

Analysis of Oleotourism and Museology: Bibliometric Analysis and Systematic Literature Review

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Abstract: Traditional Olive Grove represents about 80% of the awards in the National Olive Oil Competition of Portugal, substantiating the importance and relevance of the sector. The term "oleotourism" is considered as a movement that increasingly aims to know all the features, qualities, and differences in olive oil production. As a dynamic movement, this term uses museology to present and promote its products to the public and tourism. From museology articles, it was understood that the museums should not be limited to the institutionally conceived idea, instead of that, it should be understood as a global science of a distinct, which encompasses the universe and society. Subsequently, the relevance of conducting qualitative research arises, studying the literature on oleotourism associated with museology and analysing their contributions and effects on tourism. After reviewing the existing databases, the SCOPUS database was selected to collect and analyse the bibliographic material. Hence, as the purpose, this study aimed to highlight the scientific publications with the most significant impact of the terms "oleotourism" and "museology", understanding their research trends. In the systematisation process, we considered the final 100 articles with the most citations published in journals between 2005 and 2021. The articles analysed were reviewed using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for the systematic literature review. For the bibliometric analysis, the Bibliometrix R program was used. As a result, from the bibliometric analysis, it was found that, as research trends, the keywords "olive oil tourism" and "museums" were highlighted, with Italy, Spain and the United Kingdom as the countries with the most citations. In addition, the journals "Sustainability", "Museum Anthropology", and "Museum Management and Curation" in the publications on these themes are highlighted. In comparison, through the systematic literature review, it was understood that the research trends focused on: the conceptualisation of oleotourism; the influence of museology on tourism; and the importance of museum education. Despite the importance of this research in helping future studies, there are some limitations on their analysis, which will be recommended to use specific databases for the themes and increase the number of articles considered.

Keywords: oleotourism, oleo culture, museological, bibliometrics, research trends

1. Introduction

Oleotourism is connected to products developed in the rural olive-growing sector, offering an opportunity to diversify olive growth (Parrilla-González, Murgado-Armenteros and Torres-Ruiz, 2020). Its potential implies complementarity with other types of tourism, for the substantial part when the product is tested and for the intangible benefits, such as its contribution to a healthy lifestyle (Ruiz Guerra, Molina and Quesada, 2018). Furthermore, the dynamics around oleotourism influences the transformation of oleic spaces into tourism spaces, driving the creation of museums (Parrilla-González, Murgado-Armenteros and Torres-Ruiz, 2020). While, in museum management, several studies focus on the importance of museology to foster cultural promotion and development (Tišliar, 2017; Welsh, 2013). Following these insights, the importance of studying the existing literature on oleotourism associated with museology arises. The literature observes the relationship between these concepts, "oleotourism" and "museology", but little or nothing is discussed as a cooperative association of both terms. Thus, this study attempts to overcome an existing gap in the literature: the lack of scientific information about their relationship.

Through a systematic literature review and bibliometric analysis, our goal is to analyse their contributions and effects. Specifically, this study aims to highlight the scientific publications with a more significant impact through the SCOPUS database, analysing the terms "oleotourism" and "museology" and their variations, such as "olive tourism" and "museum". This analysis uses the final 100 articles published in journals, with the highest number of citations, between the period 2005 to 2021. As qualitative study tools, some programs and review methods were used through the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and Bibliometrix R. The Bibliometric analysis searches to understand the relationship of articles, journals, countries, and keywords with the impact on scientific research, using the crossings performed by the Bibliometrix R program.

2. Methodology

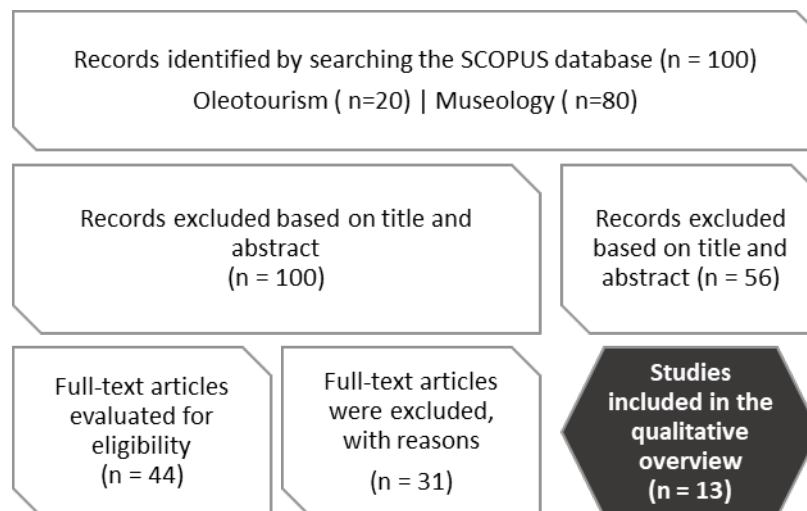
Bibliometric studies are characterised by using statistics to analyse the academic literature. Several authors assume that the leading Bibliometric indicators include the number of articles, the number of authors, the productivity of authors, and the productivity of countries or journals (Guilera, Barrios and Gómez-Benito, 2012). In addition, it is important to note that bibliometric studies provide indicators of research output in a field over time and allow scholars to study science as a system of knowledge creation (Raan, 2003). Also, some bibliometric analysis studies for the tourism universe analyse the universe of literature (Benckendorff and Zehrer, 2014). Increasingly, tourism has been an area of consistent interest for several researchers, which justifies this type of study and analysis for scientific research (Ferreira, Sousa and Gonçalves, 2020).

After reviewing the existing databases, the SCOPUS database was selected to collect and analyse the bibliographic material. Other databases were also considered, but since the information is repeated, the database considered was SCOPUS, which is considered the most complete.

The database search process was searched to highlight the scientific publications with the most significant impact, analysing the literary material for the terms "oleotourism" and "museology" and their variations, such as "olive tourism" and "museum".

After searching the database and analysing the cross-references of the concepts, the following were selected the final 100 articles published in journals, with a higher total of citations (CTs), since 2005. The time limitation between 2005 and 2021 results from the analysis of the concepts' development and the need to equalise the results to no more significant discrepancies. Nevertheless, it is important to note that of the 100 documents, 20 correspond to the oleotourism theme, while 80 articles correspond to the study in museology. The discrepancy of documents in the themes results from the recent research in oleotourism and the lower impact in scientific research than museology.

This study begins with a systematic review of the literature, reviewed through the PRISMA, undergoing various processes of screening and eligibility, as shown in Figure 1.



Source: Own elaboration

Figure 1: Review process through the PRISMA

The stratification and elimination process involved excluding the articles that did not respond to the theme; subsequently, 56 articles that did not follow the intended theme and 31 articles that did not respond to the research objective were excluded from the eligibility process. After the filtering and elimination process, 13 articles were reviewed (six documents in oleotourism and seven in museology). Concerning bibliometric analysis, the database used corresponds to the TOP100 articles obtained by the material research. Subsequently, in this analysis, cross-references were created that responded to the articles, authors, keywords, countries, and journals that stand out in the database.

3. Systematic literature review

For science, a systematic literature review is an investigation that brings relevant studies together on a topic or issue. It uses a literature search database as a systematic source and identification, selection, and analysis methods to conduct a critical and comprehensive review. As mentioned in the methodology, articles were selected through PRISMA analysis, which considered the relevant articles to answer the objective. Specifically, this study begins with a brief systematic literature review of seven museology articles and six on oleotourism. Based on this analysis, it was verified that oleotourism is an activity that distinguishes itself in rural areas, having a significant role for the tourist destination, development the growth of the local economy, new workplaces and opportunities (as the creation of qualified jobs in tourism, and all the activities surrounding tourism). Furthermore, studies also emphasise the concern for the environment, with particular reference to olives valued as cultural assets. Measured as a consolidation activity that drives sustainable growth and rational resource allocation, oleotourism is considered a vital factor for the development of Mediterranean countries (Tregua, D'Auria and Marano-Marcolini, 2018; D'Auria *et al.*, 2020). Several authors agreed that oleotourism has a fundamental role for multiple reasons. Their relations with local territories, businesses, resources, and other tourism activities also favour sustainable development (D'Auria *et al.*, 2020). Thus, oleotourism arises and encourages a growing interest among tourists who want to participate in this self-realisation experience. An increasing number of olive oil mills are diversifying their businesses to incorporate this type of tourism, and in some areas, the olive grove is the primary source of livelihood (Parrilla-González, Murgado-Armenteros and Torres-Ruiz, 2020). This activity involves several principles for enriching and sustainable tourism because it is socially caring, economically viable, and culturally rich, making it a potential tourist attraction. From the point of view of destination sustainability, based on an agri-food industry, some scholars have described other aspects to keep in mind, such as resource efficiency; environmental preservation; conservation of local biodiversity; investment in the quality of employees' work; cooperation with the local community; conservation and appreciation of traditions; and economic viability (Ruiz Guerra, Molina and Quesada, 2018). These spaces also serve as informative components, providing information about the olive oil culture, its health properties, and the cultural and social heritage of the environment where the activity is carried out. At the same time, they encourage tourists to become ambassadors of this product since it meets their needs and desires and fulfils their expectations (Parrilla-González, Murgado-Armenteros and Torres-Ruiz, 2020). The interest in this type of tourism is so high (from a social, economic and political point of view) that many factories and oil cooperatives have started to develop this activity. This activity involves converting cultivation or production areas (such as mills) into a place no longer just for production. Also, it is a unique space where visitors can enjoy a tourist experience (Ruiz Guerra, Molina and Quesada, 2018). In this perspective of oleotourism, it is understood that the relationship with museums emerge, where museums are not usually seen as agents of change, instead they are recognised as essential mechanisms to empower local communities, define, recognise, and develop their indigenous heritages (Ames, 2006). For Franklin (2018), tourism associated with museology can be realised as a new field of tourism studies. Discussions about the social impact of museums have generally focused on their relationship with society at large or the middle and upper classes, from which most museum visitors are drawn (Ames, 2006). Through research and experimentation, museum studies programs can provide exemplars for new museum practices (Welsh, 2013). Museology can and should be the principal agent in Humanisation and respect for Life processes. To promote their public participation, museums claim that their audiences are knowledgeable and learn skills to help preserve and communicate cultural heritage (Tišliar, 2017).

4. Bibliometric analysis

The second methodological moment of this study involves the bibliometric analysis of the database, highlighting some key aspects (the relationship of articles, journals, countries, and keywords with the impact on scientific research). For this, to systematise the databases, it was analysed the TOP100 final articles about oleotourism and museology, published in journals with more citations between the period 2005 and 2021. The database compilation of these themes resulted in the Bibliometric analysis. This analysis attempted to study the development and impact of tourism and museology. To this end, the following were studied: the geographic and temporal characterisation; the most prominent articles; the authors most dedicated to these themes; and the interrelationships arising from these themes.

So, from the bibliometric analysis, it was found that the four keywords with more occurrence for oleotourism were Olive Oil, Olive Oil Tourism, Sustainability and Olea Europaea. While the four keywords Museum(s), Heritage, New Museology, and Education from the museology database. They conclude that, as verified in the systematic literature review, the research trends of these articles direct the oleotourism studies towards tourism

and sustainability and the museology studies directed towards museums and education. In this research, the articles with the most citations were highlighted. Table 1 shows the TOP5 articles in each topic with the most citations.

Table 1: TOP5 articles with the most citations in oleotourism and museology

Topics	Documents	Citations (CTs) (n)
Oleotourism	Louadj, L. and Giuffrè, A. M. (2010) "Analytical characteristics of olive oil produced with three different processes in Algeria", <i>Rivista Italiana Delle Sostanze Grasse</i> , Vol 87, No. 3, pp 187-195.	27
	Millán, M. G., Pablo-Romero, M. D. P. and Sánchez-Rivas, J. (2018) "Oleotourism as a sustainable product: An analysis of its demand in the South of Spain (Andalusia)", <i>Sustainability</i> , Vol 10, No. 10, pp 101.	14
	Millán Vázquez de la Torre, M., Agudo Gutiérrez, E. M. and Morales Fernández, E. (2011) "Analysis of supply and demand of oleotourism in southern Spain: a case study", <i>Cuadernos de Desarrollo Rural</i> , Vol 8, No. 67, pp 181-202.	9
	Guerra, I. R., Molina, V. and Quesada, J. M. (2018) "Multidimensional research about oleotourism attraction from the demand point of view", <i>Journal of Tourism Analysis: Revista de Análisis Turístico</i> , Vol 25, No. 2, pp 114-128.	8
	Tregua, M., D'Auria, A. and Marano-Marcolini, C. (2018) "Oleotourism: local actors for local tourism development", <i>Sustainability</i> , Vol 10, No. 5, pp 1492.	8
Museology	Colwell-Chanthaphonh, C. and Ferguson, T. J. (2006) "Memory pieces and footprints: multivocality and the meanings of ancient times and ancestral places among the Zuni and Hopi", <i>American Anthropologist</i> , Vol 108, No. 1, pp 148-162.	81
	McCall, V. and Gray, C. (2014) "Museums and the 'new museology': theory, practice and organisational change", <i>Museum Management and Curatorship</i> , Vol 29, No. 1, pp 19-35.	79
	Kreps, C. F. (2008) "Appropriate museology in theory and practice", <i>Museum Management and Curatorship</i> , Vol 23, No. 1, pp 23-41.	31
	Carter, J. and Orange, J. (2012) "Contentious Terrain: Defining a human rights museology", <i>Museum Management and Curatorship</i> , Vol 27, No. 2, pp 111-127.	22
	Dean, C., Donnellan, C. and Pratt, A. C. (2010) "Tate Modern: Pushing the limits of regeneration", <i>City, Culture and Society</i> , Vol 1, No. 2, pp 79-87.	22

From this table, it is notable that the article published by Louadj, L., and Giuffrè, A. M. (2010), on the analytical characteristics of olive oil produced with three different processes in Algeria, with 27 CTs, and the article by Colwell-Chanthaphonh, C., and Ferguson, T. J. (2006), entitled by Memory pieces and footprints: multivocality and the meaning of ancient times and ancestral places among the Zuni and Hopi, with 81 CTs, stand out with the most citations.

Then, searching to know the characterisation of the articles under study, the journals with more prominence in this database were identified, analysing more than 70 journals, highlighting the journals "Muzeologia a Kulturne Dedicstvo", "Museum Anthropology", "Museum Management and Curatorship" and "Sustainability". The journal "Sustainability" is highlighted by research on the theme of oleotourism, justifying the direct relationship of the theme with sustainability.

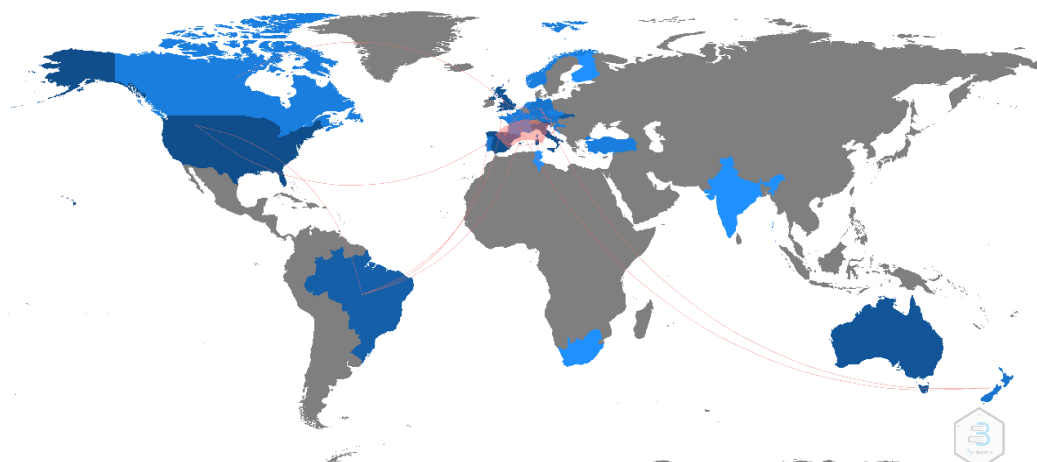
Regarding the geographical and temporal characterisation of the publications, Figure 2 highlights the number of citations according to the temporal evolution, allowing the analysis of the scientific production in the last 15 years. Unfortunately, for 2021, no complete information on the articles was available yet. Nevertheless, this analysis shows that citations in "museology" since 2005 has been showing a decrease. In contrast, research in "oleotourism" appeared in the last ten years, with a lower impact in the scientific world, also presents a reduction.

Year	Citations (n)	
	Museology	Oleotourism
2005	16	
2006	15	
2007	14	
2008	13	
2009	12	
2010	11	11
2011	10	10
2012	9	
2013	8	8
2014	7	
2015	6	6
2016	5	
2017	4	4
2018	3	3
2019	2	2
2020	1	1

Source: Own elaboration

Figure 2: Citations according to the temporal evolution

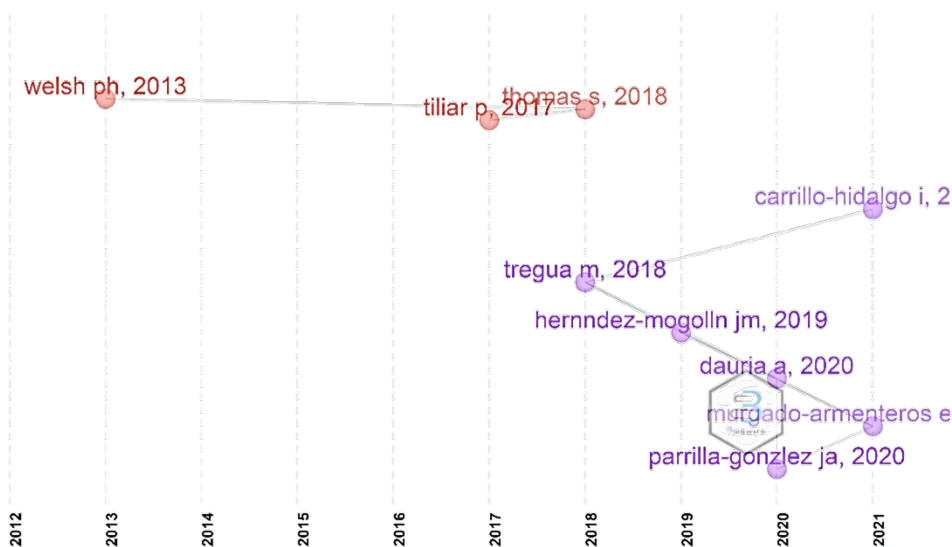
After analysing the research trends, the articles and authors, and the journals most used to publish these themes, it was possible to understand which countries are the most dedicated to studying these themes and the citation relations map between countries. So, Figure 3 shows that in Europe, the scientific research on the themes, museology and oleotourism is concentrated. It is important to note that, for the database of oleotourism, the countries of Italy, Spain, Brazil and Portugal stand out as those with stronger citation relations and scientific production. Meanwhile, for the museology database, the United Kingdom, United States, Italy and Australia stand out as those with the most robust relations with the theme. It is also interesting to note that, in an overview of both themes, the countries of Italy (CTs=60) and Spain (CTs=34) stand out, with relationships with the United Kingdom (CTs=51), the United States (CTs=45) and Australia (CTs=41) standing out. Subsequently, other relationships are associated with this research, such as Brazil and New Zealand, but minor impacts (CTs=16|CTs=9).



Source: Bibliometrix R Program

Figure 3: World map with citation relations between countries

Considering the scientific production of the themes under analysis, Figure 4 shows how the direct citation network is interrelated, based on the documents' temporal dimension and scientific output.



Source: Bibliometrix R Program

Figure 4: Direct Citation Network

This figure exposes the articles located, on the one hand, on the right of the image, in violet, which are the articles of the oleotourism base. On the other hand, the articles located on the left of the image are the museology articles in red. The image analysis shows that the scientific production in oleotourism is more recent, with a list of citations since 2018. In contrast, for the museology database, the relation of direct citations is highlighted from 2013 to 2018. By analysing the interrelationship of the documents, it is possible to understand which articles cite each other in both subjects, i.e., there is a co-citation relationship. Therefore, it is important to reinforce the relationship of the articles, and their influence on the development of each theme is present. However, the discrepancy in the association of both themes is verified when they relate, i.e., the scientific production in museology does not pass through the scientific production in oleotourism, and inversely.

5. Conclusions

After reading the systematic review and the biometric analysis of the concepts, some pertinent conclusions were reached in response to the objective. This study aimed to understand the relationship between the themes of oleotourism and museology using a stratified SCOPUS database. Specifically, to answer the purposes of this study, it was understood that from the systematic literature review, studies in oleotourism are dedicated to conceptualising the term, the analysis of the potential and tourist typologies with which it is associated, and the development of society and economic level. In comparison, a systematic literature review in museology directs its investigations towards the analysis of museums and the importance of education and study programs in the subject. Still, this review allowed to create a line of connection between oleotourism and museology. This connection is reformed through oleotourism's demand to develop ways of promotion and dissemination associated with museology. On the other hand, it was also possible to verify this connection through museology's demand for ways to grow and make museums more dynamic. In addition, both themes follow different paths in their scientific production but address themes and research trends that can be related and respond to each other.

The bibliometric review confirmed these research trends, focusing on prominent keywords such as "museology", "museums", "oleotourism" and "heritage". Also, there were highlighting the publications of the journals *Muzeologia a Kulturne Dedicstvo*, *Anthropology of Museums*, *Management and Curatorship of Museums* and *Sustainability*, for the case of oleotourism. So, this analysis proves, in response to the purpose, some benefits can arise from this connection, giving more concise answers to the market. Moreover, their publication can be related to journals in museology or sustainability. Furthermore, scientific research on both subjects highlights that the concepts are developing in recent years during the study. Even though oleotourism is a current subject, it has been marked by its impact. The countries that have the most scientific production on these themes are Italy, Spain, Brazil and Portugal for oleotourism, and the United Kingdom, United States, Italy

and Australia for museology, which may be related to the regional tourism offer and the need for research and development on these themes. In conclusion, it was understood that these terms are recent. Also, their development is increased, which drives the need for research on the themes, highlighting the importance of developing studies on these themes and relating them. Despite the importance of this research in helping future studies, there are some limitations on their analysis, which will be recommended to use other databases (such as OLEA SSR markers, WOGBC - Worldwide Olive Germplasm Bank of Córdoba, Marrakech and Izmir, and among others) for the themes and increase the number of articles considered. So, future studies should continue in this area in these contours, looking to extend the search of articles. From this study, it is also essential to understand that more and more research has emerged that aims to provide answers to both themes, but in singular analyses. Therefore, it will be important to investigate these terms together, searching for solutions to answer the museology and oleotourism development.

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