



Mapping Research Trends in Archaeology and Tourism: A Web of Science Bibliometric Analysis

Arkeoloji ve Turizm Konulu Çalışmaların Bibliyometrik Analizi: Web of Science Örneği

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Abstract

This study investigates scholarly trends in the interdisciplinary field of archaeology and tourism using a bibliometric analysis of 237 publications indexed in the Web of Science database. The aim is to identify key research themes, influential works, and geographic patterns within the academic discourse. Data spanning 1984–2024 was analyzed using VOSviewer and Microsoft Excel to uncover thematic clusters, citation networks, and keyword co-occurrence. The findings highlight the dynamic interplay between heritage conservation and tourism development, emphasizing the critical role of sustainable management practices in mitigating tourism's adverse effects on archaeological sites. Prominent themes include the use of digital tools such as GIS and virtual heritage technologies, community engagement in site preservation, and the commodification of cultural heritage. English-language publications dominate the field, reflecting its international reach, while regional studies from Spanish and Portuguese-speaking countries contribute valuable localized insights. The results underscore the dual role of tourism as both an enabler of heritage conservation and a potential threat to site integrity, prompting calls for balanced policies. By mapping the intellectual landscape of archaeology and tourism research, this study offers a comprehensive overview of its evolution and provides actionable insights for academics, practitioners, and policymakers engaged in cultural heritage and tourism management.

Keywords: Archaeology, Tourism, Archaeotourism, Bibliometric Analysis, Scientific Mapping

Özet

Bu çalışma, arkeoloji ve turizm alanlarındaki akademik eğilimleri, Web of Science veritabanında indekslenen 237 yayının bibliyometrik analiziyle incelemektedir. Araştırmanın amacı, bu disiplinler arası alanın temel araştırma temalarını, etkili çalışmaları ve coğrafi dağılımlarını belirlemektir. 1984-2024 yıllarını kapsayan veri seti, VOSviewer ve Microsoft Excel kullanılarak tematik kümeler, atıf ağları ve anahtar kelime eşleşmeleri gibi unsurlar açısından analiz edilmiştir. Bulgular, kültürel mirasın korunması ile turizmin gelişimi arasındaki dinamik etkileşime dikkat çekmekte ve turizmin arkeolojik alanlar üzerindeki olumsuz etkilerini azaltmada sürdürülebilir yönetim uygulamalarının önemini vurgulamaktadır. Dijital araçların, özellikle Coğrafi Bilgi Sistemleri (GIS) ve sanal miras teknolojilerinin kullanımı, topluluk katılımı ve kültürel mirasın ticarileştirilmesi öne çıkan temalar arasındadır. İngilizce yayınlar, alanın uluslararası erişimini

yansitarak baskın durumda iken, İspanyolca ve Portekizce gibi yerel dillerdeki çalışmalar bölgesel katkılar sunmaktadır. Bulgular, turizmin hem miras korumayı destekleyen bir araç hem de alanların bütünlüğünü tehdit eden bir unsur olarak çift yönlü rolüne işaret ederek, dengeli politikaların önemini ortaya koymaktadır. Arkeoloji ve turizm araştırmalarının entelektüel haritasını çıkaran bu çalışma, alanın evrimine dair kapsamlı bir perspektif sunmakta ve kültürel miras ile turizm yönetiminde yer alan akademisyenler, uygulayıcılar ve politika yapıcılar için uygulanabilir içgörüler sağlamaktadır.

Anahtar Kelimeler: Arkeoloji, Turizm, Arkeoturizm, Bibliyometrik Analiz, Bilimsel Haritalama

1. INTRODUCTION

Archaeology and tourism are two fields that have grown and developed in parallel, each addressing different dimensions of human curiosity, culture, and economic activity. Archaeology, as a scientific discipline, concerns itself with the study of past human societies through material remains. It has contributed significantly to our understanding of the evolution of civilizations, cultural interactions, and technological advancements (Renfrew & Bahn, 2021). The discipline of archaeology encompasses a wide array of research themes, from the examination of prehistoric societies to the analysis of ancient trade routes. Furthermore, archaeology contributes significantly to cultural heritage management, ensuring the preservation and protection of historical artifacts and sites (Smith, 2023). These contributions are crucial for fostering an understanding of humanity's shared past and preserving cultural heritage for future generations. Tourism, on the other hand, has been recognized as a major driver of economic growth and cultural exchange, particularly in countries rich in historical and cultural assets (UNWTO, 2023). The intersection of archaeology and tourism has given rise to the concepts of "archaeotourism" and "archaeological tourism," which represent the blending of cultural heritage with tourism activities. Archaeotourism refers to the practice of promoting archaeological sites as tourist destinations in a way that emphasizes education and cultural appreciation (Chhabra, 2022). This form of tourism not only aims to provide economic benefits to local communities but also fosters a deeper understanding of human history among visitors. Archaeological tourism, on the other hand, often involves organized tours to historical sites, museums, and excavation areas, with an emphasis on experiencing the tangible aspects of ancient cultures (Poria et al., 2013). This type of tourism has gained popularity as travellers seek more meaningful and educational experiences. The growth of archaeological tourism presents both opportunities and challenges, as it requires balancing the needs of tourism development with the imperative of heritage conservation (Timothy & Nyaupane, 2009). By promoting awareness and appreciation of archaeological heritage, both archaeotourism and archaeological tourism play a critical role in supporting the sustainable management of cultural resources. Archaeological sites are often popular tourist destinations, which can lead to both positive and negative consequences. While tourism can generate funds for the conservation of sites, it also poses risks such as physical damage and the commodification of heritage. The popularity of archaeological sites as tourism destinations has surged in recent years, with millions of tourists visiting sites such as Machu Picchu, Chichen Itza, and the Pyramids of Giza annually. Such trends underscore the economic benefits of archaeotourism for national and local economies. Revenue from entrance fees, guided tours, and ancillary services contributes significantly to the regions surrounding these sites, fostering local development (Comer & Willems, 2019). However, this growth also brings challenges; the heavy influx of tourists can threaten the sustainability of these sites, as illustrated by physical damage, erosion, and, in some cases, the destruction of irreplaceable cultural artifacts (Salim et al., 2024). The challenges posed by archaeotourism include the potential for cultural commodification and environmental degradation. Increased visitation often leads to the commercialization of archaeological resources, where sites are transformed to cater to tourist expectations rather than preserving authentic historical experiences (Oehmichen-Bazán, 2018). Moreover, the physical demands of large tourist

numbers can result in damage to fragile structures and landscapes, which are often not designed to accommodate high levels of foot traffic (Salim et al., 2024). Conservation-focused studies on archaeological tourism have thus highlighted the importance of implementing sustainable management practices to mitigate these risks (Comer & Willems, 2019). The intersection of archaeology and tourism has often been examined from the perspective of conservation challenges. Nguyen et al. (2022) explore the challenges faced in Vietnam, where archaeological sites are threatened by both natural and human-induced factors, including tourism-related developments and environmental changes.

Recent research at the intersection of archaeology and tourism has concentrated on several key areas, reflecting the evolving priorities and challenges within these fields. One of the main themes in the existing literature is the impact of tourism on the physical integrity of built heritage. The study by Javed Salim and colleagues (2024) provides a systematic literature review (SLR) that identifies the challenges and conservation approaches associated with preserving built heritage in the realm of archaeological tourism. It highlights the dual role of archaeological sites as cultural attractions and scientific resources, emphasizing the delicate balance required between access and preservation. This sentiment is echoed by Gao (2016), who outlines the threats posed by tourism to archaeological sites in China, including overcrowding and environmental degradation. One significant focus is the sustainable management of archaeological sites amid increasing tourist activity. Scholars emphasize the necessity of balancing heritage conservation with tourism development to prevent the degradation of cultural resources. This involves implementing strategies that mitigate the adverse effects of tourism while promoting economic benefits for local communities (Timothy & Boyd, 2015). Archaeotourism has undoubtedly become a valuable source of income for many regions, supporting local economies through entrance fees, guided tours, and ancillary services. These economic benefits, however, must be weighed against the potential for irreversible damage to archaeological sites. Numerous studies have highlighted instances where tourism has led to the deterioration of historical sites, requiring an urgent focus on sustainable management practices that balance economic and conservation goals. Tourism's economic impact on archaeological heritage has also been well documented. Built heritage serves as a major tourist attraction, contributing significantly to the socio-economic development of regions where these sites are located. The economic benefits derived from archaeological tourism can, in turn, support conservation efforts. However, the commodification of heritage also presents challenges. According to Zanier and Senica (2023), the excessive commercialization of archaeological sites may undermine the authenticity and integrity of these cultural assets. It is crucial, therefore, to maintain a balance between tourism development and heritage conservation. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) has been a key player in promoting sustainable tourism practices that align with heritage conservation goals. UNESCO's emphasis on safeguarding both natural and cultural heritage worldwide underscores the need for policies that prevent overexploitation of archaeological sites. The literature often cites UNESCO guidelines as critical benchmarks for heritage conservation efforts, as illustrated in the studies by Ferwati et al. (2021), which discuss the role of UNESCO's policies in maintaining the sustainability of heritage tourism. Community involvement in the development and management of archaeological tourism is also a critical research theme. Studies highlight the importance of including local and Indigenous perspectives to ensure that tourism practices are culturally sensitive and beneficial to resident populations. This participatory approach fosters a sense of ownership and helps preserve intangible cultural heritage (Atalay, 2012). Additionally, researchers are examining the economic impacts of archaeological tourism. This includes assessing how tourism contributes to local economies and exploring models that distribute financial benefits equitably among stakeholders. Understanding these dynamics is essential for developing policies that support sustainable

economic development linked to cultural heritage sites (Gössling & Hall, 2006). Lastly, the ethical considerations of commodifying archaeological heritage for tourism purposes are under scrutiny. Debates centre on the potential for exploitation and the loss of authenticity when cultural sites are marketed primarily as tourist attractions. Researchers advocate for frameworks that respect the intrinsic value of archaeological sites while allowing for their appreciation by the public (Smith, 2020). Another major area of focus is the use of technological advancements in conservation efforts. Modern technologies such as GIS, 3D modeling, and virtual reconstructions have increasingly been employed to document and conserve archaeological sites. The work of Rodríguez González et al. (2023) on real-time rendering technology exemplifies the role of digital tools in the preservation of archaeological heritage. Similarly, Ellenberger (2017) utilize digital mapping and GIS to maintain the integrity of built heritage while providing virtual experiences to mitigate the risks posed by physical visitation. Technological innovations such as augmented reality (AR) and virtual reality (VR) have transformed the visitor experience by enabling tourists to visualize ancient structures in their historical context without physically impacting the sites. AR, in particular, allows tourists to engage with interactive, layered information about the sites they are visiting, thus enhancing their understanding without contributing to physical wear on the site itself. Adaptive reuse is another conservation strategy discussed extensively in the literature. For instance, Vardopoulos et al., (2023) discuss how repurposing historic buildings into hotels can preserve their structural integrity and enhance their relevance in contemporary society, thereby ensuring sustainable use. This approach not only conserves architectural heritage but also contributes to sustainable tourism development.

While archaeology and tourism has received attention from scholars across disciplines, a focused bibliometric analysis of this research domain remains absent. Bibliometric studies provide valuable insights into the structure and trends of academic literature, highlighting the most influential research topics, authors, and geographic regions (Salim et al., 2024). Bibliometric methods serve two principal purposes: performance evaluation and science mapping. Performance evaluation aims to assess the research output and publication efficiency of scholars and institutions, while science mapping seeks to elucidate the structure and dynamics of specific scientific fields. Understanding these structural and developmental aspects is beneficial for researchers intending to review a particular area of study. By incorporating quantitative measures, bibliometric approaches add an objective dimension to the otherwise subjective evaluation of literature (Zupic & Čater, 2015).

By conducting bibliometric analysis on archaeology and tourism publications within the Web of Science database, this study aims to fill an important gap in the literature, providing a comprehensive overview of current research trends and areas for future exploration. Based on this gap in the literature, the aim of this study is to systematically examine and analyze scholarly output on the topics of archaeology and tourism, identifying prominent trends, research hotspots, and thematic evolutions within this interdisciplinary field. Through bibliometric analysis, the research aims to deepen understanding of how archaeology and tourism is represented in academic literature, highlighting emerging topics, influential studies, and geographic distributions of research activity. The subsequent sections of this study are structured as follows: the "Conceptual Framework" provides the theoretical foundations of the study, examining the relationships between archaeology and tourism. The "Data and Method" section outlines the data collection and analysis procedures, while the "Analysis and Findings" section presents the results of the bibliometric analysis. Finally, the "Conclusions" and "Implications" sections discuss the broader significance of the findings, highlight practical and theoretical implications, and propose directions for future research.

2. CONCEPTUAL FRAMEWORK

The conceptual framework for this research is grounded in the disciplines of archaeology and tourism, two distinct yet interconnected fields that offer complementary perspectives on cultural heritage, preservation, and economic development. Archaeology is the systematic study of past human societies through the recovery, analysis, and interpretation of material remains, including artifacts, structures, and landscapes (Renfrew & Bahn, 2021). It seeks to understand the cultural and social evolution of humanity by reconstructing past lifeways and elucidating the relationships between humans and their environment. Archaeology provides critical insights into cultural heritage, allowing societies to connect with their historical identity and preserve it for future generations (Smith, 2020). The discipline emphasizes the importance of preserving archaeological resources to maintain their authenticity and integrity, as these resources serve as tangible links to the past (ICOMOS, 2015). Archaeologists play a key role in ensuring that heritage sites are protected from destruction, both from natural decay and human activities such as looting or unregulated development (Carman & Turek, 2017). This commitment to preservation aligns with international frameworks, such as those established by UNESCO, which advocate for the safeguarding of cultural heritage as part of a shared global responsibility (UNESCO, 2021).

Archaeology, as an academic field, investigates human history and prehistory through the excavation, analysis, and interpretation of material remains (Renfrew & Bahn, 2021). Over the years, archaeology has undergone significant transformations, influenced by developments in methodological approaches and technological innovations (Smith, 2020). For instance, advancements in geospatial technologies and analytical techniques such as GIS (Geographic Information Systems) have provided archaeologists with powerful tools to analyze and visualize archaeological data, enhancing their ability to understand past human societies (Conolly & Lake, 2006). Additionally, debates around the theoretical framework in archaeology have also played an essential role in the development of the discipline. Traditional approaches, such as processual archaeology, have been gradually integrated with post-processual theories that prioritize the interpretive aspect of archaeological findings (Thomas, 2012). The discipline has been shaped by the necessity to conserve archaeological sites and the increasing interest in the public engagement and dissemination of archaeological knowledge (Moshenska, 2023). Public archaeology, in particular, emphasizes the importance of engaging the general public in archaeological work, aiming to foster greater appreciation and understanding of cultural heritage (Richardson & Almansa-Sánchez, 2021). This movement towards public involvement has further brought about an increased interest in heritage management and the sustainability of archaeological sites (Cleere, 2005). Tourism, on the other hand, is a multidisciplinary field that studies the movement of people, the experiences of travelers, and the socio-economic impacts of travel activities (Hall & Page, 2014). It encompasses various forms of travel, including cultural, heritage, and leisure tourism, each contributing to local economies and facilitating cross-cultural exchange. Tourism is recognized as a significant driver of economic development, particularly in regions with rich cultural or natural attractions (Sharpley, 2018). It provides a platform for showcasing cultural heritage, thereby increasing public awareness and appreciation for archaeological sites (Richards, 2018). However, tourism also presents challenges, particularly in terms of its environmental and cultural impacts. Unregulated tourism can lead to the degradation of sensitive archaeological sites, threatening their integrity and long-term sustainability (McKercher & du Cros, 2002). The tourism discipline thus places significant emphasis on sustainable tourism practices, which aim to minimize negative impacts while maximizing the socio-economic benefits of tourism activities (Dodds & Butler, 2019). Sustainable tourism models advocate for responsible visitor management, community engagement, and the equitable distribution of tourism revenues, all of which are crucial for the successful integration of tourism and heritage conservation (Swarbrooke, 1999).

The interrelation between tourism and archaeology dates back centuries, reflecting a rich history of public fascination with the past and the role of travel in shaping cultural awareness. The earliest documented forms of heritage tourism appeared during the "Grand Tour" era in the 17th and 18th centuries, primarily in Europe, where affluent young aristocrats travelled across the continent to experience cultural landmarks firsthand. This era saw the first wave of elite tourists who sought out significant historical and archaeological sites, laying the groundwork for what would become a popular global phenomenon in later centuries (Díaz-Andreu, 2019). As the accessibility to historical sites expanded with improvements in transportation and infrastructure, a broader demographic began to engage in heritage tourism, evolving the concept into a more inclusive activity aimed at educational, recreational, and conservation purposes (Timothy & Tahan, 2020). As international travel became feasible for a wider audience in the 20th century, archaeological sites such as the Great Wall of China, Machu Picchu, and the Egyptian pyramids attracted a substantial number of visitors from around the world. This growth in visitor numbers introduced both opportunities and challenges: while the influx of tourists provided much-needed funding for conservation efforts, it also posed significant threats to the integrity and sustainability of these ancient sites. This shift marked a critical juncture in archaeotourism, sparking discussions about balancing preservation with the demands of a burgeoning global tourism industry (Pacífico & Vogel, 2012). These early developments laid the foundation for sustainable tourism principles, which advocate for controlled visitor access and strategic management to protect heritage sites from overexploitation (Comer & Willems, 2012). The concept of Archaeotourism, also known as archaeological tourism, is a niche form of tourism that focuses on the exploration and appreciation of archaeological sites and artifacts, providing unique cultural experiences for travelers. This concept is closely tied to cultural heritage tourism, which involves visiting places of historical and cultural significance. Archaeotourism has grown significantly over recent decades, owing to the increasing value placed on cultural heritage and the desire to experience authentic aspects of the past (Wurz & Van der Merwe, 2005; Zanier & Senica, 2023). However, it also presents several challenges that require careful management to ensure the sustainability of archaeological sites. The relationship between archaeology and tourism is complex and often contradictory. On one hand, tourism provides essential financial resources that contribute to the preservation and enhancement of archaeological sites. For many archaeologists, tourist activity is a valuable opportunity to generate funding for research and conservation efforts (Walker & Carr, 2013). On the other hand, tourism can pose significant risks to the preservation of these sites, as the influx of visitors often leads to wear and tear, increased pollution, and in some cases, even vandalism and theft of artifacts (Campana et al., 2022). The dynamic between archaeology and tourism becomes even more intricate when considering the social and cultural contexts of the sites. Indigenous movements have played a significant role in shaping how archaeological tourism is approached in countries like the United States, Canada, New Zealand, and Australia, where native peoples have claimed their rights to the human remains, artifacts, and archaeological sites of their ancestors (Díaz-Andreu, 2014). These claims often lead to changes in the management and representation of heritage sites, emphasizing the importance of inclusive and respectful tourism practices that honour the cultural values of local communities. Conservation is a critical aspect of archaeotourism, as the preservation of archaeological sites ensures that these valuable resources can be enjoyed by future generations. Several approaches have been developed to address the conservation challenges posed by tourism. Adaptive reuse and sustainable tourism practices have emerged as effective methods to mitigate the negative impacts of tourism while allowing for continued access and appreciation (Ferwati et al., 2021). These strategies involve balancing the preservation of the physical integrity of archaeological sites with the need to accommodate visitors, which is often achieved through careful planning and management that includes limiting visitor numbers, controlling access to sensitive areas, and providing education on the importance

of conservation (Jean et al., 2020). Furthermore, public awareness and education are crucial components of sustainable archaeotourism. Archaeologists and heritage site managers have recognized the importance of involving the public in the preservation process through initiatives such as open excavations, volunteer programs, and virtual heritage tools that enhance the visitor experience while promoting a sense of stewardship among tourists (McManamon, 1991; Gillot, 2020). These efforts not only protect the archaeological record but also foster a deeper understanding and appreciation of the cultural and historical significance of these sites.

3. DATA AND METHOD

This study employs a bibliometric analysis to systematically investigate research trends in the interdisciplinary field of archaeology and tourism. The analysis aims to identify scholarly trends, research hotspots, and thematic evolutions by examining academic literature indexed in the Web of Science (WoS) database. The methods and tools used for data collection and analysis are detailed below. Bibliometric analysis is a widely applied methodological approach used to evaluate the status and development of a particular research field. This approach leverages quantitative and statistical tools to track publication patterns within a specified time period or selected literature corpus. By conducting bibliometric analyses, researchers can gauge the significance of a research area, uncover influential works, and map the interdisciplinary connections within a field (Dereli et al., 2011). The data collection and analysis for this bibliometric study on "Archaeology and Tourism" were conducted using the Web of Science (WoS) Academic-Scientific database, recognized for its comprehensive coverage of scholarly literature across various fields. During this period, a meticulous bibliometric search was conducted to capture a robust dataset representative of the interdisciplinary and cross-national scope of publications relating to archaeology and tourism. The data utilized for this analysis was obtained from academic databases, with the Web of Science (WOS) intentionally chosen as the primary source over other platforms such as Scopus. The selection of the Web of Science (WOS) platform is driven by its extensive and diverse coverage of international scholarly journals, its capacity to deliver granular publication metadata, and its robust citation indexing functionality, which is particularly advantageous for conducting comprehensive bibliometric analyses. Furthermore, WOS provides sophisticated search capabilities and advanced data filtering mechanisms, rendering it highly suitable for achieving the specific aims of this research (Türten, 2024). This review targeted studies published in journals, books, book chapters and conference proceedings indexed by the Science Citation Index-Expanded (SCI-E), Social Science Citation Index (SSCI), Conference Proceedings Citation Index-Science (CPCI-S), Conference Proceedings Citation Index-Social Science & Humanities (CPCI-SSH), Arts and Humanities Citation Index (AHCI), and Emerging Sources Citation Index (ESCI).

3.1. Data Collection

The search parameters were designed to identify publications focusing on the intersection of archaeology and tourism. The Web of Science platform was specifically chosen for its multidimensional indexing systems and citation tracking capabilities. Keywords were carefully selected through an iterative review process aimed at capturing the core themes of "archaeology" and "tourism." The retrieved bibliographic data, including titles, abstracts, keywords, and citation details, was exported from the WOS platform in both plain text and CSV formats. These formats were chosen for compatibility with bibliometric analysis tools such as VOSviewer and Microsoft Excel, facilitating subsequent data cleaning, visualization, and analysis. Upon completing the search, an initial dataset of 823 publications was obtained. These studies encompassed various document types, including journal articles, research reports, and book chapters, to reflect the multi-format discourse present in Archaeology and Tourism scholarship. To refine the dataset,

duplicate records were identified and removed through a rigorous review process. After eliminating 572 identical and 14 irrelevant studies, a final dataset of 237 unique publications was retained, forming the basis for the subsequent bibliometric analysis. This final set represents a comprehensive body of work, with each study examined for its relevance to the topics of archaeology and tourism. The flow diagram illustrating the Web of Science literature review process undertaken for the studies analysed within the scope of this research is presented in Figure 1.

3.2. Analysis Techniques

To explore patterns and relationships within the dataset, various bibliometric analyses were conducted. The primary tools utilized were Microsoft Excel for data handling and visualization, VOSviewer for network analysis, and WordArt for keyword visualization.

- **Keyword Analysis and Word Cloud Generation:** A word cloud representing the keywords associated with the studies was generated using WordArt. This visualization highlights frequently occurring themes and topics in the literature, providing a visual summary of research priorities within “archaeology and tourism.”
- **Visual Mapping and Network Analysis using VOSviewer:** VOSviewer, an advanced bibliometric tool designed for visualizing bibliometric networks, was used to conduct comprehensive network analyses. This program allows for the creation of co-occurrence networks among keywords, co-authorship networks, and citation networks, thus offering a multi-dimensional view of the relationships within literature. These analyses enabled an in-depth understanding of the structure and thematic foci of the literature, identifying not only the prominent areas of research but also potential gaps and underexplored regions within the field of archaeology and tourism.

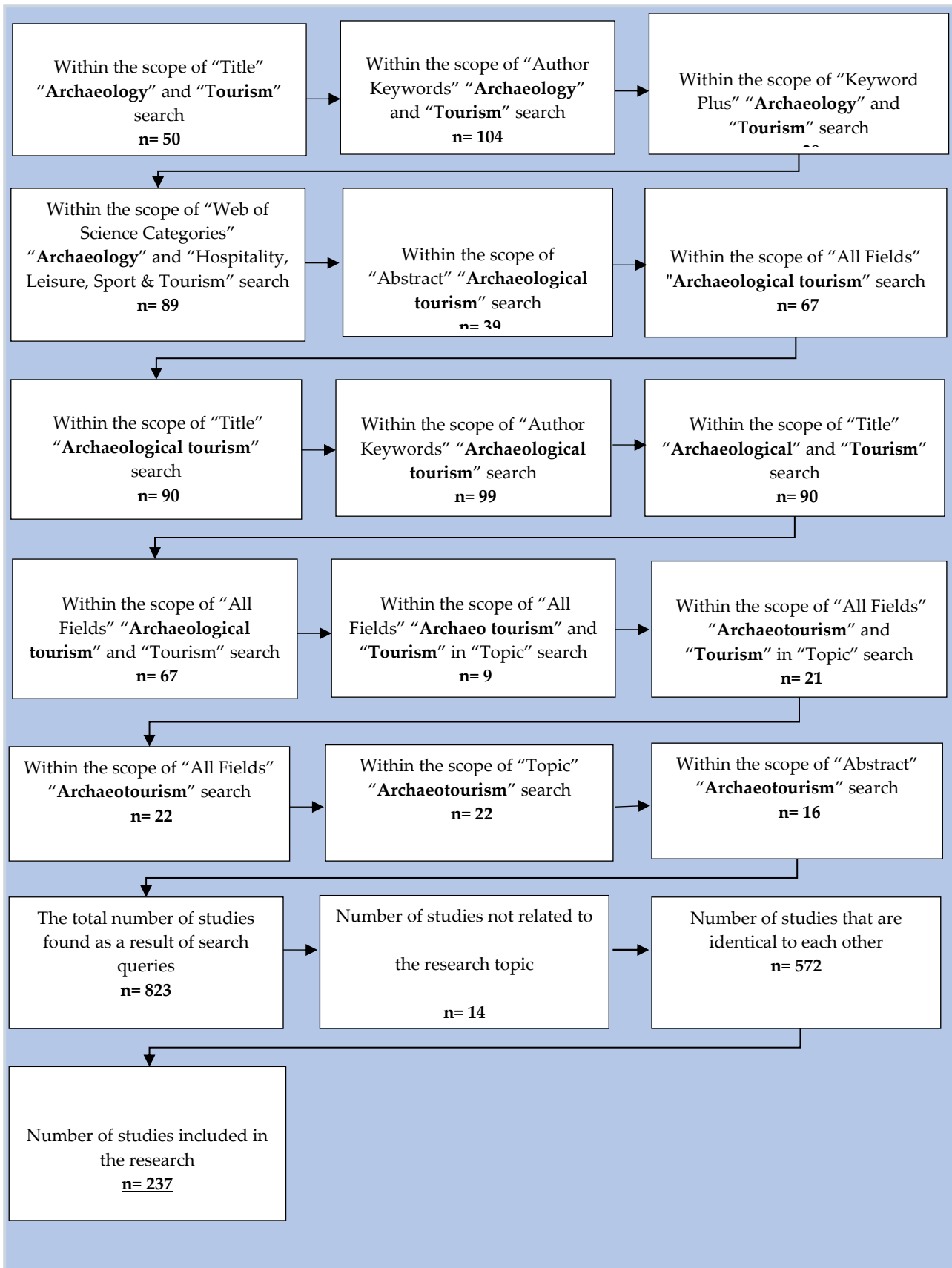


Figure 1. Summary of the WoS Review Process

4. ANALYSIS AND FINDINGS

Figure 2, illustrates the distribution of studies on Archaeology and Tourism by publication years, based on data retrieved from the Web of Science database.

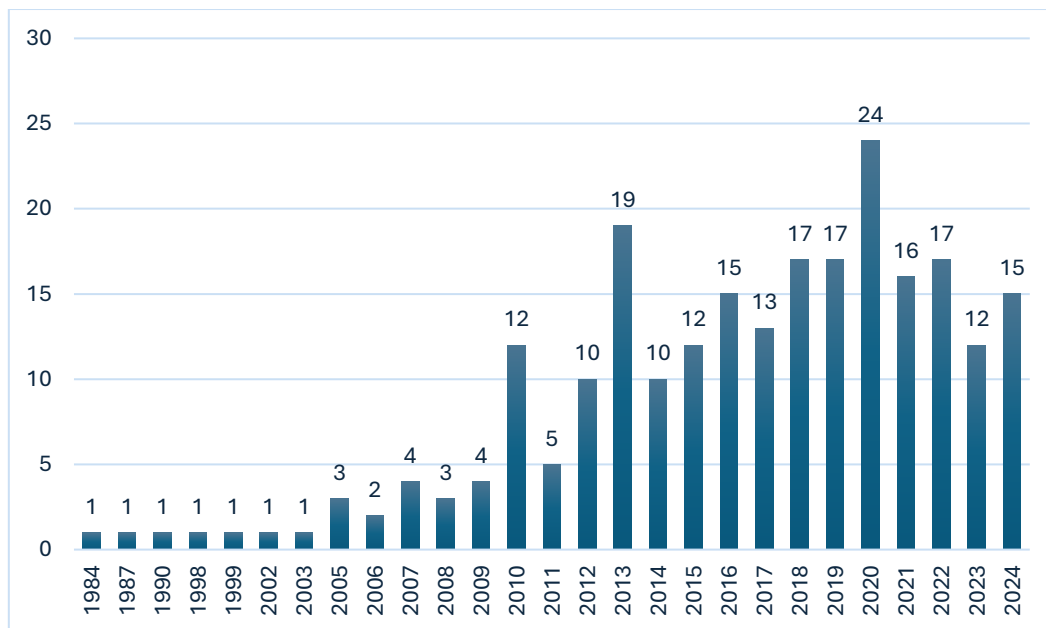


Figure 2. Distribution of Studies by Publication Years

The dataset covers publications from 1984 through 2024, reflecting a long-term perspective on the academic discourse surrounding archaeology and tourism. The data shows the distribution of publications by year, highlighting the dynamic growth and fluctuating interest in this interdisciplinary area of research. In recent years, particularly from 2018 onward, there has been a relatively high number of publications each year. This consistent output underscores the sustained relevance of the field, possibly fueled by an expanding focus on interdisciplinary approaches that incorporate environmental sustainability, digital heritage preservation, and community engagement in archaeotourism. A notable peak occurred in 2020, with 24 publications, representing 10.13% of the total output. This surge in publications could be attributed to increased academic interest in heritage-related topics and the impact of global events on tourism, such as the COVID-19 pandemic, which may have prompted more scholarly work examining the intersection of archaeology, cultural heritage, and tourism under changing conditions. Other significant years include 2013, 2018, 2019, and 2022, each with between 17 and 19 publications, corresponding to roughly 7.17% to 8.02% of the total. These findings suggest that archaeotourism research experienced periodic boosts in attention, possibly linked to the growing importance of sustainable tourism and heritage conservation in public discourse. The fluctuations in publication frequency over the years indicate that archaeotourism is an evolving research area, responding to both academic trends and external influences. The observed patterns imply an increasing acknowledgment of the role of archaeological heritage in tourism development, as well as the complex interactions between cultural heritage and tourism dynamics. This temporal analysis contributes to understanding the progression of scholarly interest in archaeotourism, providing insights into how research priorities may align with broader societal and cultural changes.

Table 1 presents an overview of the types of documents published in the field of archaeology and tourism.

Table 1. Categorization of Studies by Publication Type

Document Type	Frequency	Percentage Distribution (%)
Article	154	64,98
Proceedings Paper	23	9,7
Article; Book Chapter	22	9,28
Book Review	18	7,59
Editorial Material	4	1,69
Article; Early Access	4	1,69
Book	3	1,27
Note	3	1,27
News Item	2	0,84
Review	1	0,42
Editorial Material; Book Chapter	1	0,42
Review; Book Chapter	1	0,42
Review; Early Access	1	0,42
Total	237	100

The document type data underscores that scholarly articles are the primary mode of knowledge dissemination in archaeology and tourism studies, comprising nearly 65% of all documents. This indicates a strong preference within the field for peer-reviewed articles, likely due to their credibility and widespread acceptance in academia. Articles provide detailed accounts of research findings, methodologies, and theoretical advancements, making them a vital resource for advancing archaeological and tourism scholarship. This emphasis suggests that researchers prioritize articles for presenting new findings, thus shaping the field's foundational knowledge. Proceedings papers (9.7%) represent the second largest category, highlighting the field's engagement with academic conferences where emerging research and interdisciplinary discussions often unfold. The presence of proceedings papers implies that archaeology and tourism intersect in ways that benefit from real-time academic dialogue and exchange of preliminary findings, potentially spurring further development of ideas in more formal publications. Additionally, the presence of articles that double as book chapters (9.28%) reveals a trend where authors repurpose or expand upon research findings for inclusion in edited volumes, allowing for a broader reach and often placing their work within specific thematic collections. Book reviews (7.59%) constitute a notable proportion, signaling that critique and assessment of existing literature are valued in this field. These reviews likely serve as a means to evaluate new perspectives, theories, and methodologies within the domain, facilitating academic discussion and potentially guiding readers toward impactful or essential resources. Meanwhile, categories such as editorial material (1.69%) and early access articles (1.69%) reflect the importance of timely insights, which are essential for keeping the scholarly community abreast of recent developments, especially in rapidly evolving research areas or timely themes in tourism and archaeology. The smaller categories, including books (1.27%), notes (1.27%), and news items (0.84%), indicate more limited but specialized contributions. Books, while less frequent, offer comprehensive treatments of particular topics, often synthesizing years of research. Notes and news items provide a forum for brief reports or timely updates, which might highlight urgent issues, short field reports, or new discoveries, offering a dynamic but less in-depth format compared to articles or books. Table 2 provides insights into the languages used for publications in the field.

Table 2. Languages of Publications

Language	Frequency	Percentage Distribution (%)
English	188	79,32
Spanish	31	13,08
Portuguese	11	4,64
Russian	2	0,84
Italian	1	0,42
French	1	0,42
German	1	0,42
Bulgarian	1	0,42
Ukrainian	1	0,42
Total	237	100

English is the predominant language, comprising 79.32% of the publications. This high percentage reflects the dominance of English as the global academic lingua franca, particularly in fields that have an international scope like archaeology and tourism. The widespread use of English facilitates broader dissemination and accessibility of research findings, allowing scholars from different regions to engage with and contribute to the global academic discourse. This dominance, however, may also present challenges for non-English-speaking researchers, as their work may be less visible or face language barriers in reaching wider audiences. Spanish is the second most used language (13.08%), which may indicate a strong presence of research conducted in Spanish-speaking countries, possibly due to the rich archaeological heritage of regions like Latin America and Spain. The significant percentage of Spanish-language publications highlights the importance of local and regional research contributions, particularly in areas with a rich cultural and historical context. These publications play a crucial role in documenting and preserving local heritage, as well as providing valuable insights into regional archaeological practices and tourism dynamics. Portuguese (4.64%) also represents a significant proportion, likely reflecting contributions from Brazil and Portugal, both of which have considerable archaeological tourism activities. This suggests that there is a substantial body of research being conducted in Portuguese-speaking regions, which have unique archaeological sites that attract both academic interest and tourism. The contributions in Portuguese help to ensure that regional perspectives and culturally specific issues are represented in the broader academic discussion. Other languages such as Russian, Italian, French, German, Bulgarian, and Ukrainian each account for less than 1% of the publications, indicating that while the field is largely dominated by English, there is still a diverse range of linguistic contributions, albeit in smaller quantities. This diversity underscores the global interest in archaeological tourism, though it also highlights potential barriers for non-English research to gain wider visibility. The presence of these languages suggests that there are ongoing research efforts in various countries, contributing unique regional perspectives that enrich the field. However, the relatively low representation of these languages may point to the need for greater support in translating and disseminating non-English research to enhance its impact and integration into the global academic community. The third table categorizes the types of publication platforms used for disseminating research in archaeology and tourism.

Table 3. Categorization of Studies by Publication Type

Publication Type	Frequency	Percentage Distribution (%)
Journal	187	78,9
Book	25	10,55
Conference Proceedings	23	9,7
Book Series	2	0,84
Total	237	100

Journals are the most common publication platform, accounting for 78.9% of the total publications. This is consistent with the emphasis on peer-reviewed research as the primary medium for academic dissemination in this field. The significant proportion of journal publications underscores the importance of rigorous scholarly debate and validation through established academic channels. Books represent 10.55% of the publications, highlighting the value of comprehensive, in-depth studies that provide a broader synthesis of research findings or theoretical contributions. Books offer the opportunity for scholars to compile extensive research, provide historical context, and present nuanced discussions that are often not possible within the confines of a journal article. The presence of books as a publication platform indicates that there is still substantial interest in creating foundational texts that can serve as key references for both researchers and practitioners in the field. Conference proceedings, making up 9.7%, suggest that conferences remain an important venue for presenting new ideas and fostering academic collaboration. Conferences provide a dynamic environment for researchers to share preliminary findings, receive feedback, and build networks that are crucial for the development of new research projects. The relatively high proportion of conference proceedings highlights the role of these gatherings in shaping the direction of future research in archaeology and tourism. The relatively small percentage of publications in "Book Series" (0.84%) implies that while there is some contribution through serialized academic works, it is not a dominant mode of dissemination in this field. Book series often provide a platform for ongoing research projects or thematic collections that bring together a series of related studies. Their limited representation suggests that this form of academic dissemination is used selectively, perhaps for specialized topics that benefit from a multi-volume approach. The distribution of authors who wrote studies on archaeology and tourism according to the institutions they are affiliated with is given in Table 4.

Table 4. Distribution of Studies by Affiliations

Affiliations	Frequency	Percentage (%)
Not Affiliated with Any Institution	45	18,99
Complutense University of Madrid	5	2,11
University of Haifa	2	0,84
International Council on Monuments & Sites	2	0,84
European University of Madrid	2	0,84
Complutense University of Madrid; University of Valencia	2	0,84
University of North Carolina; East Carolina University	2	0,84
Trinity University	2	0,84
University of Barcelona	2	0,84
Complutense University of Madrid; Complutense University of Madrid	2	0,84
University of Idaho	2	0,84
State University System of Florida; University of Central Florida	2	0,84
Yarmouk University	2	0,84
University of St Andrews	2	0,84
University of London; University College London	2	0,84
Universidade Federal de Pernambuco; Universidade Federal de Pernambuco	2	0,84
University of California System; University of California Los Angeles	2	0,84
Universiti Sains Malaysia	2	0,84
Universitat de Girona	2	0,84
United Arab Emirates University	2	0,84
Institutions Where Only "One" Study Was Conducted	151	63.78
Total	237	100

Table 4 demonstrates a significant concentration of affiliations, where 18.99% of the publications were authored by individuals without any formal institutional affiliation. This percentage suggests a substantial presence of independent scholars or professionals in archaeology and tourism research, which may indicate a high level of practice-oriented or regionally engaged scholarship in these fields. Among institutional affiliations, the Complutense University of Madrid stands out with the highest number of publications (2.11%), followed by a range of other institutions with smaller contributions. The diversity of institutions represented underscores the international and interdisciplinary nature of archaeology and tourism research. Institutions such as the University of Haifa, International Council on Monuments & Sites, and University of Barcelona each contribute to a globalized research landscape. Notably, numerous affiliations appear only once (63.78%), which points to a broad yet decentralized engagement across universities and research bodies worldwide. The table also highlights the occurrence of multi-institution collaborations, such as those between the Complutense University of Madrid and the University of Valencia. These partnerships suggest an emphasis on cross-institutional research efforts, potentially enriching the research outcomes through diverse perspectives. The affiliations range widely across continents, representing universities in Europe, North America, Asia, and the Middle East, further reinforcing the global scope of archaeology and tourism as interconnected fields of study. In summary, the "Affiliations of Authors" table suggests that research in archaeology and tourism is both collaborative and internationally dispersed. This diversity reflects the fields' inclusive approach to cultural heritage and tourism studies, fostering an academic environment where varied institutional perspectives contribute to a complex, multi-dimensional

understanding of these interdisciplinary areas. Web of Science research areas of the studies analysed and presented in Table 5.

Table 5. Research Areas of the Studies (WoS)

Research Areas	Frequency	(%)
Social Sciences - Other Topics	52	21,94
Archaeology	47	19,83
Archaeology; Cultural Studies; Social Sciences - Other Topics	12	5,06
Arts & Humanities - Other Topics; Science & Technology - Other Topics	11	4,64
Arts & Humanities - Other Topics	11	4,64
History	10	4,22
Archaeology; Social Sciences - Other Topics	7	2,95
Science & Technology - Other Topics	7	2,95
Anthropology	6	2,53
Social Sciences - Other Topics; Sociology	6	2,53
Science & Technology - Other Topics; Environmental Sciences & Ecology	5	2,11
Geology	5	2,11
Arts & Humanities - Other Topics; Social Sciences - Other Topics	4	1,69
Environmental Sciences & Ecology	4	1,69
Geography	3	1,27
Architecture	3	1,27
Social Sciences - Other Topics; Business & Economics	3	1,27
Anthropology; Archaeology	2	0,84
Computer Science	2	0,84
Area Studies; Social Sciences - Other Topics	2	0,84
Education & Educational Research	2	0,84
Environmental Sciences & Ecology; Social Sciences - Other Topics; Business & Economics	2	0,84
Areas with only "One" Study	31	13.1
Total	237	100

The data reveals that the most common research area, "Social Sciences - Other Topics," represents 21.94% of the studies. This prevalence underscores the integration of social science perspectives in exploring archaeology and tourism, likely reflecting the impact of sociocultural, economic, and community-oriented studies in understanding tourism's role within archaeological contexts. The field of "Archaeology" itself is the second most prominent area, comprising 19.83% of the studies. This indicates a strong foundational focus on archaeological methods, history, and material culture within tourism studies. The significant overlap with "Cultural Studies" and "Social Sciences - Other Topics" (5.06%) suggests a trend towards interdisciplinary research, where cultural and social dimensions intersect with archaeological inquiry. This convergence highlights a holistic approach that considers the broader social and cultural implications of archaeological sites as tourist destinations. The inclusion of "Arts & Humanities" (4.64%) and "History" (4.22%) further emphasizes the cultural and historical dimensions inherent in tourism research related to archaeology. These areas provide critical insights into the interpretation, presentation, and preservation of heritage sites, which are crucial for both academic analysis and public engagement.

Other areas such as "Environmental Sciences & Ecology" (2.11%) and "Geology" (2.11%) reflect a growing environmental awareness, likely focused on the conservation challenges and ecological impacts of tourism in archaeological contexts. Additionally, the presence of "Anthropology" (2.53%) indicates an interest in human behaviour, cultural heritage, and

community relations, essential elements in sustainable tourism development. A notable proportion of the studies (13.1%) fall into categories with only one study each, indicating the diverse and specialized nature of research in archaeology and tourism. These unique categories-such as "Architecture", "Education & Educational Research" and "Computer Science"-suggest emerging or niche fields where innovative approaches are being applied to archaeology and tourism studies. In summary, the table highlights that research in archaeology and tourism spans a broad range of disciplines, from social sciences and humanities to environmental sciences and emerging technological applications. This diversity illustrates the complexity of the field, where interdisciplinary approaches contribute to a richer, multifaceted understanding of the interactions between heritage, culture, and tourism. The distribution of the publications examined in the study according to the "Web of Science" indexes is given in Table 6. Table 6 reflects the diverse indexing of archaeology and tourism publications across multiple Web of Science categories, indicating a broad scholarly reach and interdisciplinary nature of this research domain. The most represented index, the Emerging Sources Citation Index (ESCI), accounts for 43.04% of the studies, highlighting the relevance of emerging and developing research topics within archaeology and tourism. This prevalence in ESCI suggests that a substantial portion of the literature in this area is recent or falls into newer research outlets that may not yet be indexed in the more established citation indexes. The Arts & Humanities Citation Index (A&HCI) follows with 16.03%, emphasizing the field's strong connections to arts, history, and cultural studies, integral to both archaeology and tourism.

Table 6. Distribution of Studies by Web of Science Indexes

Web of Science Index	Frequency	(%)
Emerging Sources Citation Index (ESCI)	102	43,04
Arts & Humanities Citation Index (A&HCI)	38	16,03
Book Citation Index – Social Sciences & Humanities (BKCI-SSH)	27	11,39
Social Science Citation Index (SSCI)	19	8,02
Conference Proceedings Citation Index - Social Science & Humanities (CPCI-SSH)	19	8,02
Social Science Citation Index (SSCI); Arts & Humanities Citation Index (A&HCI)	13	5,49
Science Citation Index Expanded (SCI-EXPANDED)	9	3,8
Science Citation Index Expanded (SCI-EXPANDED); Social Science Citation Index (SSCI)	5	2,11
Conference Proceedings Citation Index - Science (CPCI-S)	3	1,27
Science Citation Index Expanded (SCI-EXPANDED); Arts & Humanities Citation Index (A&HCI)	1	0,42
Conference Proceedings Citation Index - Science (CPCI-S); Conference Proceedings Citation Index - Social Science & Humanities (CPCI-SSH)	1	0,42
Total	237	100

The prominence of A&HCI suggests that many studies focus on cultural and interpretive dimensions of heritage, which are central to tourism narratives around archaeological sites. The Book Citation Index – Social Sciences & Humanities (BKCI-SSH), with 11.39%, underscores the importance of monographs, edited volumes, and similar publications, which are commonly used for in-depth analysis in these fields. This distribution implies that archaeology and tourism research is not solely confined to articles but is also disseminated through comprehensive book formats, likely to cover the complexity and breadth of case studies, theoretical explorations, and historical overviews. Social Science Citation Index (SSCI) entries (8.02%) reveal the impact of sociological, anthropological, and economic perspectives on tourism and archaeology. Additionally, the matching 8.02% for the Conference Proceedings Citation Index - Social Science & Humanities (CPCI-SSH) illustrates the field's engagement with dynamic and evolving discussions through conferences, where new findings and methodologies are frequently shared. Other mixed

index entries, such as studies listed in both SSCI and A&HCI (5.49%), reflect the dual social science and humanities orientation of this research, bridging sociocultural analysis with historical and artistic insights. The presence of studies indexed under the Science Citation Index Expanded (SCI-EXPANDED), though lower at 3.8%, and in combination with SSCI (2.11%), highlights interdisciplinary approaches that may incorporate scientific methodologies, such as environmental assessments or technological applications in archaeological research. Table 7 provides a detailed look at the categorization of research within archaeology and tourism. The category "Hospitality, Leisure, Sport & Tourism" is the most represented at 20.25%, reflecting the centrality of tourism studies within this bibliometric analysis. This dominance highlights the primary role of tourism as a key area of inquiry when it intersects with archaeology, often focusing on themes such as heritage tourism, visitor behaviour, and the management of archaeological sites.

Table 7. WoS Categories of Studies

WoS Categories	Frequency	(%)
Hospitality, Leisure, Sport & Tourism	48	20,25
Archaeology	47	19,83
Archaeology; Cultural Studies; Hospitality, Leisure, Sport & Tourism	12	5,06
Humanities, Multidisciplinary	11	4,64
Humanities, Multidisciplinary; Multidisciplinary Sciences	11	4,64
History	10	4,22
Archaeology; Hospitality, Leisure, Sport & Tourism	7	2,95
Hospitality, Leisure, Sport & Tourism; Sociology	6	2,53
Anthropology	6	2,53
Green & Sustainable Science & Technology; Environmental Sciences; Environmental Studies	5	2,11
Social Sciences, Interdisciplinary	4	1,69
Green & Sustainable Science & Technology	4	1,69
Humanities, Multidisciplinary; Social Sciences, Interdisciplinary	4	1,69
Geosciences, Multidisciplinary	4	1,69
Hospitality, Leisure, Sport & Tourism; Management	3	1,27
Architecture	3	1,27
Geography	3	1,27
Multidisciplinary Sciences	3	1,27
Environmental Studies	2	0,84
Anthropology; Archaeology	2	0,84
Education & Educational Research	2	0,84
Environmental Studies; Hospitality, Leisure, Sport & Tourism; Management	2	0,84
Computer Science, Software Engineering	2	0,84
Categories with only "One" study	36	15,2
Total	237	100

Closely following is the category "Archaeology" itself, representing 19.83% of the studies. This significant proportion indicates a strong focus on archaeological research that directly engages with historical sites, artifacts, and cultural heritage, establishing archaeology as a core component of tourism studies. The frequent overlap with categories like "Cultural Studies" and "Hospitality, Leisure, Sport & Tourism" (5.06%) underscores the interdisciplinary approach often taken in these studies. By bridging archaeology and tourism with cultural studies, researchers are exploring the social and cultural significance of heritage sites and their integration into contemporary tourism. The inclusion of "Humanities, Multidisciplinary" (4.64%) and its combination with "Multidisciplinary Sciences" suggests a broad scope of research methods and

analytical perspectives, highlighting the adaptability of humanities research to encompass archaeology and tourism topics. This category points to an integration of humanities-oriented approaches, likely addressing topics such as cultural identity, heritage conservation, and historical analysis within tourism contexts. The presence of "History" (4.22%) as a category is significant, emphasizing the historical dimension in understanding tourism related to archaeological sites. This category likely involves studies that address the preservation and interpretation of historical sites for tourism purposes, thus enriching public understanding of the past. The inclusion of fields such as "Anthropology" (2.53%), "Green & Sustainable Science & Technology" (2.11%), and "Environmental Studies" (0.84%) reflects a commitment to sustainable and socially-aware tourism practices. These categories suggest that some studies are focused on the environmental impact of tourism, the role of indigenous knowledge, and the importance of sustainable development in archaeological tourism. Additionally, smaller but notable contributions from fields like "Architecture," "Geography," and "Management" illustrate specialized yet critical areas in archaeological and tourism research. These disciplines likely contribute to the architectural preservation, spatial analysis, and strategic management of heritage sites, thus facilitating more sustainable and accessible tourism models. In summary, the diversity of categories in this table reflects the highly interdisciplinary nature of research in archaeology and tourism, integrating insights from humanities, social sciences, environmental sciences, and management. This broad categorization underscores the complexity and depth of these fields, as scholars employ various disciplinary lenses to address the challenges and opportunities of archaeological tourism in a global context. The distribution of the publications reviewed within the scope of the study by their publishers (top 12) is given in Table 8. Since there are many publishers in this distribution who published only 2 or 1 study, the top 12 publishers that stand out are included in the table.

Table 8. Distribution of Studies by Publishers

Publisher	Frequency	(%)
Routledge Journals, Taylor & Francis Ltd	37	15,61
Mdpi	19	8,02
Gobierno Canarias, Consejeria Educacion Cultura & Deportes	13	5,49
Channel View Publications	12	5,06
Springer	10	4,22
Routledge	9	3,8
Emerald Group Publishing Ltd	7	2,95
Springer International Publishing Ag	6	2,53
Univ Politecnica Valencia, Editorial Upv	6	2,53
Pergamon-Elsevier Science Ltd	5	2,11
Elsevier	5	2,11
Wiley	3	1,27
Total	132	100

Table 8 provides a clear view of the leading publishers contributing to the dissemination of research on archaeology and tourism within the Web of Science. The publisher with the highest representation is Routledge Journals, Taylor & Francis Ltd, accounting for 15.61% of the publications. This prominence suggests that Routledge, known for its focus on humanities and social sciences, serves as a central platform for scholarship in archaeology and tourism. Given the interdisciplinary nature of these fields, Routledge’s extensive catalog likely offers comprehensive resources that address both the cultural and practical aspects of tourism in relation to archaeological studies. Following this, MDPI represents 8.02% of the publications, reflecting its role as an open-access publisher. MDPI’s inclusion indicates the increasing preference for open-access venues, which enhance the accessibility and global reach of research on archaeology and

tourism. Open access aligns well with the cross-cultural and international appeal of this research area, promoting knowledge dissemination beyond traditional academic audiences. The Gobierno Canarias, Consejería Educacion Cultura & Deportes, accounting for 5.49%, showcases a unique regional interest in archaeology and tourism, likely tied to local heritage conservation and cultural tourism. This governmental involvement suggests a notable degree of engagement with tourism's impact on archaeological and cultural sites at a policy or administrative level, emphasizing the importance of regional publishers in addressing local heritage issues. Other publishers such as Channel View Publications (5.06%), Springer (4.22%), and Emerald Group Publishing Ltd (2.95%) indicate a diverse set of academic outlets that support interdisciplinary research in tourism, culture, and heritage. Channel View, in particular, is known for its focus on tourism and cultural studies, indicating a strong alignment with the thematic focus of archaeology and tourism research. The presence of major academic publishers like Springer, Elsevier, and Wiley, though each contributing a smaller proportion, highlights the value of peer-reviewed scientific dissemination in this domain. These publishers are known for their broad disciplinary coverage, suggesting that archaeological and tourism research is positioned within both specialized and general scientific contexts. Source titles of the studies reviewed are given in Table 9.

Table 9. Source Titles of Studies

Source Title	Frequency	(%)
Pasos-Revista De Turismo Y Patrimonio Cultural	13	5,49
Archaeology And Tourism: Touring The Past	12	5,06
Heritage	11	4,64
Journal Of Heritage Tourism	9	3,8
International Journal of Historical Archaeology	7	2,95
Tourism And Archaeology: Sustainable Meeting Grounds	6	2,53
Public Archaeology	6	2,53
Sustainability	5	2,11
Virtual Archaeology Review	5	2,11
Annals Of Tourism Research	5	2,11
Sources with only "4" Studies	3	5,06
Sources with only "3" Studies	6	7,60
Sources with only "2" Studies	9	7,60
Sources with only "1" Studies	110	46,41
Total	237	100

The "Source Titles of Studies" table provides a comprehensive view of the distribution of publications across various journals and edited books, emphasizing the diversity of sources that contribute to the body of research in archaeology and tourism. The journal *PASOS-Revista de Turismo y Patrimonio Cultural*, published in Portugal, holds the highest frequency with 5.49% of publications. This journal's regional focus on tourism and cultural heritage underscores the importance of localized perspectives in archaeology and tourism studies, particularly within contexts that engage directly with cultural and heritage tourism. The edited book *Archaeology and Tourism: Touring the Past* follows closely with 5.06% of the studies. This source's presence indicates that books, particularly edited volumes, are vital for thematic discussions and multidisciplinary perspectives, offering comprehensive insights into how past societies are represented and marketed in contemporary tourism contexts. Similarly, *Tourism and Archaeology: Sustainable Meeting Grounds*, another edited volume, represents 2.53% of publications, underscoring the role of sustainable practices in the intersection between tourism and archaeological preservation. Edited books such as these provide researchers with focused collections of studies, exploring key issues like sustainability and heritage management through diverse scholarly voices. Journals like

indicating a strong focus on the field's traditional emphasis on the study, preservation, and interpretation of ancient sites. The presence of **"Heritage"** and **"Culture"** emphasizes the cultural value of these sites and their significance in identity, memory, and heritage tourism. This suggests that scholars are not only concerned with archaeological methods and findings but are also invested in how these sites contribute to the cultural and historical narratives presented to tourists. The word cloud also includes terms related to **sustainability** and **management** (e.g., "Sustainable Management," "Conservation," "Planning"), suggesting that the field has a keen interest in balancing tourism with conservation efforts. These terms reflect the challenges of ensuring that tourism does not compromise the integrity of archaeological sites and that these sites are preserved for future generations. Additional keywords like **"Digitalization"**, **"Virtual Reality,"** and **"Smart Tourism"** indicate a trend toward integrating modern technology into heritage tourism. These terms suggest that research may focus on how digital tools can enhance visitor engagement through virtual experiences or improve site management through smart technologies. Such innovations allow for more immersive and accessible experiences while reducing the physical strain on fragile sites. Geographically specific terms such as **"Japan," "Greece," "Western Cape,"** and **"Sao"** imply that case studies in various regions play a crucial role in this research field, providing a comparative perspective on how different cultural contexts approach tourism and archaeology. This regional diversity reflects a global interest in how heritage and tourism intersect across different social, cultural, and environmental landscapes. In summary, the word cloud highlights that the field of archaeology and tourism research is deeply interdisciplinary, combining cultural heritage studies, sustainable tourism practices, and technological innovation. The focus on terms like "sustainability" and "conservation" demonstrates a commitment to responsible tourism, while the inclusion of digital and technological keywords points to a modern approach in engaging with and preserving heritage sites. This visual summary encapsulates a research field that is as concerned with preserving the past as it is with innovatively sharing it with the world. Table 10 presents the most cited studies and authors in all databases in the field of tourism and archaeology and highlights the main authors who have undertaken studies that have significantly influenced the research field.

Table 10. Top Ten Most Cited Publications

Author Names	Article Title	Document Type	Times Cited
Silverman, H	Touring ancient times: The present and presented past in contemporary Peru	Article	100
Ross, David; Saxena, Gunjan; Correia, Fernando; Deutz, Pauline	Archaeological tourism: A creative approach	Article	70
Alazaizeh, Mohammad M.; Hallo, Jeffrey C.; Backman, Sheila J.; Norman, William C.; Vogel, Melissa A.	Value orientations and heritage tourism management at Petra Archaeological Park, Jordan	Article	62
Comer, DC	Tourism and Archaeological Heritage Management at Petra: Driver to Development or Destruction?	Book	52
Ross, David; Saxena, Gunjan	Participative co-creation of archaeological heritage: Case insights on creative tourism in Alentejo, Portugal	Article	49
Pacifico, David; Vogel, Melissa	Archaeological Sites, Modern Communities, And Tourism	Article	45
Roslan, Zainab Binti; Ramli, Zuliskandar; Razman, Muhammad Rizal; Asyraf, M. R. M.; Ishak, M. R.; Ilyas, R. A.; Nurazzi, N. M.	Reflections on Local Community Identity by Evaluating Heritage Sustainability Protection in Jugra, Selangor, Malaysia	Article	42
Bridaa, Juan Gabriel; Meleddub, Marta; Pulinac, Manuela	Understanding Urban Tourism Attractiveness: The Case of the Archaeological Ötzi Museum in Bolzano	Article	41
Adams, Jeffrey Lee	Interrogating the equity principle: the rhetoric and reality of management planning for sustainable archaeological heritage tourism	Article	29
Robb, John G	Tourism and legends - Archaeology of heritage	Article	26

Table 10 provides an insightful look into the highly cited publications at the intersection of archaeology and tourism, underscoring the pivotal research that has shaped this field. The most cited article, *Touring ancient times: The present and presented past in contemporary Peru* by Silverman, receives the highest citation count (100), reflecting the considerable impact of his work on understanding how ancient history is recontextualized in modern tourism. The second-most cited work by Ross, Saxena, Correia, and Deutz, titled *Archaeological tourism: A creative approach* (70 citations), emphasizes the creative potential in archaeological tourism, a theme that recurs in other influential works within this list. This approach is echoed in their later work on participative co-creation of archaeological heritage, which received 49 citations. Together, these studies reveal a growing emphasis on engaging local communities and tourists interactively, enhancing the experiential and cultural value of heritage tourism. Alazaizeh and colleagues' study on *Value orientations and heritage tourism management at Petra Archaeological Park, Jordan* (62 citations) and Comer's exploration of Petra's tourism-driven development or destruction (52 citations) highlight the importance of balancing heritage preservation with tourism. These studies underscore the challenges in managing popular archaeological sites, such as Petra, to protect cultural assets while supporting economic benefits. Petra serves as a focal point in this table, signalling it as a significant

case study in heritage tourism debates Pacifico and Vogel's article, *Archaeological Sites, Modern Communities, and Tourism* (45 citations), as well as the work by Roslan et al. on community identity and heritage sustainability in Malaysia (42 citations), reveal the broader social dimensions of archaeological tourism. The articles by Bridaa et al. on urban tourism attractiveness (41 citations) and Adams' interrogation of the equity principle in sustainable tourism management (29 citations) contribute to an understanding of how archaeological heritage sites function as cultural and economic assets within urban settings and broader policy frameworks. Robb's exploration of the interplay between tourism and legends (26 citations) closes the list, highlighting how storytelling and mythology contribute to heritage tourism. Overall, these top-cited publications underscore a multidisciplinary focus within tourism and archaeology, covering issues from heritage management and creative tourism approaches to local community dynamics and sustainable practices. Following a comprehensive presentation of descriptive tables summarizing research on tourism and archaeology indexed in the Web of Science academic database, the subsequent portion of this study delves into an analysis of the visual maps generated using the VOSviewer software. This analysis aims to provide a visual representation of the knowledge structure and intellectual base of the research field. Figure 4 provides a comprehensive visual map illustrating the co-occurrence of author keywords in studies on tourism and archaeology.

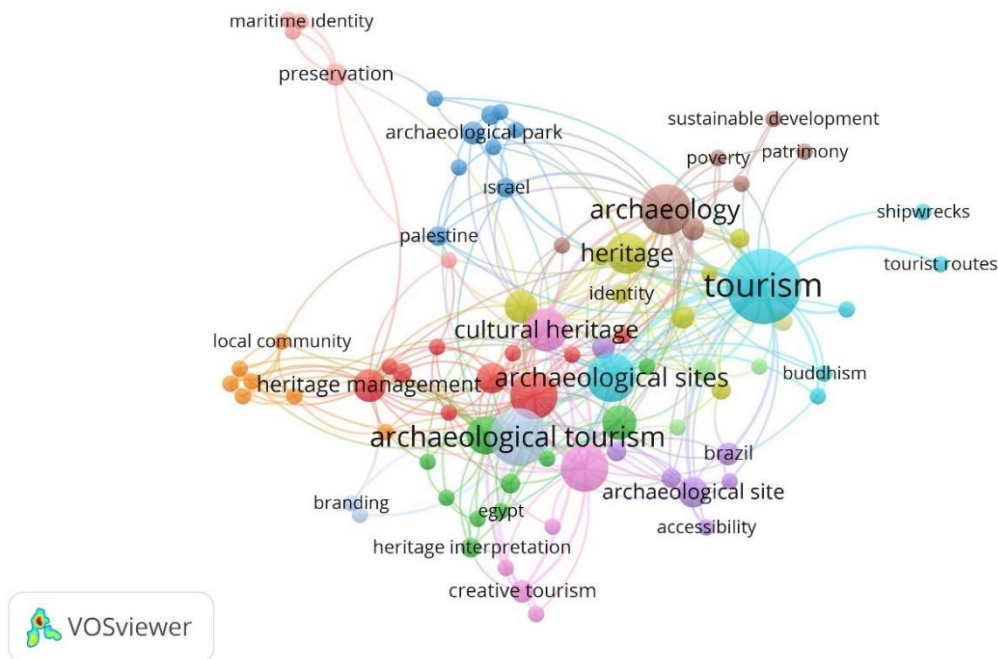


Figure 4. Co-occurrence Map of Keywords in Tourism and Archaeology Research

Based on 237 publications and an analysis of 619 distinct keywords, the figure highlights 87 keywords that appeared at least twice, of which 83 are included in this network visualization. These keywords are clustered into 13 groups, forming 310 interconnections with a combined link strength of 402. This mapping reveals prominent research themes, dominant topics, and underlying patterns that characterize the academic landscape in this field. The central keywords in this visualization, such as "tourism" and "archaeology," appear with high frequency and strong linkages, indicating their foundational role in the literature. "Tourism," in particular, with 42 occurrences and the highest link strength of 74, serves as the focal point around which many related themes orbit. This prominence suggests that much of the research in this domain is driven by the intersection of tourism dynamics with archaeological and heritage sites. The clustering of keywords into 13 groups points to a variety of subfields and specializations within tourism and archaeology studies. Key clusters revolve around topics like "archaeological tourism," "heritage

management," "sustainable development," and "local community." These clusters highlight the critical areas of focus where scholars are delving into the impacts of tourism on archaeological sites, strategies for heritage preservation, and the role of local communities in the sustainable development of tourism. One prominent cluster includes keywords such as "archaeological tourism," "cultural heritage," and "heritage tourism," reflecting a strong interest in the conservation and presentation of heritage sites for tourist consumption. This cluster likely represents research focused on managing tourism at heritage sites in a way that both preserves cultural integrity and enhances visitor experiences. The interconnection between "heritage management" and "sustainability" within this cluster highlights an emphasis on sustainable practices, suggesting that researchers are increasingly aware of the need to balance tourism with conservation efforts. Another significant theme that emerges from the visualization is the focus on community involvement and identity preservation. Keywords such as "local community," "identity," and "heritage values" indicate a scholarly interest in the participatory aspects of heritage tourism, where local communities are not just stakeholders but also active participants in managing and shaping tourism. This cluster implies that there is a movement within the field to respect and preserve the cultural values and identities of communities surrounding archaeological sites, addressing both the socio-cultural and economic impacts of tourism. Several niche topics also appear, such as "maritime identity" and "shipwrecks," pointing to specialized areas within archaeology and tourism research that focus on underwater heritage and the significance of maritime archaeology. The specific mention of "shipwrecks" and "tourist routes" suggests that there is a developing interest in exploring non-traditional forms of heritage sites, broadening the scope of tourism research to include aquatic and submerged cultural resources. The geographical references within the clusters, such as "Palestine," "Israel," "Peru," "Spain," and "Brazil," highlight region-specific studies that address the unique challenges and opportunities of managing tourism and heritage in culturally and historically rich areas. These locations often have distinct sociopolitical and environmental factors influencing their approach to heritage tourism, and the presence of these keywords underscores the contextual diversity within the field. In summary, Figure 3 provides a comprehensive snapshot of the scholarly discourse within archaeology and tourism. The dominant themes emphasize a growing trend towards sustainable heritage tourism, the integration of local communities, and the diversification of heritage sites, including underwater and rural locales. Figure 5 presents the citation-document visual map of studies on tourism and archaeology created by VOSviewer software. Citations are used to assess the impact of research, with highly cited articles considered to be more influential. Citation analysis can reveal the relative importance of publications.

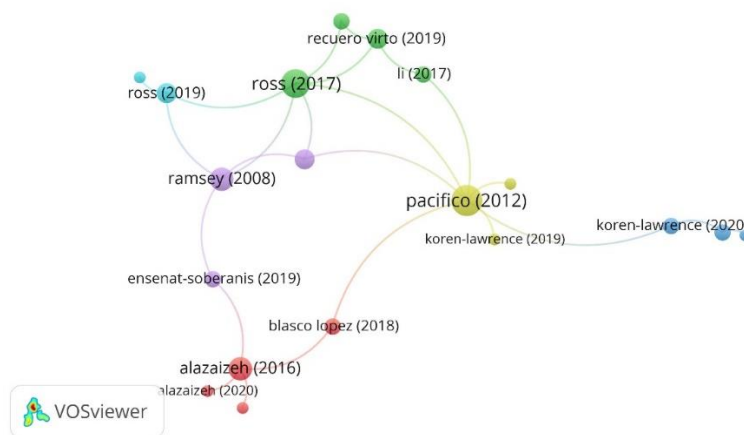


Figure 5. Citation-Document Network Visualization

Figure 5 provides a focused bibliometric map illustrating the citation network among the most impactful documents in the field of archaeology and tourism. The map is based on a threshold of a minimum of five citations, resulting in a subset of 55 influential documents from an original set of 237. In this particular visualization, there are 19 items (publications) that form six distinct clusters, connected through 24 citation links, providing a structured view of how research in this interdisciplinary field is interwoven. Each of the six clusters represents a thematic grouping of research, with each cluster color-coded to highlight different areas of focus within archaeology and tourism. This clustering reveals key research directions and subfields where scholarship has been concentrated. The presence of multiple clusters emphasizes the diversity within this research field, with scholars tackling the challenges of archaeology and tourism from various angles. In this map, certain publications act as central nodes with multiple citation links, indicating their foundational role in the field. Ross (2017) and Pacifico (2012), for example, stand out due to their size and centrality within their respective clusters. These publications likely introduced influential frameworks, methodologies, or case studies that have been widely referenced by subsequent studies, making them pivotal in advancing knowledge in archaeology and tourism. Their citation strength suggests that these works provide insights or approaches that are applicable across multiple contexts, explaining their wide-reaching influence within this academic network. The 24 links between the documents indicate active cross-referencing among the works in this field, with citations representing intellectual lineage and influence. The connections between clusters suggest that there is a cross-pollination of ideas across different thematic areas, indicating a high degree of interdisciplinary interaction. Figure 6 presents the citation-country visual map of studies on tourism and archaeology created by VOSviewer software.

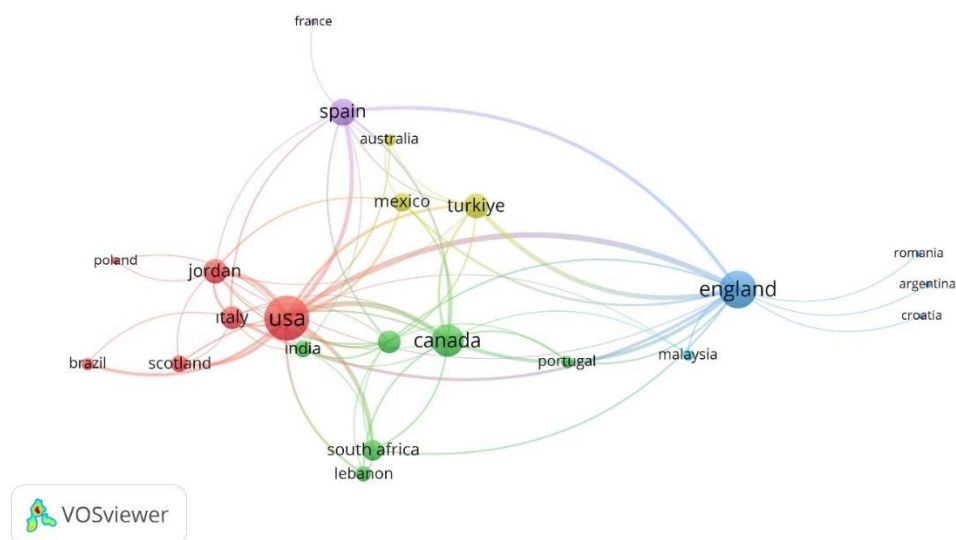


Figure 6. Citation-Country Network Visualization

This analysis highlights how research contributions and citations are distributed among countries, reflecting both academic influence and international collaboration. Among 56 countries with academic publications in this field, 23 countries met the threshold of at least three documents and three citations. Of these, 22 countries were visualized, forming six clusters with 67 connections and a total link strength of 159. This configuration highlights the concentration of influential research contributions and international collaborations within specific regions and between certain countries. In this map, the United States stands out as a central node, reflecting its dominant role in research output and citation impact within the fields of archaeology and tourism. As the largest node, it is well-connected to other countries, showing extensive collaborations and citations. The

inclusion of Italy, Jordan, and Scotland in the same cluster (Cluster 1) with the USA points to a pattern of cross-regional scholarly interaction. This cluster likely emphasizes research themes that are globally relevant, such as heritage conservation and sustainable tourism, with studies frequently cited across these countries. Another significant node is England, which appears in Cluster 3 with connections to countries like Argentina, Croatia, and Romania. England's central position within its cluster suggests a leading role in European and Commonwealth-related research. This network may reflect historical and academic ties that facilitate collaborative studies and shared methodologies in heritage and tourism research, especially in regions with rich archaeological heritage. Spain, forming Cluster 5 with France, is also a prominent node with strong links to other countries, including those in Europe and Latin America. This cluster may focus on Mediterranean and Latin American heritage, with Spain acting as a bridge between Europe and Latin American countries in the field of archaeology and tourism. The prominence of France alongside Spain further underscores the importance of European collaborations in this field. Cluster 2, including Canada, India, South Africa, and other countries, represents a geographically diverse group of nations that may focus on regional studies or case studies within their own contexts, contributing unique insights into archaeology and tourism. Canada's central role within this cluster suggests an emphasis on heritage preservation and indigenous tourism, topics relevant to both domestic and international scholarly communities. Clusters 4 and 6, featuring fewer countries, represent niche areas or emerging contributors to the field. Australia, Mexico, and Türkiye form Cluster 4, highlighting potential regional collaborations focused on unique archaeological sites and heritage tourism practices specific to their locales. Meanwhile, Malaysia, as a standalone entity in Cluster 6, represents an emerging contributor to the field, suggesting that Malaysian research in archaeology and tourism is beginning to gain international visibility. The 67 connections within the map illustrate a well-developed citation network with strong collaborative ties, indicating that research in archaeology and tourism is both globally interconnected and regionally nuanced. The total connection strength of 159 underscores the robustness of these academic exchanges, with each cluster contributing a distinctive perspective based on regional heritage, historical ties, and shared research interests. This international network fosters a holistic approach to archaeology and tourism studies, where countries contribute to a shared body of knowledge while maintaining unique insights shaped by their specific historical and cultural contexts. Following the co-occurrence and citation analyses, co-citation analyses are included from this section of the study onwards. Co-citation analysis utilizes co-citation counts to determine the similarity between documents, authors, or journals. Co-citation refers to the frequency with which two units are cited simultaneously. The core assumption underlying co-citation analysis is that the more frequently two items are cited together, the greater the likelihood that their content is conceptually related. Depending on the unit of analysis, various types of co-citation can be employed: document co-citation analysis, author co-citation analysis, and journal co-citation analysis. Co-citation thus establishes connections between documents, authors, or journals based on their co-occurrence in citations (Zupic & Čater, 2015). Figure 7 shows the Co-citation analysis on cited references in tourism and archaeology research. The minimum number of citations of a cited reference is set at 10. For this condition, of the 8759 cited references, nine meet the threshold. Of these, nine references were visualized, forming three clusters with 30 links and a total link strength of 77. The group colours in the image are as follows. Red represents the first group, green represents the second group, and blue represents the third group. These clusters illustrate the intellectual grouping of frequently co-cited references, suggesting thematic cohesion among certain groups of studies.

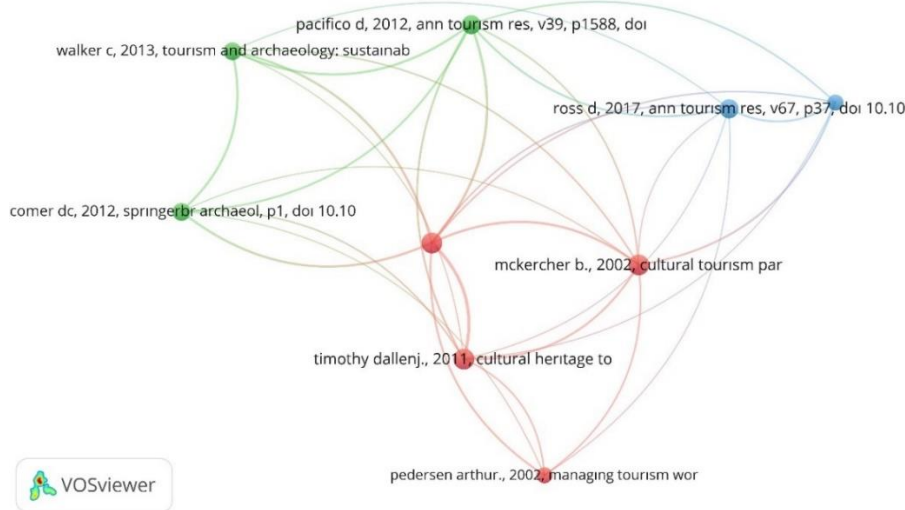


Figure 7. Co-citation of Cited References Network Visualization

In Figure 7, the red cluster includes references by McKercher (2002), Timothy (2011), and Pedersen (2002). This cluster primarily focuses on cultural tourism, heritage management, and sustainable tourism practices. The inclusion of McKercher and Timothy's works highlights the importance of cultural heritage conservation in the context of tourism development. Pedersen's work further emphasizes the necessity of effective tourism management to balance economic growth with the preservation of cultural assets. The strong link strength within this cluster indicates that these references are often co-cited in discussions about managing tourism sustainably while protecting cultural heritage. The green cluster consists of references by Comer (2012), Pacifico (2012), and Walker (2013). This cluster revolves around archaeological heritage management and the role of tourism in local communities. Comer's work on Petra as both a development driver and a threat to archaeological heritage is central to this cluster, highlighting the dichotomy of tourism as both an economic opportunity and a conservation challenge. Pacifico's research on the interaction between archaeological sites and modern communities, along with Walker's work on tourism and archaeology as sustainable meeting grounds, emphasizes the socio-economic dynamics that arise from archaeological tourism. The green cluster is characterized by a focus on balancing heritage conservation with community benefits and sustainable tourism development. The blue cluster includes references by Ross (2017), Poria (2003), and Timothy (2003). This cluster is primarily concerned with the experiences and motivations of tourists visiting archaeological sites and the factors that influence their engagement with heritage. Ross's work on tourism research highlights the significance of understanding tourist behaviours and motivations, while Poria's study on tourist perceptions of heritage contributes to the understanding of how tourists' personal connections to heritage influence their experiences. Timothy's work from 2003 adds to this cluster by exploring heritage tourism in a broader cultural context, contributing to the conceptualization of heritage as a dynamic interaction between tourists and the cultural environments they visit. The network visualization of the co-citation analysis shows how these references are linked through co-citation, revealing the underlying intellectual structure of tourism and archaeology research. The 30 links and total link strength of 77 indicate a well-connected network where the most influential works are frequently cited together, suggesting that these references form the foundational literature of the field. The co-citation links between clusters indicate that there is an overlap between themes such as cultural heritage management, community involvement, and tourist motivations, illustrating the interdisciplinary nature of the research field. The central position of references by Timothy (2003) and McKercher (2002) suggests that these works serve as key bridging studies that connect multiple thematic areas within the

field. These references are highly influential, as they are co-cited across different clusters, indicating their role in shaping diverse aspects of tourism and archaeology research.

Figure 8 presents a co-citation analysis of cited sources in tourism and archaeology research, providing insights into the most influential journals and publication sources within the field. A minimum threshold of 25 citations was applied, resulting in the identification of 17 cited sources, of which 16 were visualized to form three clusters, with 117 links and a total link strength of 5317. The clusters are represented by three different colors: red, green, and blue, and help to elucidate the intellectual foundations of the field.

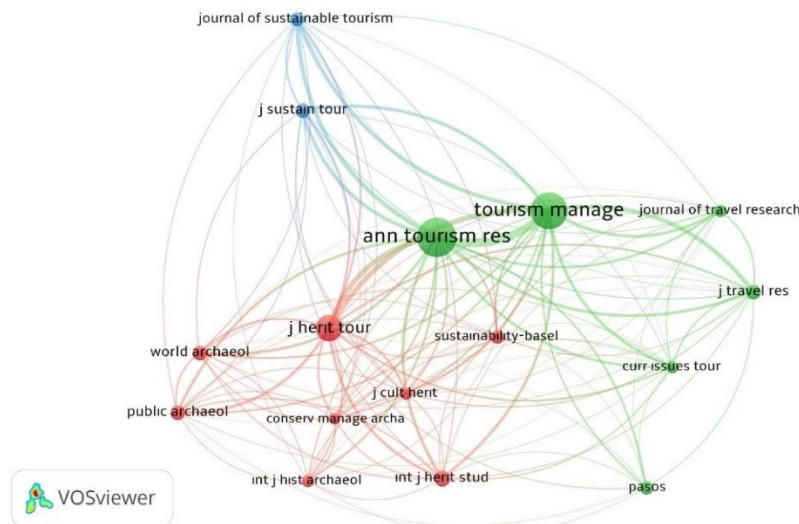


Figure 8. Co-citation of Cited Sources Network Visualization

The red cluster includes sources such as the Journal of Heritage Tourism, International Journal of Heritage Studies, Public Archaeology, and World Archaeology. This cluster predominantly focuses on cultural heritage, heritage tourism, and public engagement with archaeological resources. The Journal of Heritage Tourism has a significant citation count (120 citations) and serves as a key source for research on how heritage tourism impacts cultural preservation and community identity. The International Journal of Heritage Studies and Public Archaeology further contribute to discussions on the ethical and social aspects of heritage tourism, emphasizing community involvement and sustainable practices in the tourism industry. The green cluster is primarily represented by high-impact journals such as Annals of Tourism Research, Tourism Management, and the Journal of Travel Research. Annals of Tourism Research, with 262 citations, is the most cited source and plays a central role in tourism research, contributing to various topics including tourism development, tourist behaviours, and tourism economics. Tourism Management (235 citations) also features prominently, focusing on the practical aspects of managing tourism activities and the challenges associated with balancing tourism growth and sustainable resource use. The Journal of Travel Research adds to this cluster by exploring travel motivations, tourist experiences, and destination management. The blue cluster consists of the Journal of Sustainable Tourism and Journal of Sustainable Tour. These sources focus specifically on sustainability issues within tourism, with an emphasis on balancing environmental, social, and economic concerns. The Journal of Sustainable Tourism (34 citations) is a leading source for research on sustainable tourism practices, highlighting the need for conservation efforts and the responsible use of natural and cultural resources in tourism. The focus on sustainability in this cluster underscores the increasing importance of integrating sustainability principles into tourism and heritage management. The co-citation network reveals that Annals of Tourism Research and Tourism Management are central to the intellectual structure of tourism and archaeology research,

as evidenced by their high citation counts and strong link strengths (2424 and 2398, respectively). These journals are frequently co-cited with other influential sources, indicating their foundational role in shaping the research discourse. The presence of *Journal of Heritage Tourism* and *Journal of Sustainable Tourism* as key sources highlights the interdisciplinary nature of the field, where cultural heritage, tourist behaviour, and sustainability intersect. The 117 links and total link strength of 5317 indicate a robust co-citation network, reflecting the interconnectedness of various research themes, including sustainable heritage management, tourism development, and community engagement. The links between clusters demonstrate the overlapping concerns of sustainability, heritage conservation, and tourism management, which are central to addressing the challenges faced by the tourism and archaeology sectors.

Figure 9 shows a co-citation analysis of cited authors in tourism and archaeology research. A minimum threshold of 20 citations was applied, resulting in eight authors meeting the threshold, of which seven were visualized, forming two clusters with 20 links and a total link strength of 239. The clusters are represented by two different colours: red and green, indicating distinct groups of influential authors and their thematic relationships.

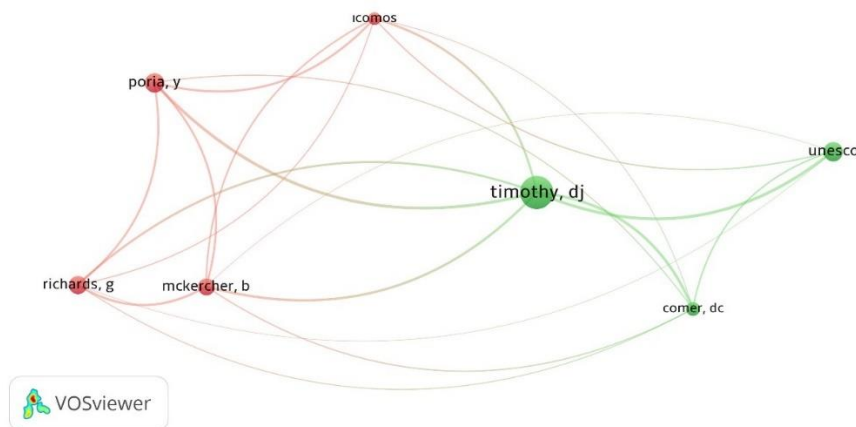


Figure 9. Co-citation of Cited Authors Network Visualization

The red cluster includes authors such as McKercher (B), Poria (Y), Richards (G), and ICOMOS. This cluster focuses primarily on cultural heritage, community engagement, and sustainable tourism practices. McKercher's work is well-known for addressing cultural tourism and its challenges, while Poria and Richards have contributed to understanding tourist motivations and the importance of emotional connections to heritage. ICOMOS, an international organization dedicated to heritage conservation, plays a crucial role in setting guidelines and principles for sustainable heritage management. The strong interconnections between these authors highlight their collective impact on shaping sustainable tourism policies and practices. The green cluster includes Timothy (D.J.), Comer (D.C.), and UNESCO. This cluster emphasizes the management and development of archaeological heritage sites within the context of tourism. Timothy's extensive work on heritage tourism and community-based tourism is central to this cluster, showcasing his influence on the integration of community perspectives into heritage management. Comer has contributed significantly to discussions on heritage management, particularly regarding Petra, while UNESCO's involvement underscores the importance of international frameworks and guidelines for the preservation of world heritage sites. The linkages between Timothy, Comer, and UNESCO reflect a shared focus on balancing tourism development with the conservation of archaeological heritage. The co-citation network reveals that Timothy (D.J.) is a central figure in the intellectual structure of tourism and archaeology research, with the

highest citation count (60) and link strength (135). His work serves as a bridge between different thematic areas, connecting cultural heritage, community engagement, and sustainable management practices. The links between Timothy and other influential entities, such as UNESCO and Comer, indicate the integration of practical heritage management approaches with theoretical frameworks on sustainable tourism. The total link strength of 239 and the 20 links between authors suggest a moderate level of co-citation activity, indicating a foundational but not overly dense network. This reflects the interdisciplinary nature of the field, where authors contribute diverse perspectives on heritage conservation, community involvement, and sustainable tourism development. The presence of both international organizations (ICOMOS, UNESCO) and individual researchers underscores the collaborative efforts required to address the complexities of tourism and heritage management. The co-citation analysis of cited authors highlights the key contributors to the field of tourism and archaeology research. The presence of two distinct clusters suggests a division between those focused on community engagement and sustainable practices (red cluster) and those emphasizing heritage management and international frameworks (green cluster). Future research could explore the intersections between these clusters, particularly in how community-driven initiatives can align with international heritage conservation standards. Moreover, the prominent role of organizations such as UNESCO and ICOMOS indicates the importance of integrating policy frameworks with academic research. Researchers are encouraged to further investigate how international guidelines can be adapted to local contexts, ensuring that sustainable tourism development respects both global standards and community-specific needs. By building on the foundational work of the cited authors, future studies can contribute to more comprehensive and context-sensitive approaches to managing tourism in archaeological settings.

CONCLUSIONS

This study provides a comprehensive bibliometric analysis of the research trends in archaeology and tourism, highlighting the evolving intersections between these two fields. The findings reveal a growing emphasis on sustainable tourism, heritage management, and the integration of community perspectives in archaeological tourism. By analyzing 237 publications from the Web of Science database, this study identifies not only prominent research themes but also the evolving role of technological tools, such as GIS and digital heritage visualization, in enhancing the management and promotion of archaeological sites. The bibliometric maps generated through VOSviewer illustrate the interconnectedness of keywords, authors, and institutions, providing a visual understanding of the academic landscape and facilitating the identification of key research clusters and collaborations. A key observation is the dual role of tourism as both a conservation challenge and an economic opportunity. While tourism has the potential to generate economic benefits that can support heritage preservation, it also poses risks to the integrity of archaeological sites if not managed responsibly. Therefore, sustainable management practices are emphasized as essential for ensuring that tourism continues to benefit archaeological heritage without compromising its authenticity. This study contributes significantly to the understanding of how archaeology and tourism are represented in scholarly literature, offering insights into emerging trends and potential future directions for interdisciplinary research. Importantly, the originality of this study lies in its systematic approach to mapping research trends in archaeology and tourism using bibliometric analysis, which has not been extensively explored in previous literature. By shedding light on the thematic evolution, research hotspots, and collaboration networks within this field, the study provides a foundational understanding that can guide both academics and practitioners in advancing archaeological tourism research.

Theoretical and Managerial Implications

From a theoretical perspective, this study enriches the existing literature on archaeology and tourism by systematically identifying research trends and thematic developments in this interdisciplinary area. The findings provide a foundation for future research that can explore emerging topics such as the impact of technological innovations on heritage tourism, the role of local and indigenous communities in site management, and the challenges of balancing conservation with economic development. The bibliometric analysis highlights the importance of sustainable tourism practices, suggesting that future theoretical models should incorporate frameworks that emphasize community involvement, heritage preservation, and digital engagement. Furthermore, the study contributes to the theoretical understanding of how archaeology and tourism intersect, particularly by revealing the ways in which technological advancements and community dynamics shape the discourse around heritage tourism.

Managerially, the study offers practical implications for stakeholders involved in the tourism and heritage sectors. Policymakers, heritage site managers, and tourism operators can use the insights from this analysis to develop strategies that promote responsible tourism. Emphasizing sustainable practices, such as controlled visitor access, community-led initiatives, and the use of digital tools to manage visitor flows, can enhance the visitor experience while preserving the cultural and historical integrity of archaeological sites. The identification of key research hotspots and influential studies can also help managers prioritize resource allocation and foster collaborations that address the challenges posed by increasing tourist activities at vulnerable heritage sites. Moreover, the study highlights the importance of involving local communities in heritage tourism initiatives, which not only fosters a sense of ownership but also contributes to the long-term sustainability of archaeological sites. By providing a clear picture of the current research landscape, this study can assist heritage managers in making informed decisions that balance the need for conservation with the opportunities presented by tourism development.

Practical Recommendations

Archaeologists are encouraged to adopt adaptive conservation strategies, integrating advanced technologies such as Geographic Information Systems (GIS) and 3D modeling to document and preserve sites. These tools not only enhance research outcomes but also facilitate the creation of virtual tours, which can reduce physical strain on fragile sites while promoting public engagement with archaeological heritage. Tourism managers should implement visitor management frameworks, including the use of timed-entry systems and capacity limits, to control foot traffic in vulnerable areas. Additionally, developing interpretive programs and interactive exhibits can enrich the visitor experience, fostering a deeper understanding of the cultural and historical significance of archaeological sites. Policymakers should establish legal safeguards that prioritize the protection of archaeological resources within tourism development plans. Financial incentives, such as subsidies for sustainable tourism operators or grants for community-based conservation projects, could support the dual objectives of heritage preservation and economic growth. Moreover, fostering international collaboration through UNESCO frameworks can strengthen global standards for sustainable archaeotourism. Active involvement of local communities in tourism management can ensure culturally sensitive practices while enhancing socio-economic benefits. Training programs for local guides and entrepreneurs, alongside equitable revenue-sharing models, can empower communities to participate meaningfully in heritage conservation efforts.

Limitations and Directions for Future Studies

While this study provides valuable insights into the research landscape of archaeology and tourism, there are several limitations to consider. The reliance on the Web of Science as the sole data source may have excluded relevant studies indexed in other databases such as Scopus or Google Scholar, potentially limiting the comprehensiveness of the dataset. Future research could address this limitation by incorporating multiple data sources to provide a more holistic overview of the research field. Additionally, the bibliometric methods employed focus on quantitative analysis and do not account for the qualitative aspects of the research, such as the in-depth content of individual studies. Integrating qualitative content analysis in future studies could provide richer insights into the thematic developments and contextual nuances within the field, thereby offering a more nuanced understanding of the interplay between archaeology and tourism. Future research should also explore the role of emerging technologies, such as augmented reality and virtual reality, in enhancing the accessibility and engagement of archaeological sites for tourists. These technologies have the potential to provide immersive experiences that can enrich tourists' understanding of archaeological heritage while minimizing physical impacts on sensitive sites. Additionally, there is a need for more studies focusing on the socio-cultural impacts of archaeological tourism on local communities, particularly in underrepresented regions where the voices of local stakeholders are often overlooked. Investigating how different cultural and political contexts influence the management and promotion of archaeological heritage could further contribute to the global understanding of best practices in heritage tourism management. Moreover, future research could explore the role of interdisciplinary collaborations in advancing the field, particularly by examining how partnerships between archaeologists, tourism professionals, policymakers, and local communities can contribute to more effective and sustainable heritage tourism practices.

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