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Bibliometric evaluation of research on museology as a carrier of culture

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ABSTRACT

This research aims to examine and bibliometric analyze works published in various disciplines in the international literature, which are considered to play an important role in the field of museology. Articles, conference papers, books, and other publications related to museology are targeted to be examined and analyzed within specific parameters. The Web of Science (WOS) database was utilized on July 01, 2023, to scan scientific publications. The scanning process was conducted using the "title" tab with the keywords "Museology" and "Muselogy." As a result of the scan, 1551 academic publications were reached. The VOSviewer software was used for bibliometric analysis and visualization. Research on museology was examined within parameters such as publication years, types of publications, institutions, authors, sources, countries, languages, citations, and keywords. The research revealed that the majority of research on museology has been conducted in recent years, articles being the most common type of publication, the United States being the country with the highest number of publications, and English being the most frequently used language. It was observed that articles related to museology were mostly published in the journal "Muzeologia a Kulturne Dedicstvo Museology and Cultural Heritage," with "Gray Clive" identified as the author with the highest number of publications in this field. The institution with the most research was determined to be "Comenius University Bratislava." It was also noted that the majority of citations related to museology were made in recent years, and the most commonly used keyword was "museology." When examining the number of publications over the years, it can be said that research on museology has increased over time. With these results, it can be concluded that the study provides detailed information on the development process of museology.

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1. Introduction

The Turkish Language Association defines a museum as "a place/structure where art and science works or objects serving art and science are stored and exhibited to the public." The term "museum" is derived from the Greek word "Mouseion," which in the Ancient Greek period meant "the homes of the inspiration goddesses." In Greek mythology, temples dedicated to the goddesses known as the Muses and the hill allocated for them in Athens were considered (Gerçek, 1999). Today, the word "museum" has evolved in different cultural contexts over time and is commonly used to refer to institutions where art works and scientific objects are exhibited.

Museums, according to the definition of the International Council of Museums (ICOM, 2021), are institutions serving the society and its development, open to the public. Museums conduct research on materials that bear witness to humanity and its environment, collect and preserve these materials, and share knowledge. Their purpose is to exhibit these works in the direction of study, education, and appreciation. Museums are independent of profit motives and are important institutions whose continuity is ensured. Thus, the preservation of cultural heritage, informing future generations, and increasing society's access to knowledge become possible.

In the Ancient Era, in Alexandria, a temple named "Mouseion" was commissioned by Ptolemy I. Additionally, this temple housed the Library of Alexandria, becoming a center of science where scholars of that era could reside, teach, and conduct research as much as they desired. This establishment provides initial insights into how the concept of "Museum" developed its distinctive characteristics (Karabıyık, 2007: 3).

Museums are specialized institutions that bring together, preserve, and exhibit cultural heritage, thus bridging the past to the present while also preserving it for the future. According to the 4th article of the International Council of Museums (ICOM), museums are organizations that aim to

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preserve cultural artifacts and present them collectively to enhance study, education, and aesthetic enjoyment. Museums work for the benefit of society and host various collections ranging from art to science, health, and technology. Similarly, as stated in Article 5 of the ICOM regulations, institutions such as historic monuments with permanent exhibition spaces, libraries, and archive centers officially open to the public, as well as parts and annexes of buildings associated with historic monuments, places of natural and archaeological significance, parks, botanical gardens, and zoos, including aquariums, fall under the definition of museums (Güven, 2022: 2).

Museum studies, which play a pivotal role in safeguarding and showcasing cultural heritage, have emerged as a crucial and continually evolving area of scholarly interest. Recent years have witnessed a notable surge in academic publications within this field, underscoring its growing significance and expanding scope in academic discourse. Nonetheless, there remains a critical need for a thorough analysis of international literature on museum studies to gain a nuanced understanding of its trends and developments. The primary aim of this research is to systematically scrutinize scientific publications related to museum studies and identify prevailing trends through bibliometric analysis. This research is significant as it lays a robust foundation for comprehending the evolution of knowledge in this domain and the distribution of scientific publications by elucidating the overall structure of the museum studies literature. Specifically, it seeks to shed light on the breadth and dynamics of academic productivity within the field by examining various parameters such as the geographical distribution of publications, publication types, author profiles, and citation patterns.

The findings reveal a substantial increase in academic output in museum studies over recent years. Articles emerged as the predominant publication type, with the United States leading in the number of publications, and English being the most commonly used language. Furthermore, the journal "Muzeologia a Kulturne Dedicstvo Museology and Cultural Heritage" was identified as hosting the highest volume of publications, "Gray Clive" was noted as the most prolific author, and "Comenius University Bratislava" was recognized as the institution with the most extensive research activity. The rising citation rates and the frequent use of the term "museology" indicate a trend of ongoing development and expansion within the field.

This study offers valuable insights into the progression of museum studies by providing an extensive analysis of the academic literature. The research results are anticipated to enhance understanding of the scientific productivity and knowledge accumulation in museology and offer a solid groundwork for future inquiries in this domain.

2. Method

This research aims to examine and conduct bibliometric analysis of documents published in the international literature between 1976 and 2023 regarding museology, which serves as an attraction factor for cultural heritage, authentic experiences, and significant destinations. The analysis focuses on articles, conference papers, books, etc., within specific parameters. The increasing number of studies subjected to bibliometric analysis demonstrates the significance of this statistical analysis method in various scientific fields, including museology (Ellegaard and Wallin, 2015). Furthermore, this research opts for bibliometric analysis to determine the scientific basis of the topic addressed in scientific publications and to reveal trends, developments, and future roadmaps in the field of museology (Hall, 2011; López-Bonilla and López Bonilla, 2020; Kırıcı Tekeli, 2022: 2847).

The term "bibliometrics" was introduced by Alan Pritchard in 1969 (Lawani, 1981; Diodato, 2012). Pritchard argued that bibliometrics is more appropriate than the term statistical bibliography. According to him, bibliometrics means "the application of mathematical and statistical methods to books, articles, papers, and other communication media" (Pritchard, 1969). In other words, bibliometrics is the process of counting and analyzing various aspects of written sources, thereby shedding light on the development and trends of these sources (Lawani, 1981). The first study related to bibliometrics was published in 1896 by Campbell in the work titled "Theory of the National and International Bibliography." In this study, the subject distributions of the examined publications were analyzed using a statistical analysis method (Sengupta, 1992; Tekeli and Kırıcı Tekeli, 2020: 108). This study, which aims to reveal the state of museology research, provides explanations about research questions, variables, data collection methods, and data analysis, and introduces the details of bibliometric analysis.

Research Questions

In this study, several research questions were developed to reveal the development process of publications on museology topics. These questions are related to the research purpose and have clarified the analysis of the research. The research questions are as follows:

•What is the distribution of studies related to museology over the years?

•What is the distribution of studies related to museology according to publication types?

•What is the distribution of studies related to museology according to publication languages?

•What is the distribution of studies related to museology according to countries?

• What is the distribution of studies related to museology according to institutions?

• What is the distribution of studies related to museology according to fields?

• What is the distribution of studies related to museology according to sources?

• What is the citation distribution of studies in the field of museology over the years?

• Which are the most cited publications in museology studies?

• What is the network map of keywords used in museology studies?

• What is the network map of the most collaborative authors in museology studies?

• What is the network map of the most collaborative countries in museology studies?

• What is the network map of the most cited authors in museology studies?

• What is the network map of the most cited countries in museology studies?

The research developed fourteen questions. In the analysis conducted on the Web of Science, the answers to the first nine questions were obtained, while the answers to the last five research questions were obtained from the VOSviewer software program.

Research Area

The research area encompasses all scientific publications related to museology published in the Web of Science database. In this study, variables were examined with a comprehensive perspective. Accordingly, international publications related to museology were scrutinized and analyzed in terms of specific parameters.

2.3. Data Collection Method

On July 1, 2023, the Web of Science database was searched to identify scientific publications related to museology methods. It was observed that WoS is more focused on social sciences in terms of publication content (Jacso,

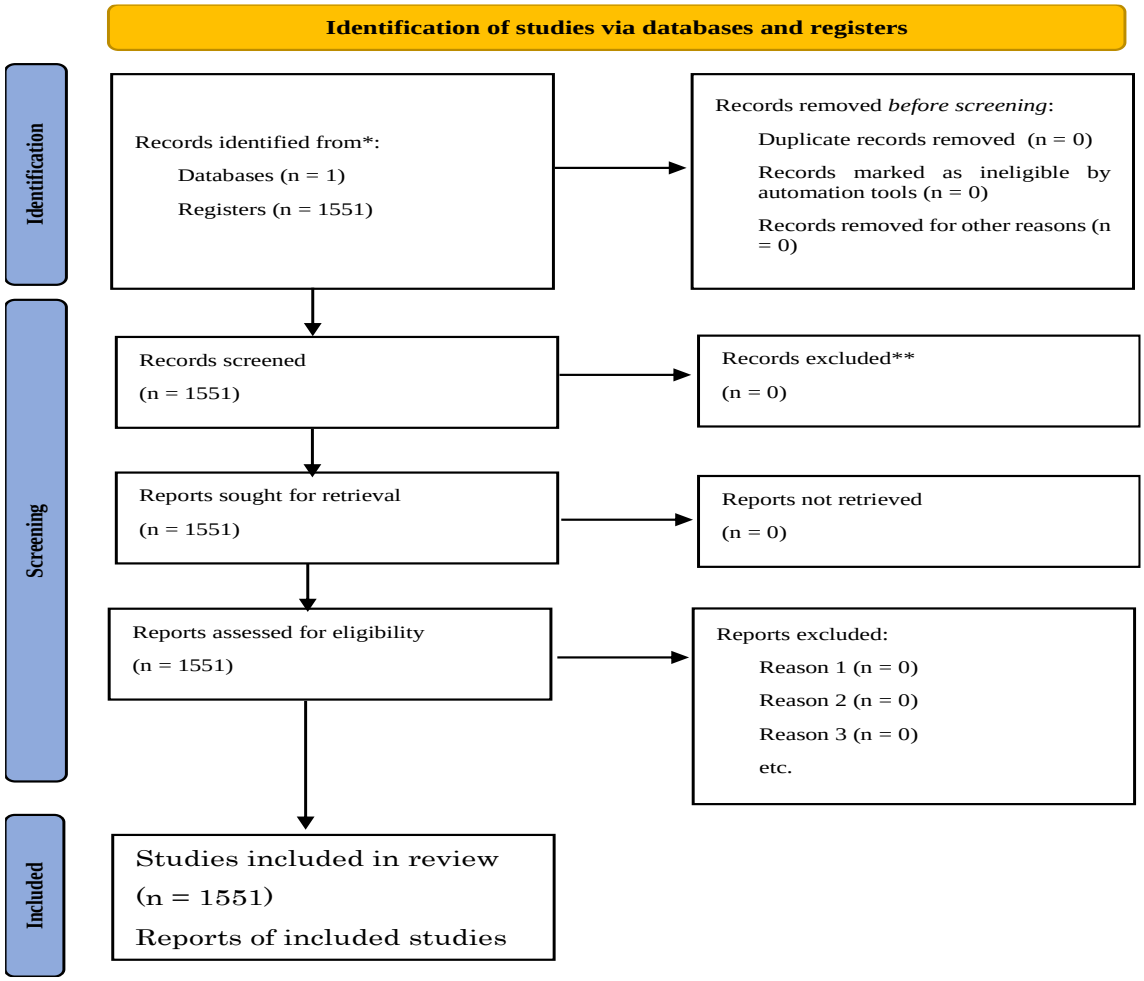

Figure 1. PRISMA Flow Diagram

Source: *PRISMA Flow Diagram, 2020*

Table 1. Research on Museology by Year

Year	Number of Publications	Year	Number of Publications	Year	Number of Publications	Year	Number of Publications	Year	Number of Publications
1976	1	1989	6	1998	1	2007	15	2016	117
1978	1	1990	5	1999	3	2008	30	2017	138
1980	1	1991	5	2000	3	2009	50	2018	112
1982	2	1992	7	2001	4	2010	32	2019	133
1983	1	1993	3	2002	1	2011	32	2020	135
1985	6	1994	4	2003	3	2012	105	2021	129
1986	1	1995	5	2004	5	2013	81	2022	141
1987	2	1996	4	2005	6	2014	78	2023	24
1988	3	1997	5	2006	15	2015	96		

Source: *Web of Science database.*

2005). Web of Science is a database that includes scientific citation indexes such as the Science Citation Index (SCI), Social Science Citation Index (SSCI), and Arts and Humanities Citation Index (A&HCI), providing access to significant publications worldwide (Goodman & Deis, 2005). Additionally, the most important factor in preferring Web of Science is its suitability for bibliometric analyses and being the most widely used database (Yang et al., 2013). The search process was conducted using the "title" tab with the keyword "Museology". The time frame for the research was chosen as 1976-2023. The process of collecting scientific publications is detailed in Figure 1 as a PRISMA flow diagram.

All scientific publications listed in Figure 1 were examined, revealing publications in different fields. However, it was determined that all scientific publications were related to the field of museology. In this context, publications were systematically examined in terms of years, types, languages, origin countries, connections, study areas, source titles, distribution of citations by years, and cited publications. Since the Web of Science database is continuously updated and includes new scientific publications, scanning the Web of Science database based on a different period but with the same keywords could yield results completely different from the current situation. It appears that obtaining similar results when using the same data collection method for a different date is not likely (Liu, Zhan, Hong, Niu, & Liu, 2013).

Data Analysis

In the study, the VOSviewer software program was utilized to conduct bibliometric analysis of scientific publications on Museology and to visually present the results. This software program is preferred among users as it is open-source and free (Van Eck & Waltman, 2020). Van Eck and Waltman (2017: 1054) define the Web of Science software program as a "scientific mapping program designed for the analysis and visual representation of bibliometric networks." At the beginning of the study, the Web of Science database was scanned, resulting in a file containing 1551 scientific publications including citations, bibliographic information, abstracts, keywords, and funding details. After downloading the formatted file in an appropriate format, it was immediately uploaded to the VOSviewer software program. In the program, the "Co-authorship", "Co-citation", and "Citation" tabs were used to identify significant keywords, authors, and countries present in scientific publications on museology. Thus, the keyword network related to the relevant topic, the most collaborative authors and countries, and the most cited authors and countries were determined through analysis. Consequently, scientific publications on museology were examined and interpreted in terms of various parameters.

The VOSviewer software program has its own unique terminology. Knowing this terminology is crucial to clarify the analysis. Maps created using VOSviewer contain "items." Items can be relevant publications, researchers, keywords, etc. within a study. Each map covers only one item. Among items, there can be a "link" representing the relationship between two items, such as co-authorship links between researchers or co-occurrence links between keywords. Items and links together form a network. Thus, a network is a "cluster" containing connections between items. Items are grouped into clusters. An item can belong to only one cluster. Some items may not belong to any cluster. Additionally, clusters are referred to as cluster 1, cluster 2, etc. (Van Eck & Waltman, 2020). In conclusion, understanding the program's terminology helps interpret the analyses.

3. Findings

The data related to museum studies were evaluated using various parameters and analyzed using visual mapping techniques. The results were presented using tables, graphs, and figures. The first finding regarding museum studies reveals the developmental process of the subject over the years. Table 1 illustrates the distribution of publications over the years.

In line with the research objective, museum studies were examined using the Web of Science (WOS) database. Within this scope, it was determined that a total of 1551 studies related to museology were conducted between 1976

and 2023. It was observed that the first study on this topic was conducted in 1976. Table 1 contains the number of publications for each year. According to this table, the year with the highest number of research publications on museology was 2022 (141 publications). Based on the data in Table 1, it can be stated that research on museology has increased in recent years.

Table 2. Distribution of Research on Museology by Publication Type

Publication Type	Number of Publications
Article	1245
Book Chapters	115
Proceeding Paper	101
Editorial Material	72
Review Article	23
Art Exhibit Review	9
Letter	5
News Item	5
Book	4
Bibliography	2
Biographical-Item	2
Toplantı Özeti	2
Poetry	1

Source: *Web of Science database.*

When the studies on museology are examined, the types of publications, including articles, book chapters, conference papers, and other types, are shown in Table 2. It is observed that the most common types of publications on the subject are articles (1245 publications), book chapters (115 publications), and conference papers (101 publications), respectively.

Table 4. Distribution of Research on Museology by Languages

Publication Language	Number of Publications
English	909
Spanish	131
Slovak	121
Portuguese	105
Russian	76
French	54
Czech language	45
Italian	34
German	21
Turkish	19
Croatian language	12
Polish language	8
Dutch	4
Slovenian	3
Ukrainian	2
Unspecified	2
Bulgarian	1
Chinese	1
Greek	1
Japanese	1
Norwegian	1

Source: Web of Science database.

According to the data obtained from Web of Science, the languages in which research on museology has been published are presented in Table 3. According to the table, out of the 1551 studies conducted on museology, 909 were published in English, 131 in Spanish, 121 in Slovak, 105 in Portuguese, 76 in Russian, 54 in French, and 45 in Czech.

Table 4 shows the data of the countries and institutions conducting research on museology. Although 88 countries have conducted studies on museology methods, Table 4 includes only the top ten countries. The USA ranks first with 130 scientific publications on museology methods. It is followed by Slovakia (n=125) and Brazil (n=119). The number of scientific publications on the relevant topic in Turkey is seen as moderate (n=38). On the other hand, among the 201 institutions that have published scientific work on the relevant topic, the top ten institutions are listed

Table 3. Distribution of Research on Museology Methods by Countries and Institutions

Country	Number of Publications	Establishment	Number of Publications
ABD	130	COMENIUS UNIVERSITY BRATISLAVA	45
Slovakya	125	RLUK RESEARCH LIBRARIES UK	41
Brezilya	119	UNIVERSITY OF LONDON	25
İspanya	116	MASARYK UNIVERSITY BRNO	24
İngiltere	114	TOMSK DEVLET ÜNİVERSİTESİ	19
Rusya	100	SAINT PETERSBURG DEVLET ÜNİVERSİTESİ	18
İtalya	73	ÜNİVERSİTE KOLEJİ LONDRA	18
Çek Cumhuriyeti	65	RUSYA BİLİMLER AKADEMİSİ	17
Polonya	64	UNIVERSIDADE DE BRASILIA	17
Fransa	54	MADRİD COMPLUTENSE ÜNİVERSİTESİ	15

Source: *Web of Science database.*

Table 5. Distribution of Museology Studies by Topic Areas and Sources

Topic Areas	Number of Publications	Sources	Number of Publications
Arts, Humanities and Other Subjects	653	Muzeologia a kulturne dedicstvo museology and cultural heritage	278
Art	221	Conservation of easel paintings	51
History	101	Routledge series in conservation and museology	51
Information Science Library Science	82	Museum international	34
Anthropology	76	Vestnik tomskogo gosudarstvennogo universiteta kulturologiya iskusstvovedenie tomsk state university journal of cultural studies and art history	34
Archeology	68	Museum management and curatorship	31
Education and Training Research	55	Revista eletronica ventilando acervos	28
Social Sciences Interdisciplinary	49	Culture et musees	23
Cultural studies	38	Museologia scientifica	21
Folklore	30	Intervencion revista internacional de conservacion restauracion y museologia	19

Source: *Web of Science database.*

in the table. Comenius University Bratislava ranks first with forty-five studies, followed by RLUK Research Libraries UK, University of London, and Masaryk University Brno.

Table 5 shows the distribution of scientific publications on museology by subject areas and sources. Although there have been studies in 116 different fields on this topic, the table shows the top 10 based on the number of publications. In this ranking, publications in the field of Arts Humanities and Other Topics (n=653) are in the first place, followed by Art (n=221) and History (n=101). Studies on museology have been published in 696 different sources. Table 5 shows the top ten sources publishing these studies. As seen, "Muzeologia a Kulturne Dedicstvo Museology and Cultural Heritage" is the source with the most scientific publications on this topic (n=278), followed by "Conservation of Easel Paintings" (n=51) and "Routledge Series in Conservation and Museology" (n=51).

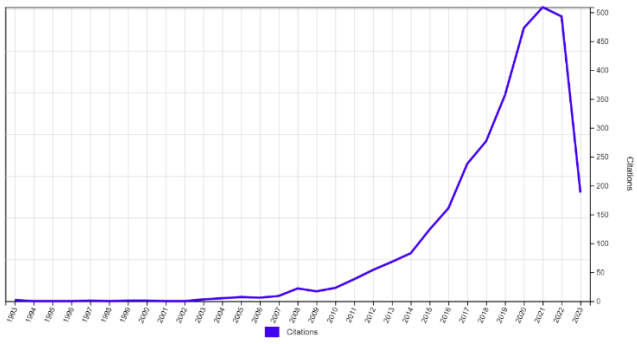

Figure 2. Graph of the Distribution of Citations for Museology Studies by Year

Source: *Web of Science database.*

Figure 2 shows the distribution of citations to museology studies by year. Information obtained from the Web of Science database revealed that there were 493 citations on these topics in 2022 and a total of 188 citations in the current year of 2023. The graph indicates an increasing number of citations to studies on museology over the past 30 years.

APPENDIX 1 shows the top ten most cited studies on museology. Each entry includes the study title, author, source name, publication year, and the number of citations, listed in descending order from the most to the least cited. The most cited scientific publication is the article titled "Museums and the 'new museology': theory, practice and organisational change" by McCall, V., and Gray, C., published in the journal "Museum Management and Curatorship" in 2014 (n=102). The second most cited publication is "Anthropology in and of the Archives: Possible Futures and Contingent Pasts. Archives as Anthropological Surrogates" by Zeitlyn, D., published in the "Annual Review of Anthropology" in 2012 (n=86). Additionally, information obtained from the Web of Science database shows that scientific publications related to museology have received a total of 3166 citations over the past 46 years.

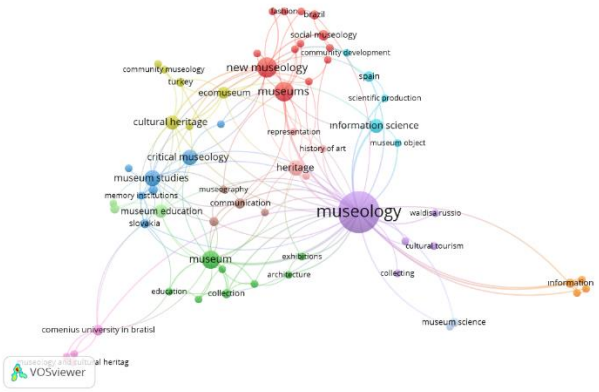

Figure 3. Network of Keywords Related to Studies on Museology

Source: VOSviewer

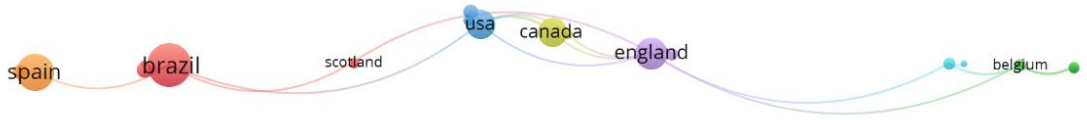

Figure 4. Network Map of the Most Collaborating Countries

Source: *VOSviewer*

Figure 3 illustrates the network map of 509 keywords frequently used in studies on Museology. When the minimum repetition count of keywords is set to two, 407 out of 509 keywords match the threshold value. These 407 keywords are distributed across 23 different clusters. According to this information, 'museology' emerges as the most frequently repeated keyword with the highest correlation strength within the largest turquoise circle. Additionally, 'new museology', 'museum', 'museums', 'museum studies', 'heritage', 'critical museology', 'cultural heritage', 'ecomuseum', 'information science', and 'museum education' are frequently used keywords with high correlation strengths. Different colored circles representing clusters and lines indicating the strength of relationships between circles signify a dense network of keywords.

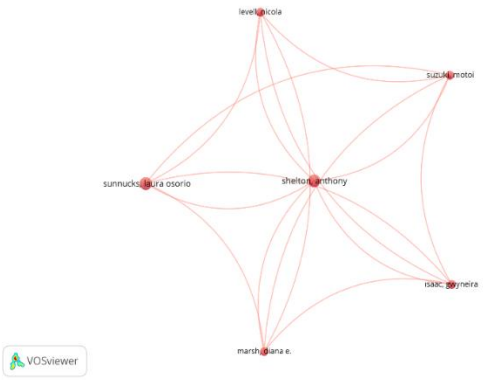

Figure 5. Network Map of the Most Collaborative Authors in Museology Studies

Source: *VOSviewer*

Figure 4 illustrates the network map of authors collaborating most frequently in studies related to Museology. When creating the network map, the minimum document and citation counts for authors were set to 1, resulting in 2298 authors being included. Among these 2298 authors, only 127 met the threshold. Of these 127 authors, only 6 had connections with each other. Authors were grouped into clusters. Each color represents a cluster. The size of the red circles reflects the prominence of the most collaborative author, but as observed, the circles representing the 6 authors are of the same size, indicating that all authors collaborated equally.

Figure 5 illustrates the network map of countries collaborating most frequently in studies related to Museology. When creating the network map, the minimum document and citation counts for each country were set to 1, resulting in 42 countries being included. Among these 42 countries, 33 passed the threshold. In the network map, only 24 out of the 33 countries were connected to each other. These 24 countries were distributed across 7 different clusters. "United Kingdom" located in the largest purple circle emerged as the country with the most collaboration and connections, followed by "USA" in the blue circle and "Brazil" in the red circle. The overall assessment of the network map indicated that the relationships between countries were not very strong.

Figure 6 depicts the network map of authors who are most cited in studies related to Museology. When creating the network map of most cited authors, a minimum document and citation count of 1 was set for each author, resulting in 2298 authors being obtained. 127 authors met the threshold value. Instead of including all authors, the network map included only 97 authors who were connected to each other. The authors were distributed across 6 clusters. Gray Clive (n=102), followed by "McCall Vikki" (n=102), and "Howes David" (n=49) are the most cited authors. The network map shows intense relationships among some authors while weak relationships among others.

Figure 6. Network Map of the Most Cited Authors in Museology Studies

Source: *VOSviewer*

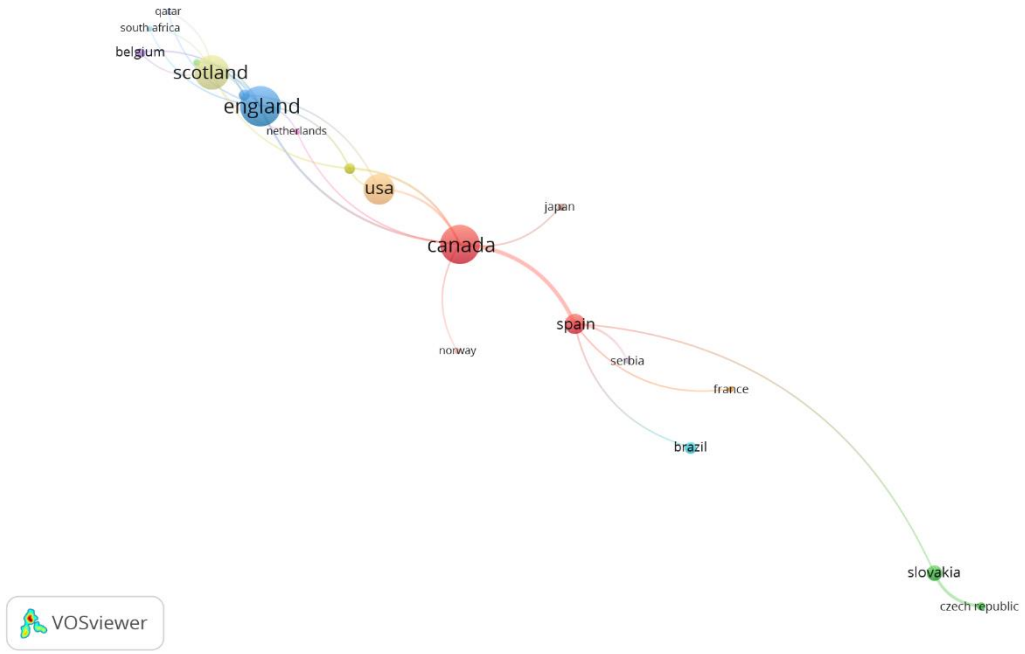

Figure 7. Network Map of the Most Cited Countries

Source: *VOSviewer*

Figure 7 illustrates the network map of countries most cited in studies related to museology. This network map was created by setting a minimum document and citation count of 1 for each country, resulting in 42 countries being obtained. 33 out of these 42 countries met the threshold value. The network map divided these countries into five clusters. The largest blue circle represents "United Kingdom" as the most cited country (n=139), followed by "Canada" in the red circle (n=136), and "Scotland" in the dark khaki circle (n=102). The network map of the most cited countries generally shows weak relationships.

4. Result, Discussion and Suggestions

Museology plays a significant role in preserving, sharing, and transmitting cultural heritage to future generations. Museums enable individuals to acquire knowledge about history, art, science, and other disciplines, enrich their cultural experiences, and understand the cultural identity of society. Additionally, museums contribute to preserving the history and culture of communities, serving as resources for researchers and future generations. Museology has emerged as an increasingly important topic in recent years. Bibliometric analysis on museology evaluates the academic development and trends of the discipline, providing valuable insights to researchers, institutions, and decision-makers. This analysis aims to help determine the direction of future research in museology and contribute to the growth of the discipline. Therefore, systematic examination and analysis of research on this topic have been conducted. Accordingly, the present study examined the relevant subject with specific parameters and conducted bibliometric analyses using software. The first international publication on museology was made in 1948. It is observed that the number of research studies on museology has shown an increasing trend from 1948 to 2023. In conclusion, the results indicate that there will be an increase in scientific publications on museology, attracting more attention to the field.

When we examined the distribution of research on the museology method according to years, we observed that the first research in the relevant database emerged in 1948. The highest number of studies was in 2022. We observe that research on museology has generally increased in recent years. Most of the research in this field is in the form of articles, but there are also publications in the form of reviews and papers. The analysis reveals that most publications on museological methodology come from France. We also found that research in this field is usually published in English.

Most of the articles on the museological method have been published in the journal Meat Science, with Agricultural and Biological Sciences being the top subject in this field. The year with the highest number of citations to the museum method is 2022. The most cited research is "Structural model requirements to describe microbial inactivation during a mild heat treatment" by "Geeraerd A.H., Herremans C.H. and Van Impe J.F." published in the International Journal of Food Microbiology in 2000 and received 537 citations in total.

As a result of the analysis conducted using the VOSviewer program, the most commonly used keywords, the most collaborating authors, countries, the most cited authors and countries were determined. With the analysis, it was tried to determine the keywords commonly used in publications on museology. The results of the analysis show that the most frequently used keywords are "museology", "new museology", "museum", "museums", "museum studies", "heritage", "critical museology", "cultural heritage", "ecomuseum", "information science" and "museum education".

It has been determined that the most collaborative authors are 2298 people and among them, names such as "Shelton, Anthony; Levell, Nicola; Marsh, Diana E.; Sunnucks, Laura Osoria; Suzuki, Motoi; Isaac, Gwyneria" are the most collaborative and connected authors on museology. It is possible to say that the most collaborative countries are the UK, the USA and Brazil. It has been observed that Gray Clive and Mccall Vikki are the most cited authors and the most cited countries are Spain, the USA and the UK.

Theoretical Implications

This study reveals the development process of scientific publications on the Museology method over the years and reveals the types, languages, countries, affiliations, fields, sources and most cited studies of these publications. This study, which examines the related topic with the above parameters and contributes to the gastronomy literature, can be a resource for those who are considering researching this topic. In addition, the bibliometric analysis conducted in the study using a software program provided more detailed information including the network map of the most frequently used keywords, the most collaborated authors and countries, the most cited authors and countries in the studies on the Museology method. This study can contribute to the literature and methodology due to its content and methodology for Museology.

Practical Implications

The results of this study will contribute to academics and researchers as well as stakeholders in the sector. The study examined international publications on museology methodology in detail, identified museology studies, and thus identified a strong relationship between the subjects of Art, History and Anthropology and museology. In this context, researchers in museology should make use of these relationships in order to develop their perspectives. It provides important clues to guide future research in the field of museology. It is thought that it will be necessary to identify research trends, encourage collaborations and ensure that resources are directed effectively. Furthermore, the analysis can be used to identify existing gaps in museology research and optimize publication strategies. In addition, the analysis can contribute to implementation and policy development processes. Therefore, it provides information that will guide researchers and practitioners in the field of museology.

Limitations and Future Research

The database, keywords, software program and analyses used in this study are seen as a limitation of this research. In addition, examining only international publications on the subject is another limitation of this study. In the future, it is recommended to use a different database such as Scopus and to conduct bibliometric analysis using other software programs such as Bibliometrix R-Package. National and international publications on museology methodology can be analyzed using meta-analysis or meta-synthesis techniques. In addition, in order to share cultural heritage more effectively, new approaches such as digital museology, virtual exhibitions, interactive experiences can be used more effectively. Qualitative or quantitative research methods can be used to analyze perceptions and attitudes towards museums and museology. Museology is a study and discipline that aims to preserve, exhibit and transfer cultural and natural heritage to society. Museums are the institutions at the center of these studies and have the mission of providing information, education and cultural experience. Thus, future research will increase the quality and quantity of research on museology while examining the subject in depth from different angles. In addition, museums are an integral part of cultural and social life, fulfilling a wide range of important functions such as cultural heritage conservation, education and knowledge sharing, strengthening cultural identity and social ties, research and innovation, tourism and economic contribution, aesthetic and artistic experience. Therefore, addressing this issue, which plays a critical role in the sustainability of cultural heritage, more comprehensively with relevant stakeholders will make great contributions.

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APPENDIES

APPENDIX 1

Table 6. Most Cited Studies on Museology

	Publication Name	Author	Source	Publication Year	Number of Citations
1	Museums and the 'new museology': theory, practice and organisational change	McCall, V and Gray, C	Museum management and curatorship	2014	102
2	Anthropology in and of the Archives: Possible Futures and Contingent Pasts. Archives as Anthropological Surrogates	Zeitlyn, D	Annual review of anthropology	2012	86
3	Techniques for collecting, handling, preparing, storing and examining small molluscan specimens	Geiger, DL (Geiger, Daniel L.) ; Marshall, BA (Marshall, Bruce A.) ; Ponder, WF (Ponder, Winston F.) ; Sasaki, T (Sasaki, Takenori) ; Waren, A (Waren, Anders)	Molluscan research	2007	80
4	Memory pieces and footprints: Multivocality and the meanings of ancient times and ancestral places among the Zuni and Hopi	Colwell-Chanthaphonh, C and Ferguson, TJ	American anthropologist	2006	64
5	Introduction to Sensory Museology	Howes, D	Senses & Society	2014	49
6	INTRODUCTION: UNDERSTANDING FASHION AND DRESS MUSEOLOGY	Melchior, MR	Fashion and museums: Theory and practice	2014	44
7	Heat and moisture promoted deterioration of raw silk estimated by amino acid analysis	Zhang, XM; Berghe, IV and Wyeth, P		2011	44
8	Human subsistence strategy at Liuzhuang site, Henan, China during the proto-Shang culture (similar to 2000-1600 BC) by stable isotopic analysis	Liangliang Hou, Yaowu Hu, Xinping Zhao, Suting Li, Dong Wei, Yanfeng Hou, Baohua Hu, Peng Lv, Tao Li, Guoding Song, Changsui Wang	Journal of archaeological science	2013	42
9	Co-seismic and cumulative offsets of the recent earthquakes along the Karakax left-lateral strike-slip fault in western Tibet	Li, HB (Li, Haibing); Van der Woerd, J (Van der Woerd, Jerome); Sun, ZM (Sun, Zhiming); Si, JL (Si, Jialiang); Tapponnier, P (Tapponnier, Paul) [4] , [5] ; Pan, JW (Pan, Jiawei) [1] ; Liu, DL (Liu, Dongliang) [1] ; Chevalier, ML (Chevalier, Marie-Luce)	Gondwana research	2012	40
10	Critical Museology: A Manifesto	Shelton, A	Culture et musees	2022	38

Source: Web of Science database.

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INFO PAGE

Bibliometric evaluation of research on museology as a carrier of culture

Abstract

This research aims to examine and bibliometrically analyze works published in various disciplines in the international literature, which are considered to play an important role in the field of museology. Articles, conference papers, books, and other publications related to museology are targeted to be examined and analyzed within specific parameters. The Web of Science (WOS) database was utilized on July 01, 2023, to scan scientific publications. The scanning process was conducted using the "title" tab with the keywords "Museology" and "Muselogy." As a result of the scan, 1551 academic publications were reached. The VOSviewer software was used for bibliometric analysis and visualization. Research on museology was examined within parameters such as publication years, types of publications, institutions, authors, sources, countries, languages, citations, and keywords. The research revealed that the majority of research on museology has been conducted in recent years, articles being the most common type of publication, the United States being the country with the highest number of publications, and English being the most frequently used language. It was observed that articles related to museology were mostly published in the journal "Muzeologia a Kulturne Dedicstvo Museology and Cultural Heritage," with "Gray Clive" identified as the author with the highest number of publications in this field. The institution with the most research was determined to be "Comenius University Bratislava." It was also noted that the majority of citations related to museology were made in recent years, and the most commonly used keyword was "museology." When examining the number of publications over the years, it can be said that research on museology has increased over time. With these results, it can be concluded that the study provides detailed information on the development process of museology.

Keywords: *Museology, Bibliometric Analysis, Web of Science, VOSviewer.*

Authors

Full Name	Author contribution roles	Contribution rate
Emre Aykaç:	*Conceptualism, Methodology, Software, Validation, Formal Analysis, Investigation, Resources, Data Curation, Writing - Original Draft, Writing - Review & Editing, Visualization, Supervision, Project administration, Funding acquisition*	*50%*
Oğuz Diker:	*Conceptualism, Methodology, Software, Validation, Formal Analysis, Resources, Data Curation, Writing - Original Draft, Writing - Review & Editing, Visualization, Supervision, Project administration, Funding acquisition*	*50%*

Author statement: *Author(s) declare(s) that All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.* ***Declaration of Conflicting Interests:*** *The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article*

This paper does not required ethics committee report

Justification: The methodology of this study does not require an ethics committee report.