslatable into our language for now. Maybe there will be a syntagmatic compound indicating a new profession in the next section of the road that librarians and information scientists are currently following as a confirmation and recognition of this phenomenon.

The essence of traditional as well as digital archives and libraries is the intellectual product, to which digital form, thorough bibliographic data and normative data base, provides duration and vast distribution. Digital collections lie upon formal, subject-matter, expert, as well as regional local, national principle. Digitalized special collections are our cultural heritage, historical retrospective, our warm national identification in a global "estranged" world. Planning the process of digitalization from the moment of setting goals, selection of funds, methods, procedures and techniques, equipment, through staff training, financial sources, leads also to timely achievement of defined goals. The lack of plan or its inconsistency lead to loss of money as well as information.

Whilst the advantages of digitalization in the domain of usage are recognized most convincingly, in the domain of protection they are below those which are bound to so-called traditional media. Their characteristics that, if there are no commercial restrictions, provide absolute accessibility, not influenced by time and space, as well as maximal protection from fraying in the direct

4 Colin Steele and Mechthild Guta, „Staffing the Digital Library of the 21st Century”, SPARC – the Scholarly Publishing and Academic Resource Coalition, accessed March 15, 2004, <http://www.lib.pku.edu.cn/98conf/paper/f/SteeleGuha.htm>

5 Peng Junling and He Haidi, „The Application of Modern Information Technologies and the Intensification of the Education Function for Academic Libraries”, SPARC – the Scholarly Publishing and Academic Resource Coalition, accessed March 15, 2004, <http://www.lib.pku.edu.cn/98conf/paper/a/PengJunling.htm>

contact of the user with precious material, can't completely overcome objections which have often derived from high expenditures in connection with equipment, work force, as well as their short life-span from various reasons, but also for great investments and efforts if we want their lifetime to make more durable. Consequently Lutherhand concludes with skepticism that digital media are "very big luxury", because "everything that you don't take care of regularly, won't one day be available". The solution for archives and libraries is the multiplicity of media, since no carrier of information ensuring eternal durability has not been found so far. Hybrid microfilming, which enables digitalization of microfilm contents, and not the document itself, in that manner becomes desirable protection procedure of documentation for many institutions which safeguard cultural heritage, because it secures microfilms as well as digital entry as final products. Questions on this theme which were posed by Dagmar Gizberg have provoked Lutherhand to give the following answer: "Let me be frank, I relate to this problem with a healthy portion of professional cynicism. We, archival technicians, in fact live with the notion that cultural goods sometimes even disappear. Because of the great quantity of all of that we can't do anything else but to preserve the remains. This is also true for digital media. For me it is evident that a lot of that we have today, in 15 to 20 years time won't exist in that form. Simply because the safeguarding is too complicated, the interests and general political circumstances have changed, and costs of the maintenance are too high. And then these beautiful, multicolored castles in the sky won't exist anymore. This is not anything unusual. There is no need for any dramatization. But we must not fool ourselves. If one upholds that data are preserved forever by digitalization, then this is just as blurring the eyes."

Questions on dying out of books, as well as on restrictions connected with their usage are posed on a daily basis, while the electronic media are considered to be the saviors in the age of abrupt expansion of information and attempt to meet the need for their overpowering. However, being aware that the digital world rushes only now towards its peak, we should say that there are no rare cases when it is experienced also as a cause

of its own possible elimination.

Allow me to draw the attention from the general to the local, national plan. The process of digitalization, and therefore the very development of digital humanities, in Serbia shouldn't be left to the enthusiasm of individuals, financial advantages of certain institutions, arbitrariness of local government, attractiveness of particular projects. These are all the factors which will influence and contribute to them – without them it is not even possible to round it up. Inconsistent, extremely decentralized, which would not necessarily have to be a flaw, automation of activities of educational, scientific and cultural institutions is a process that neither theoretically nor practically is not yet rounded up in Serbia, since the factors which should contribute conjointly to their realization do not participate in that process in a timely manner. Digitalization of cultural heritage in libraries and archives is the core of general national system and for the purpose of its establishment and perseverance of its significance in the international framework as well, this process should be led in a meaningful and systematic manner.

Therefore, recent experiences and real needs of users and international public, recommend phase approach to the process of digitalization: get familiarized with the guidelines for digitalization which were formulated by UNESCO, MAS, IFLA; become acquainted with existing software, which could be used for free, as well as with the possibilities of building ordered software according to the needs of archives and libraries; joining consortiums in accordance with the project task in order to protect their interest; creation of national guidelines and instructions for digitalization which would define precisely: purpose, contents, value, physical state of the materials, intellectual property and regulation of authorial rights, necessary infrastructure, project costs and financial sources; professional specialization of staff who would be able to answer new needs; involvement in international projects, for financial effect which archive and library could have, as well as for general transparency of activities and inclusion of local digital collections into global system.

Guidelines for projects of digitalization for public property collections, especially those in libraries and archives, are the result of research and

compression of conclusions of two organizations, IFLA and MAS (International Archival Council), presented to UNESCO, with distinct awareness of the author of this project that there is no general collection of recommendations completely acceptable for every institution. General conclusion which must not be neglected is that digitalization is not protection of funds, that it is not cheaper, neither safer nor more acceptable variant than microfilms, undoubtedly always dependent upon hardware and software solutions (Watters and Garrett 1996). Microfilm still remains transient form, and conservation and restoration fundamental modes of protection of physical carriers of information. Although in developing countries they sometimes put equality sign between those two solutions, digital form protects original only as much as it reduces the degree of its usage. Taking into consideration that the National Library of Serbia and Library of Matica Srpska as the national libraries, according to the Law, national sentiment and their real leadership role and importance, as well as the ministries for culture and science, are institutions that channel expectations of all libraries, museums and archives, it is important to emphasize that in 2005 they concluded that projects of digitalization of national cultural heritage should be supported.

After UNESCO had proclaimed 2002 to be the year of protection of global cultural heritage, several institutions have joined around the task of forming necessary National Centre for Digitalization: Archaeological Institute of SASA, Archives of Serbia, Yugoslavian Film Institute, Faculty of Mathematics from Belgrade, Mathematical Institute of SASA, National Library of Serbia, National Museum from Belgrade and Republic Bureau for Protection of Cultural Monuments, and were also supported by Museum of Film Institute, Matica Srpska and Archives of Yugoslavia (respectively Archives of Serbia and Montenegro) wishing that Centre represents "prototype of the model of cooperation within scientific and cultural institutions in information society of the 21st century". Digitalized and adequately represented national heritage in the era of contemporary computer-oriented societies constitutes, as it is stipulated by mission of the Centre: "one of a kind proof of the existence and continuity of nation in time

and space, possibility of cooperation with our national communities in the region and in Diaspora, possibility for cooperation with developed countries on contemporary plan of interlacing computer sciences and their application in culture, economically speaking significant value that could bring financial profit in various manners." One should bear in mind that one excellent initiative, such as procedure of founding the Centre and concern for the process of digitalization, do not live "detached" from libraries, archives and other institutes of culture, science and education. Even the high quality realization of digitalization of cultural heritage could be miscarried investment if conditions for its sustainability and availability of results were not provided, not to mention reversed economical effects of commercialization of usage of digital entries. From the point of view of usage of digital collections the data on their maximal accessibility during all 24 hours through the whole year in international framework is always accentuated. The set of digitalized national library and archival collections constitute European Digital Library and Memory of the World. "Distinct national strategy could stimulate larger involvement on global level" (Bultmann 2005). Thus, on the basis of experience of kindred organizations in the world the National Centre for Digitalization in Serbia was in fact created as organization which formulates and develops national strategy – non-restricted by demands of certain groups, organizations or regions; supported by the work and ideas of prominent cultural, scientific and educational institutions; protected and promoted by the authority of intellectuals which contribute to their advancement; channeled by the approved library and archive "tools", such as inventories, registers, catalogues, bibliographies of digital projects and their contents; coordinated and controlled by renowned researchers. "It could be said with great certitude", concludes Cvetana Krstev, "that researches and plans in the domain of digital libraries haven't still reached their peak. Many questions, especially those connected with standardization, more complete consideration for semantics of objects and more qualitative service towards users has still remained open. Very active researches in the domain of content analysis (natural language, image, sound) remain extremely

significant for further development of digital libraries" (Krstev 2002).

National Center for Digitization, together with the SASA institutes (for Serbian language, Ethnographic and Balkan institutes), Archaeological Institute, Institute for Literature and Arts, City Library "Vladislav Petković Dis" from Cacak and the Center for Digital Humanities founded The Association of researchers of the institutes for humanities, whose goal is to create a digital collection of scientific papers, local journals, old and rare books, manuscripts and archival materials, doctoral dissertations. The Association has then launched an initiative to create the Internet Library of Serbia for the Humanities and Arts IbiS. The aim of IbiS is the presentation of Serbian cultural and scientific heritage and current scientific production within humanities and related sciences to a wider audience - professional and scientific, domestic and international, the preservation of cultural identity, domestic public education, planning and prioritizing of digitization and presentation of cultural diversity in the European environment.

In the meantime, while the associations and consortia do not take the priority, the Digital National Library of Serbia and the Digital Library of Matica Srpska were built, if summarized from their portals, "in accordance with the principles of open access to knowledge and information (...) and represent the national public good." Their digitized collections are consisted of: newspapers and journals, books, collections of cyrillic manuscripts and old printed books, old and rare books, catalogs and bibliographies, whole libraries and legacies, photographic documents, posters and documentary material, engravings and visual materials, cartographic materials, oral poetry and various other materials. Within the Library of Matica Srpska the priority is given to publications that are described in the regular editions of the Cyrillic Manuscript Books BMS and the Catalog of Old and Rare Books BMS, as well as to the library publications. Those two most important digital collections of ours include more than 1,400,000 documents. Collections belonging to public libraries of Pirot, Pozarevac, Leskovac, Loznica, Sabac, Cacak, Sombor, Jagodina, Herceg Novi, Smederevo, Kraljevo, Uzice, Novi Pazar, Bor, Nis, Valjevo,

Vranje will, hopefully, soon be available through the website of the Digital National Library of Serbia, and, thus the legally defined parentage function of this library will be realized in the virtual world as well. University Library "Svetozar Markovic", considering that it provides full support to the scientific and educational work of the University, pays particular attention to the repository of doctoral dissertations, electronic bibliographies of the teaching staff and the inclusion of users with special needs, who, thanks to modern equipment, have the option of obtaining audio and video records of searched material.

Virtual Library is a powerful tool of comparison, research and of directing collective efforts towards a common goal of developing e-learning. The Faculty of Philology of the University of Belgrade, inheriting two hundred years of higher education tradition in Serbia, visible and unique in the educational map of Serbia and Europe, considering the number of languages taught at its premises, its resources, personnel and interests, and the awareness of our own needs, opted to create a virtual library and put it into a function of distance learning. Thus, the faculty began the process of digitization of cultural heritage of its own editions first, which are the backbone of scientific thought in the fields of study of 34 languages and corresponding literatures and cultures, as well as in the fields of library, information and archival sciences and museology. The content of our digital humanities includes the following: prominent periodicals (Annals, Contributions, South Slavic philologist, Literature and Language, Italics, Slavic studies, Yearbook of the Department of Serbian Literature, Philology review...), editions of PhD dissertations defended at the Faculty of Philology, proceedings of international scientific conferences, monographs, anthologies, collections. All digitized contents are fully and cross-searchable, both by author, title, subject and chronological criterion, as well as by every word in the text and completely open in full format to all the actors of culture, education and science, students and citizens.

The Faculty of Philology, together with SASA (based on the approval of the Executive Board of the SASA of 3 July 2012), in whose archives Andrić's manuscripts are being kept, and the Ivo

Andrić Foundation, as the holder of the copyright, realized the digitization project of the journal *Sveske* of the Ivo Andrić Foundation, Catalogue of Ivo Andrić's Personal Fund, whose authors are Olga Mucalica and Andjelija Dragojlovic and Andrić's personal holdings, as well as of all the materials that belong to other funds, and could be linked to Andrić. The material preserved in 82 archival binders, containing 50 Andrić's notebooks and correspondence precious for historical, political and literary reasoning, as well as numerous other Andrić's texts insufficiently known to our cultural community are put into electronic form. Special conditions were specified by the contract and then respected, such as: work of technical staff within the Reading Room of SASA, continuous professional cooperation with the archivists in defining attributes describing each document, complete dedication and meticulous processing. Permanent professional engagement of Mr. Mile Savic, expert employed at SASA Archive, has enabled the maximum accuracy and informativeness of determinants. In total, 118 100 pages are searchable by various queries: catalog number, group of documents, subgroup of documents, archival boxes and description of the document, following the structure of the Personal Fund's catalog, which of course fully corresponds to the organization of funds within the SASA Archives. In this way, the preservation, protection and quality of searchability of the manuscript materials is achieved, and the basis for textological research is created, leading, from June 2012, towards the preparation of the critical edition of the Complete works of Ivo Andrić in cooperation with Ivo Andrić institute in Visegrad.

Further use of digitized manuscript materials will be determined by joint decision of the Ivo Andrić Foundation, Archives of SASA and the Faculty of Philology. Its excellence and uniqueness make it a much-needed for our scientific community. The project of digitizing manuscript legacy of Ivo Andrić is important as a whole, but also, it is the first and experimental base of manuscript documents of one particular writer in Serbia, and we are not familiar with any similar in the world. This pattern paves the way for the protection and digitization of other personal funds of our writers.

The project of digitization of Andrić's Personal Fund was realized thanks to the support of the Ministry of Culture, Ministry of Education and the NIS. Willing to make the digital form of our scientific contribution attractive in its form, useful for all the researchers, teachers and students, in the so-called "virtual world of organizing knowledge", the Ivo Andrić Foundation, SASA and the faculty are hoping to have met at least four requirements: easier access to often inaccessible publications, protection from excessive usage, introduction of teaching materials for distance learning, empowering presence of our science, Faculty and University and our Letter on the Internet.

In this sense, our colleague Sasa Moderc, professor at the Faculty of Philology, launched an initiative to digitize literary works of Serbian authors, as well as the translations of these works into Italian and to offer them as parallel texts. This bilingual corpus will provide information not only about the time of creation and publication of translations and on translators, but will establish a transparent library of all Serbian literary works translated into Italian. At the same time, this will enable comparison of styles and methods of individual translators and elaboration of criteria for objective evaluation of the range of literary translation. Within the draft of his project professor Moderc wrote the following: "Bilingual Serbo-Italian corpus represents a new and valuable basis for traductology and contrastive research, and along with a program enabling searchability of the corpus, which is in the process of conceiving, researchers will be able to detect the subtlest linguistic, stylistic, cultural ties between our literature and the way in which it is presented to the Italian public. The abovementioned Serbo-Italian corpus may include translations of our work into other languages, thus providing philological studies with a new material and a new instrument for their studies."

In accordance with the recommendations of the Vienna Convention on Cultural Diplomacy,⁶ as a social, educational, artistic correspondence aiming at presenting historical, cultural and national achievements, in order to emphasize national identity on the one hand and a friendly intention, on the other, books and libraries have an

⁶ Vienna Convention on Diplomatic Relations and Optional Protocols. Vienna, 18 April 1961.

important social role. Along with the museums, archives, theaters and cinemas, books and libraries are nowadays, as well as throughout the history, active agents of intercultural and interethnic communication. Primarily due to their general ethical and aesthetic values, characteristics of particular cultures which they are profiling and by which they are being recognized, and then on the standardized professional peculiarities that allow permeation of library science with other disciplines, as well as horizontal connectivity within the profession in the interest of the nation and its culture. Each cultural diplomacy owes gratitude for its best achievements to books and libraries, as constant and reliable ambassadors of their

cultural values and heritage, which, in its digital form, always achieve the desired unity of action, time and space. By forming a digital collection of our humanities, we are returning a debt that we have towards their creators, previous generations, and obligating the following generations to continue to preserve our cultural, religious and national identity. New digital literature, and digital humanities, is dependent on the mechanical codes, platforms and aesthetic effects, it can be created as digital or subsequently adapted to the new medium, but it still has its foundation in the literary history, artistic context and social circumstances, it represents a new creative strategy of cultural diplomacy of the 21st century.

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