**Area of higher education:** 3. Social, economic and legal sciences

Professional field: 3.5. Public Communications and Information Sciences (Information Search

Systems)

Dissertation title: "Digitalization as a factor for the development of museums in Bulgaria"

**Author of the dissertation**: Vesela Vasileva Georgieva **Research supervisor**: Prof. ScD Ivanka Mavrodieva

Reviewer: Assoc. Prof. Dr. Eli Popova

## REVIEW

for external defense, 26.04.2024

## Introduction of the PhD student and details for the doctorate

In 2014 Vesela Georgieva finished her secondary education at the Humanitarian High School "St. St. Cyril and Methodius" in the city of Kazanlak. In the period 2014-2018, she studied in the bachelor program "Library and Information Sciences" at the Department of Library Science, Scientific Information and Cultural Policy, Faculty of Philosophy, Sofia University "St. Kliment Ohridski". She graduated with a master degree in "Management and Socialization of Cultural Heritage" at the Faculty of Philosophy, Sofia University in 2019. Her choice of educational programs shows a deep interest in cultural heritage and modern technologies applied in the activities of memory institutions. In the master program, Vesela Georgieva studied the disciplines Public policies for the preservation and socialization of cultural heritage; Immovable and movable cultural monuments and archaeological reserves; Legal and institutional infrastructure of cultural heritage; Production and approbation of thematic cultural routes, Cultural tourism and others that correspond to her passions and biases, outlined already in the bachelor degree. As a student, she is diligent, thorough, and interested in research. Naturally, her biography includes PhD at the Department of Library Science, Scientific Information and Cultural Policy. During her doctoral studies Vesela Georgieva also worked as a part-time lecturer in the academic discipline "Project Management" (2021-2023) and in the academic discipline "Museology" (2022), which gave her the opportunity to gain some teaching experience.

Vesela Georgieva is a socially engaged person, active, creative and responsible in everything she does. She is a member of a number of organizations, works as a volunteer, actively participates in a number of projects, some of which are in the direction of her dissertation, for example: participation in projects related to the digitization processes of resources at the "Iskra" library, Kazanlak; project on "Digitalization and virtualization of cultural heritage" at the

Department of Library Science, Scientific Information and Cultural Policy at the Sofia University; project on "Digitization of scientific bibliography" at the National Center for Digitization of Cultural, Historical and Natural Heritage together with NNEK - UNESCO and others.

The PhD student Vesela Vasileva Georgieva was enrolled by the order of the Rector of Sofia University RD 20-307 from 31.01.2020, code and field 3.5. Public Communications and Information Sciences (Information and Search Systems). The internal defense was held at the Department Council of the Department of Library Science, Scientific Information and Cultural Policy on 25.01.2024. The doctoral student was disenrolled with the right of defense after completing the study plan, with the order RD-20-744-220323. The supervisor has submitted a report with a positive evaluation of the doctoral student's dissertation, assuring that "it meets the requirements at the structural, content, theoretical, methodological and research level" and a report that no plagiarism was found. Vesela Georgieva has also covered the credits for the three years of her doctoral studies.

The preliminary discussion of the dissertation provoked interest due to the relevance and importance of the developed theme, the main remarks are specified and guidelines for editing and improving the work are given. In the course of the internal defense, a jury was selected and approved by the decision of the Faculty Council from 06.02.2024, Protocol No. 7 and order RD-38-102-190224 of the Rector of Sofia University "St. Kliment Ohridski".

There were no violations of the regulations, all deadlines were met, as well as the national requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria. The individual plan and the exams taken by the PhD student were carried out in full accordance with the requirements of the Law. Therefore, it can be concluded that no violations were committed in the course of the procedure.

## Overview of the dissertation

The theme of the dissertation is topical, dedicated to an unexplored problem in the museum sector. The PhD student and her research supervisor are focused on issues that have a strong impact on the future of the museum institution, on its visibility and value for today's generations. The content of the work fully corresponds to the stated theme.

The dissertation is 251 pages with three chapters, an introduction, a conclusion, a reference to the contributions made in the dissertation and a list of the used literature with 164 titles (104 of

them in Bulgarian and 60 in foreign languages) and 49 figures. The appendices are 79 pages and include: Tables of museums in Bulgaria; Results based on an approbated research methodology; Questionnaire for empirical research on managerial and technological aspects of digitization in museums in Bulgaria; List of figures in the text and Glossary of terms used.

The structure is slender, classical. In two chapters are presented and analyzed the main objects that are fundamental to the chosen topic, and in the third, their correlation is developed in the context of the set goals and objectives: to reveal the impact of digitization on the development of museums, using the results of an empirical study. I believe that the conclusions of each chapter are an appropriate addition to the lean structure of the work and help to fully understand the text. The thesis has a logical structure and coherence between the parts, with a gradual development of the topic and the derivation of evidence to support the hypothesis presented in the introduction.

The Introduction contains all the parts required by the rules of the genre and provides a thoughtful introduction to the main body of the dissertation. The topicality and significance of the topic are clearly and precisely presented, and the object and subject of the research are defined. The goals and objectives of the research are clearly formulated, and the hypothesis that the PhD student intends to prove is presented. The scope of the research is outlined, the content and structure of the work are discussed, and the research methods are described.

The first chapter of the dissertation thesis "Museums in Bulgaria: Essence, Types, Functions and Trends" is devoted to one of the researched objects – the museums. They are presented in three main directions: in the context of cultural heritage, their functions and significance as institutions of memory and their role in the development of technology, culture, tourism and science.

In the first section, a thorough review of the terms used is made, their definitions proposed by leading authors in the field of museology are presented, the meanings accepted by the PhD student are argued, the limits of the presence of the museum institution in the developed topic are outlined. The conceptual apparatus is explained in the international framework and in the current normative base in the country, as well as through the definition and use of the selected concepts in fundamental theoretical works of Bulgarian and foreign scientists.

The museum institution is examined from a historical point of view, as one of the three institutions (along with libraries and archives) committed since its inception to the preservation and promotion of cultural heritage. A brief review of the emergence of museums as institutions of

memory is given, definitions of the concept of museum given by international organizations, by foreign associations and in leading scientific works on museology are presented, an overview of international organizations whose activities are related to the preservation and promotion of cultural heritage is included.

The PhD student presents in detail the system of criteria for the classification of museums, then defines the object of research in the dissertation, accepting the established legislative system of the Republic of Bulgaria and the Law on Cultural Heritage according to the territorial scope of the museums, i.e. the choice of the research object is directed at the national, regional and municipal museums in the country.

The second section presents the functions of the museum, highlighting its social significance in creating spaces for preserving movable cultural heritage, encountering the past, promoting good museum practices, carrying out a process of socialization and building sustainable cultural tourism. Again, there is a historical overview as an introduction and a link to the contemporary presence of the museum institution in public life. The mention of inter-institutional cooperation and the subsequent development of this idea is a particularly good impression. The overview of the functions of museums is systematized in four parts: traditional, educational, sociocultural and communicative. The functions are considered both as recommendations in the documents of international organizations, and as modern trends in the development of museum activities – new concepts, conceived and developed in the publications of a number of foreign and Bulgarian authors. The accents are correctly placed, new moments in the work of museums, attention to visitors and their needs, expectations and requirements are very well highlighted. This part of the dissertation introduces the topic in contemporary frameworks and interpretations of the social significance of the museum institution.

The third section of the first chapter provides a smooth transition to the following chapters: The role of technology, cultural tourism and science in the development of museums. The subject has been developed in several important aspects, which are presented through the publications of authoritative scholars. The state of digitization in memory institutions, particularly museums, and the impact of societal issues on the process are touched upon. For example, the pandemic is appreciated as an accelerator of the application of technology in museum practices. The opportunities that technologies provide for the restoration and conservation of objects, their research, cataloging, proof of ownership and possession are positively defined. On the other hand,

the existing negative manifestations, stand the destruction and deterioration of cultural monuments, the hoarding and theft of cultural artifacts, the export and illegal trade of cultural heritage, and digitization as an effective tool in the fight against them. The interdisciplinary research field presented in the first chapter is complemented in accordance with the contemporary understandings of the recent sections on museum informatics and digital humanities — already actively developed topics recognized as important components in the museum environment today, in the study of the impact of information technology on visitors, the impact of museums and socialization in the museum spaces.

The topic of museology and museums and their relation to other sciences – history, archaeology, ethnography, anthropology, pedagogy, psychology, new technologies – fits very well in the section. The interdisciplinary character of the object of the study is embodied in the variety of types of museums, discussed in detail in the previous section, refracted through the prism of their public functions and argued through basic scientific and applied research.

The second chapter deals with the second main component of the dissertation: "Digitization: essence, technologies and digital access to museums and cultural heritage". Analogously to the structure of the first chapter, a terminological analysis related to the concepts in the field of digitization is developed here in detail, with a sufficient number of definitions from authoritative sources – foreign and Bulgarian from various fields. The context has been analyzed, a comparative analysis has been made in the approaches and contents of a number of definitions that are current in the scientific environment and practice. The attitude and evaluation of the various options are expressed, the ones adopted and used in the present work are indicated. I believe it is a good solution to focus on specific concepts related to the activities and functioning of museums, for example, digital artifact and digitization of artifacts.

The content analysis of the terms also reflects the social changes in people's lives in the digital age, drawing important parallels in the behavioral characteristics of the generations, highlighting key concepts in the new competencies of the modern individual. The discussed section of the second chapter provides a thorough, detailed and competent overview of the terminology related to the qualitative changes in the digital world that have marked the way people live, work, think, behave and communicate. Terms that are not directly related to the topic of the dissertation are also included, but, as the author notes, they "seem to stand aside from the topic"

and are presented to "outline the terminological base". Yes, it is outlined as fully and comprehensively as possible.

The PhD student comments on the studies, results and conclusions at European and national level, as well as on European initiatives in the field of digitization. Attention is focused on the powerful digitization process over the last decade with a clear impact on modern business, social relations, the provision of new services and raising living standards, with a focus on ensuring access. The following is a brief overview of the main changes affecting societies around the world. Some key studies and issues affecting museums are mentioned and statistics derived from them, including study on the impact of the COVID-19 pandemic on digitization in museums, conducted in 2022. Strategic European and national documents with regulations that reflect on the researched topic are presented.

For the sake of completeness, a separate part examines the current legal and normative European and national parameters related to digitization. I believe it is a good approach to reflect European policies in national legislation. The overview includes European projects and programs in which our country participates, examines currently relevant national programs – strategic documents for the development of digital Bulgaria and the perspective for the country's development until 2030, laws – all these documents are related to determine the parameters, directions and dynamics in the digitization of cultural heritage.

The second section of the second chapter, parts 1, 2, 3 and 4 can be defined as technological. They analyze the technological prerequisites and resources necessary for the successful implementation of digitization processes, presenting hardware, software, standards that are used and applicable in museum practices.

The third part is a transition to the third chapter, where the topic of the study is most fully developed. It is dedicated to digital access to museums and the cultural heritage they preserve. I find this part as particularly valuable. It is entitled "Digitization and digital access to cultural heritage in museums in Bulgaria". There the author gives an overview of the current state of this activity in museums, providing examples of successful digitization projects with the participation of museums.

The Third Chapter, entitled "Analysis of the results of an empirical sociological study on the managerial and technological aspects of digitization in museums in Bulgaria", develops the research part and fulfills the research tasks set by the PhD student. Here I would like to note the strong presence of the research supervisor – Prof. Mavrodieva, her skillful guidance of the PhD student in the depths and complex layers of an empirical sociological research.

A professionally structured sociological research system is developed, the methodology and used methods are presented; with an approbation of the methodology applied in the analysis of the sites and an approbation of the empirical research with its predetermined and purposefully researched managerial and technological aspects. A hypothesis is presented and the processes of distribution of the questionnaire, the difficulties and problems encountered during the arduous path of obtaining data are explained in detail. The requirements for sociological research work are met and the results, problems, reasons, difficulties encountered in the selection process, in making contacts and collecting reliable information are analyzed in detail. In the substantive part of the research task, the methodology was tested in the study and analysis of the websites of 5 randomly selected museums. Four main groups of criteria developed to identify the digitization activities implemented by the museums, marketing and communication objectives and opportunities to reach visitors and to consider their attitudes and expectations are presented in tabular form. The main research work includes the validation of a methodology in the analysis of the results of an empirical study (semi-structured interview) with employees of museums in Bulgaria. They serve the PhD student to establish legal, regulatory, technological, marketing and communication models related to digitization, websites and social networks used by museums, etc. The research design, ideas and stages are thoroughly explained and scientifically justified. The blocks of questions, their general characteristics and objectives are presented, then the questions formulated for each block are listed. In total, the topic and the aspects studied are covered in five blocks with a total of 36 questions.

The third part of the chapter is devoted to an in-depth, comprehensive analysis of the results obtained of the interviews conducted with 52 respondents who hold various positions in the museum - managerial – at high and middle management level, expert and executive. The analyses are grouped by blocks. The answers received to each question are commented in detail. For each block there is a general part Conclusions, where the results are briefly systematized in the context of the research objectives set in the questions of the block. The reflections are supported by figures with the reflected results, with percentages plotted and opportunities to check the accuracy of the interpretation of the data presented after each figure. Both the figures and the text deal with percentage values and ratios, making the analytical part clear and precise.

The conclusion summarizes the work on the topic and assesses the fulfillment of the tasks set in the introduction. It very briefly presents the content of each element of the structure and refers to the main points of the main text. An interesting decision of the PhD student is to give directions for further research problems in which the results achieved by her could be used. I appreciate this perspective as a positive statement by the author to contribute to important research efforts to build a contemporary vision of the museum institution.

The structure of each chapter and each section is also aimed at maximum clarity of the text: a short introductory part, sections in the main exposition of the chapter, subsections and conclusions to each chapter.

The content of the works is linked between the different parts by direct references in the text and by the linking logic of the exhibition plan. This is difficult to achieve and is a reason for admiration for the author of the thesis. The text, both in individual chapters and in the general statement, is coherent, consistent, as a whole, subordinate to the stated goals and objectives.

The style of presentation is concise, precise and meets the requirements of a dissertation.

The dissertation is characterized by the high quality of the scientific apparatus. The citation of publications is correct. The attached bibliography of Bulgarian and foreign publications is presented in compliance with the standards for bibliographic description.

The appendices are formatted according to the requirements for a scientific work and scientific apparatus. They substantially supplement the main text of the dissertation and represent a part of the contribution.

## **Notes:**

I must state that the PhD student has been very conscientious in the editing of her thesis and has followed the comments and suggestions for editing made during the internal defense. As a result, the disseration has been significantly and noticeably improved. I would like to point out some disadvantages:

- Regarding the imbalance in chapter size: the first and second chapters are in very good proportion, but the third chapter is twice as large. Achieving a balance in the volume of the individual components of the structure should not become an end in itself, but should be prioritized on the content side. Chapter three develops a complex research task which is the essence of the dissertation. The presentation in this chapter follows the logic and principle basis of the previously

accepted and approved methodology and must remain in its entirety. Thus, ignoring the double volume, the PhD student preserves the high value of the complete, multi-layered and in-depth research.

- The text is grammatically quite clean. However, a careful check for technical and grammatical errors is not superfluous.

The abstract has been fully developed in accordance with the requirements for the presentation of scientific work. It gives a detailed and accurate general description of the thesis. They are presented in separate subsections: Relevance of the topic, Object of the research, Subject of the research, Goals, Objectives, Hypothesis, Scope of the research, Research methods. The PhD student develops the structure and content of her dissertation in a synthesized way, noting all valuable and essential moments of her research quest. Contributions are presented in a separate section so that they can be highlighted and compared with the main text. The last section lists the PhD student's publications related to the dissertation topic, demonstrating her continued interest in the topic and her steps towards in-depth and contributing research on the topic.

The publications of the doctoral student related to the topic of the dissertation show her active participation in scientific and international forums – conferences and round tables. Her papers are devoted to the impact of new technologies on the development of museums, their educational functions and the COVID-19 pandemic. The topics of her reports testify to the existence of a continued interest in the implementation of digitization in the museum environment, to a good response to current and significant scientific problems.

The **theoretical and applied contributions** are properly formulated and the achievements of the thesis are outlined.

In general, the proposed dissertation fully meets the requirements and standards for dissertation research. A great deal of work has been done, valuable studies of the museum sector have been carried out, and important directions for its contemporary development have been indicated. I sincerely congratulate the doctoral candidate and her supervisor for the results achieved. I give a positive assessment of the dissertation. I vote with full conviction for the awarding of the scientific and educational degree "doctor" to Vesela Georgieva.

**Question:** You write in the Conclusion on p. 229 that "the results of the research show that at this stage digitization processes are not part of the main activities of museums, but rather a priority future vision for development". Is this really true? It confirms the hypothesis formulated in the Introduction, p. 9, as you write on p. 230 and, if you think so, what gives you this confidence?

31.03.2024 Reviewer: Assoc. Prof. Dr. Eli Popova,

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