



Article

Cultural and Natural Resources in Tourism Island: Bibliometric Mapping

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Abstract: Island ecosystems have very specific physical, economic and socio-cultural characteristics, which are shared by most of these ecosystems regardless of their geographical area. These characteristics include well defined geographical boundaries that lead to a greater degree of isolation, lack of economically exploitable resources, great external dependence for consumption, cultural and natural heritage with a high uniqueness level and a high concentration of endemic plant and animal species. All of them are responsible for the high development dependence level linked to the tourism activity of these ecosystems. Thus, island ecosystems are currently an important international tourism destination, where a great diversity of very attractive natural and cultural resources and of great heritage value are concentrated. This fact allows for the development of tourism activities of great heterogeneity among countries or regions of the world that host these island ecosystems. The aim of this research was to identify and analyze, through a bibliometric and bibliographic analysis, the scientific production indexed in the international Scopus database, which addresses the subject of use of cultural and natural resources by tourism in island ecosystems. This scientific mapping allows us to observe the evolution of scientific production in this field of study. The results show that this is a new subject (a large number of transient authors), predominantly affiliated with the United States and Spain. The most followed research lines to date are destination management followed very far by responsible environmental behavior and the impacts of sustainable development. However, the keywords with the highest co-occurrence show that the hot topics are tourism exploitation in the ecotourism field and sustainable tourism development. This research is considered the first bibliometric study carried out which is related to this thematic approach, providing a clear in-depth analysis for researchers and thereby facilitating the approach of future research work.

Keywords: island ecosystems; island tourism; cultural heritage; natural heritage; bibliometric analysis; bibliographic analysis

1. Introduction

1.1. Cultural and Natural Heritage

Constant debates on the relevance of the cultural and natural heritage of territories established that such assets are an irreplaceable source of identity and inspiration, which can be used as key

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elements to promote sustainable development [1,2]. Following this approach, governments promoted a regulatory and institutional framework that allows for the regulation of these spaces in order to achieve their conservation. UNESCO elaborated international instruments to strengthen the protection of cultural heritage [3–6], among others.

In this regard, UNESCO set a significant precedent with the campaign it launched in 1960 for the preservation of Nubia's monuments in Egypt so that they would not remain under the waters of the Aswan Dam. Thanks to this, today these treasures of humanity can be admired and visited by tourists, researchers and scientists from around the world [7]. This action is the symbolic step that enabled the Convention Concerning the Protection of World, Cultural and Natural Heritage to be established at a UNESCO meeting in 1972 [3].

In the beginning, the creation of two conventions was considered, one that addressed natural heritage and another that addressed cultural heritage. After several debates, it was considered that the bidirectional human–nature relationship developed has an extraordinary value, so heritage cannot be divided, which is a fact that supports the creation of a single convention that raises the existence of natural and cultural goods. Years later, cultural-natural goods, also known as mixed goods, emerged. Based on the latter, heritage was resized by accepting "other thoughts" from Latin America, where the link between human beings and their environment is a permanent expression [8].

Therefore, UNESCO proposed a heritage classification that serves as the basis for heritage classification within territories, although this may vary (by subdividing) depending on the reality of each state. Thus, it defines natural heritage as a set of natural and environmental assets and wealth, which society has inherited from its predecessors [9]. Cultural-natural heritage is made up of the elements of nature, which are maintained in their original context, but intervened in some way by human beings [9]. Finally, it defines cultural heritage as the set of tangible and intangible assets which are made up of elements that reinforce the sense of community with a self-identity and that are perceived by others as characteristic of the human group. They come from human creativity that is transmitted, modified and accumulated from generation to generation [9].

1.2. Tourism as a Means of Conservation of Natural and Cultural Heritage

One of the ways of preserving heritage assets is by exploiting the assets linked to the tourism activity. Exploitation of these resources by tourism together with obtaining the declaration of heritage at different levels (local, national, regional, global) can produce significant socio-economic impacts [10,11]. Obtaining a declaration of assets as World Heritage recognition granted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) enables the achievement of a change in the visitor's profile, that is, by attracting tourists who spend more and take a greater interest in cultural aspects [12]. For example, the report developed by the National Commission of the United Kingdom for UNESCO in 2016 [13], determines that from April 2014 to March 2015, £10.8 million was generated in Scotland from the visits made to the six heritage assets registered on the World Heritage List [13]. Ecuador receives on average USD 147 per day from foreign tourists who visit protected areas of the natural heritage, while national tourist spends on average USD 110 per day. Thus, a USD 11 relationship of economic return for every dollar that is invested in the continental National System of Protected Areas is established. A greater influx of international visits is reached based on the recognition by the Ecuadorian government that the country does not have a natural working capital, but a natural heritage that belongs to everybody, which results in 68% of foreign tourists expressing that their main motivation to travel to Ecuador is to visit the protected areas of the country [14].

Despite the encouraging data, there are also trends which reveal that those interested in reaching a declaration of heritage are not aware of the disadvantages that result from such acknowledgments [15]. It is confirmed that there is no direct or generalized link that supports the idea that socio-economic development is an effect to be achieved with a declaration of heritage, and by no means can this be applicable when the World Heritage Site (WHS) status is achieved [16,17].

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According to Yuksel et al. [18], the residents of the areas declared as heritage, in some cases, perceive that tourism development is generated at the expense of the sustainability of these spaces. This is due to the fact that from a natural heritage perspective, the tourist does not have a robust environmentally responsible behavior. Thus, the intensity of environmental and ecological impacts is inevitable for these spaces, although these may vary in intensity according to the attitude, motivation and behavior of tourists [19,20].

In the case of cultural heritage, Alraouf [21] reveals an emergence of "false authenticism" because the efforts to conserve cultural property in many spaces are concentrated in the preservation of isolated monuments, which does not enable to make the daily life and identity of human groups that settled down in these spaces known in an authentic way, succumbing many times to the incorporation of contemporary needs (commercial spaces, exclusive accommodations, etc.), which reinforces the loss of social sense and meaning that these assets have for the community.

Finally, the realities that arise from exploiting resources will be varied, so the challenge for including these resources in tourism practices must be aimed at sustainability objectives in order to benefit all the actors linked to them.

1.3. Research Objective

In the literature review, it is observed that the scientific production on use of both natural and cultural resources by tourism activity is concentrated in large geographical areas, ignoring the reality of tourism in small geographical spaces such as Islands. There are few studies in this geographical area; Jolliffe and Baum [22], small islands of the North Atlantic or Sdrali and Chazapi [23] of the Mediterranean. A topic of great relevance which is dealt with is the saturation of carrying capacity, a condition that has led destinations to generate management strategies focused on sustainability models [24,25]. The main reason why many destinations reach the carrying threshold is mainly due to the absence of resource management tools, an appropriate implementation of basic infrastructure, as well as a decrease in the attractiveness of the destination [26,27].

However, island tourism is very relevant. According to the World Tourism Organization [28], there is an economic upturn in the demand for travel in the main source markets towards island destinations. Thus, for the year 2017, 1326 million international tourist arrivals were registered worldwide, representing 1.34 trillion dollars in revenue. Of the total arrivals worldwide, the regions with the highest concentration of Island States, such as the Caribbean and Oceania, hosted 26 and 16.6 million international tourist arrivals, respectively.

According to the Office of the High Representative for the Least Developed Countries—Landlocked Developing Countries and Small Island Developing States [29], island territories are characterized by a high social, economic and environmental vulnerability, which is specific to their geographical characteristics, partly due to the lack of resources for extractive industries and the high transportation costs. This has often led to the development of a strong dependence on tourism, as it is considered the main source of income, causing limited opportunities for the private sector and an inversely proportional (large) dependence on their public sector economies [29,30].

The strong relationship of these geographical spaces with tourism has led to a very diverse and in many cases, aggressive exploitation of the fragile natural and cultural environments they host. Regarding tourism activities, Akadiri et al. [31] mentioned that their level within islands shows a great heterogeneity among the states or regions of the world. On the one hand, tourism activity is seen as an opportunity for diversification and generation of foreign exchange [32–36] but at the same time, the presence of limitations is unavoidable due to the difficulties of the carrying capacity, the area of exploitation that can be used for tourism purposes and the state of conservation that can be achieved. It is necessary to point out that the resources available within islands are elements that are part of the cultural heritage of territories, which, due to their relevance, are aimed at being capitalized and being used as mechanisms to achieve economic development [37,38]. At times, their destruction for

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implementing spaces that can generate other capitalization methods has also become a constant choice alternative [39,40].

In this context, this research aims to analyze and examine the scientific production developed in relation to use of cultural and natural resources by tourism in a geographical environment such as island ecosystems, in order to observe its evolution. The methodology used is a bibliometric analysis that allows for scientific mapping based on the scientific documents identified in the international Scopus database (185 documents). The novelty of this research is that there is no compilation work of the scientific production of these characteristics on the subject under study. The results and information obtained are of great value for researchers who work on the subject or begin their first steps, as well as contributing to the literature by performing a scientific mapping on the scientific production published until 2019.

This article is structured into four sections. A brief introduction in which the subject is contextualized, the novelty of the work is presented and the objective is raised. Then, the work methodology (materials and methods) is presented and the results obtained are shown in the third section. In the last section, the conclusions and limitations of the investigation are discussed.

2. Materials and Methods

The methodology focuses on a bibliometric analysis. This analysis applies techniques and tools that enable to identify, document and synthesize different characteristics of the field of knowledge [41,42]. Based on the data obtained, scientific mapping is carried out, outlining the networks based on their structure and definition of their relationships between the elements of the structure [43]. An appropriate articulation of these networks will identify future lines of strengthening the scientific production of this field [42].

2.1. Search Criteria and Source Identification

Firstly, the scope of the review was defined. The Scopus database was selected with the purpose of identifying high-quality scientific material based on three characteristics: (a) application of rigorous quality standards through the Relative Quality Index, Scimago Journal Rank (SJR) [44]; (b) wide coverage in time compared to other databases, being more suitable for a citation analysis because Scopus provides about 20% more coverage than its main competitor, WoS [45]; and (c) access to simultaneous downloads of a considerable number of references stored in detail as metadata [46]. The requirement and fulfilment of these characteristics allows for the validation of indexed information and therefore, its use is justified [47].

Several criteria are established for searching and monitoring information were established for developing the review. First, coverage time is determined to be equal to or less than 2019, with the purpose of identifying information published during full years. Then, the documentary unit of analysis is established, which, in this case, is the article; the choice is made based on joining the six criteria: (1) speed within publication processes, (2) rigorous arbitration process, (3) visibility and impact at different levels (local, national and international), (4) specific outline of presentation of information, (5) acceleration in positioning of authors within the scientific community, and (6) increase in feedback [48–50]. Conference articles, books and chapters, editorials, notes, letters or errors contained in the selected base are excluded from the process.

Tracking the selected documentary units was based on the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA) method, detailed in Figure 1 [51,52]. This methodology is composed of an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses. Specifically, it consists of a 27-item checklist and a 4-phase flow diagram. The first step is to identify scientific production records through a search equation. These records contain a set of metadata that describes their attributes [53] and are the main source of information for scientometric and bibliometric studies [54]. The process begins by structuring an advanced search equation, because within Scopus, this option manages to combine the basic search options without the

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author limits and search, and more operators and codes are enabled [45]. The equation is constructed as follows: (TITLE-ABS-KEY (island AND touris *) AND TITLE-ABS-KEY (cultural AND resources) OR TITLE-ABS-KEY (natural AND resources)) AND DOCTYPE (ar OR re) AND PUBYEAR < 2019. This equation resulted in 482 documents for analysis.

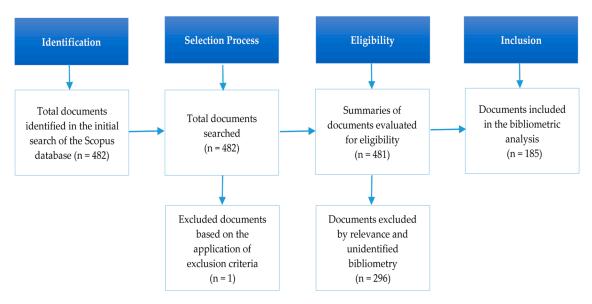


Figure 1. PRISMA [51] method procedure detailing the steps in the identification and selection of documentary units. Source: Own elaboration.

2.2. Data Extraction

Once the documents were identified, the exclusion criteria were applied to refine and standardize the metadata by eliminating duplicate documents, those with unidentified bibliometrics and those unrelated to the subject of study. After the final selection and verification of eligibility, 185 documents were consolidated within Scopus for use in the review.

To prepare the Scopus sources for bibliometric analysis, the records of the 185 documents included in csv format (comma separated values) were downloaded. Metadata on citation information, bibliographic information, summary, keywords, among other information were included in the download. The downloaded information was worked with in the Microsoft-Office Excel software based on the analysis variables required for each selected bibliometric indicator. In addition, VOSviewer bibliometric analysis software was used for developing scientific mapping (build and visualize bibliometric networks) [55–62]. Finally, EndNote was used to manage bibliographic references.

2.3. Data Analysis

Data analysis is structured in two parts. In the first one, a descriptive analysis is developed, which details the basic characteristics of the scientific production of the field of knowledge. For this, a series of indicators that arise from different mathematical models, which are based on the relationship of two or more variables were applied to the total set of identified metadata. These are classified into activity indicators that provide information on quantity, productivity, dispersion, collaboration and networks, among others; and into impact indicators, which provide information on the citation level of the documents, impact factor or immediacy index, H-index (measure both the productivity and citation impact of the scientific publications of a researcher; takes into account the most cited articles of the researcher and the number of citations received in other publications), among others [63].

In the second part of the analysis, VOSviewer software was used, which enabled to build different representations of the scientific mapping, thus identifying the different relationships that are built in the field of study knowledge. In this section, the co-citation or citation analysis was also included, which is established according to Klavans and Boyack [64] as "the most effective way to index the

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literature" (p. 2). This analysis enables to determine the frequency with which other authors jointly cite two authors or documents in the reference list of the database under review [42,43,65,66]. It also counts the aforementioned citations, a value that enables to build similarity measures through bibliometric mapping [64,67].

The analysis of co-occurrence of keywords or co-keywords was also included. The aim of this analysis is to determine the frequency with which certain keywords "occur together" in three possible sections of the reviewed documents; title, abstract or keywords. Chen et al. [68] propose to observe the relationship generated from the presence of two or more keywords within the same research topic, so the more frequent the coincidence of these combinations is, the closer the relationship is. This analysis is carried out based on the study of the metadata of the documents registered and is classified as a method of great value for researchers who begin in new research fields, since an overview of the analyzed knowledge field can be available from a relational structure [69,70], in addition to allowing to track emerging concepts as they occur within the analyzed literature [64].

3. Results

3.1. Productivity by Years

185 documents have been identified since 1985. The first work is Tourism resources and their development in Maldive Islands [71]. The production is concentrated in 92% within the last 19 years, supporting the thesis of Price's Law, the duplication of production in the course of 10 to 15 years after having begun the study of the thematic approach [72]. 2013 and 2017 are the years with the greatest production, with a concentration of 18 items each.

The evolution of scientific production is observed in Figure 2. At first, there is a slow growth (precursor stage) that extends until the year 2000; 80% of documents have a single authorship, which implies a ratio of 0.94 articles/year. As of 2001, there is a substantial increase in scientific production (accelerated growth), 73% of the articles show a participation of two or more authors per publication with a ratio of 8.95 articles/years in this period.

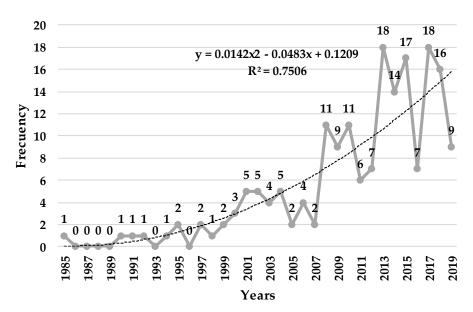


Figure 2. Trend of publications Scopus. Source: Own elaboration.

3.2. Authors

491 authors are identified in the 185 documents, which implies a productivity index of 0.97 articles per author. C. León is the most productive author, with 3 articles, followed by a group of 15 authors,

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with 2 articles each. On the other hand, the author that accumulates the most citations is M.C. Uyarra, with 86 citations in two documents.

Table 1 identifies the key and most productive authors within the thematic approach, together with their citations.

R Author University f TC C/f H-Index Country 1 León, C. University of Las Palmas de Gran Canaria Spain 3 15 5.00 2 Chen, C.M. 5.00 7 National Kinmen (Quemoy) University China 2 10 3 Chung, S.S. Hong Kong Baptist University China 2 8.50 19 7 4 González, M. University of Las Palmas de Gran Canaria Spain 2 3.50 5 5 Gössling, S. Lund University Sweden 2 26 13.00 39 National Yunlin University of Science and 7 6 Jan, F.H. China 2 31 15.50 Technology 7 Kim, J.E. Mokpo National University South Korea 2 18 9.00 6 National Yunlin University of Science and 8 2 Lee, T.H. China 31 15.50 13 Technology University of Botswana Botswana and 9 Lenao, M. 2 8 4.00 4 and University of Oulu, Finland Finland Liu, T.M. 10 National Sun Yat-sen University China 11 Morrison, C. Griffith University Australia 2 18 9.00 12 12 Ramkissoon, H. Monash University Australia 2 31 15.50 21 13 Tsai, T.H. National Kinmen (Quemoy) University China 2 5.00 Uyarra, M.C. 2 43 00 13 14 University of East Anglia United Kingdom 86 15 Vorlaufer, K. Universität Düsseldorf Germany 2 6 3.00 5

Table 1. Ranking of the most productive authors.

Note: R = ranking; f = frequency; TC = total number of citations received for published articles; <math>C/f = ranking; C/f = ranking; C/f

2

17

8.50

Hong Kong Baptist University

Zhang, L.

16

The productivity of the total number of authors can be analyzed by means of different types of processes, which enable to classify the authors based on the quantity of documents that are contributed to the thematic approach. Crane [74] proposes the existence of four groups of authors; large producers (more than 10 documents), moderate producers (between 5 and 9 documents), aspiring and transient authors (Table 2).

No. of Articles Per Author	Groups According to Crane	Number of Authors	%	PI
1	Transients (a single document)	475	96.75	0.000
2	Aspiring	15	3.05	0.301
3	(between 2 and 4 documents)	1	0.20	0.477
Total		491	100.00	

Table 2. Classification of the authors according to the Crane system.

Note: PI = Productivity Index; % = relative frequency. Source: Own elaboration.

The existence of two groups is identified. The first group "aspiring", with 2-3 documents per author, represents 3.25% of the total authors. The second largest group of "transients", with a single document, represents 96.75% of the authors, with a Transience Index (TI = [PI = 0]). It is equal to or represents the total of occasional authors that only arise once within the review and do not make any more contributions to the rest of the line of evolution. This shows that there is a high circulation of authors addressing the thematic approach.

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With regard to the collaboration trend in the production of documents, 31.4% are single authorship documents and the remaining percentage, 68.6% are multiple collaboration documents. According to Berelson [75] and López López [76], the presence of several authors with different affiliations in a document shows the maturity of the thematic approach. This thematic approach is beginning its professionalization process by showing an authorship index of 2.65 authors/article, that is, the production of multiple collaboration is mainly developed from papers written by academic peers. This collaborative trend accumulates 767 of the total number of citations.

3.3. Productivity by Type of Institution and Country

This analysis enables to determine the geographical nodes of information concentration, as well as the institutions in which the production is registered. In relation to geographical production by continent (Figure 3), it is observed that the leader is Europe (72 documents), followed by Asia (46) and America (44), although the most productive country is the United States. The distribution identified on this subject, as Yoopetch and Nimsai [42] state, is not surprising, due to the persistent Anglo-American European dominance both in the publication of articles as in the publication of journals. At this point, it is necessary to indicate that production started to intensify in the last years within Oceania and Africa, due to the emergence of new tourist destinations, as well as due to increasing levels of concern for sustainable exploitation of destinations already worked within these continents.

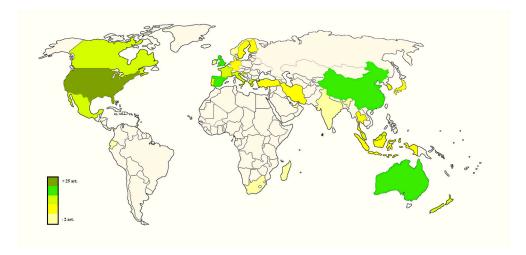


Figure 3. Geographical distribution of production in Scopus. Source: Own elaboration.

With regard to productivity by country of affiliation, the United States is the largest producer, with 76 authors, 76 authorships and 46 centers, followed by Spain with 42 authors, 45 authorships and 18 centers (Table 3). In relation to citation accumulation by country, the United States is the leader with 985 citations, followed by Canada (748) and Spain (696).

R	Country	С	A	As	hi%	TC	h-Index
1	United States	46	76	76	14.8	985	14
2	Spain	18	42	45	8.8	696	12
3	China	23	35	42	8.2	255	10
4	Australia	16	32	34	6.6	32	10
5	United Kingdom	21	28	29	5.7	536	10
6	Mexico	8	22	22	4.3	113	6
7	Greece	12	20	20	3.9	158	7
8	Canada	11	19	19	3.7	748	11

Table 3. Number of centers, authors and authors by country of affiliation.

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Table 3. Cont.

R	Country	C	A	As	hi%	TC	h-Index
9	<u> </u>						
9 10	Malaysia New Zealand	8 7	19 19	19 19	3.7 3.7	94 332	8 9
10	Portugal	9	15	15	2.9	64	7
12	Netherlands	6	15	15	2.9	292	10
13	Italy	9	13	13	2.5	99	5
14	Iran	5	12	12	2.3	56	6
15	Thailand	5	12	12	2.3	62	5
16	France	9	11	11	2.9	17	3
17	Japan	8	10	10	2.0	23	3
18	Croatia	5	9	9	1.8	29	4
19	South Korea	4	7	8	1.6	52	4
20	Indonesia	3	6	6	1.2	18	1
21	Maldives	2	6	6	1.2	18	3
22	Germany	7	5	6	1.2	51	4
23	Madagascar	2	5	5	1.0	25	5
24	Norway	2	5	5	1.0	55	5
25	India	1	5	5	1.0	45	5
26	Turkey	2	4	4	0.8	2	1
27	Denmark	1	4	4	0.8	41	4
28	South Africa	2	3	3	0.6	0	0
29	Ecuador	3	2	2	0.4	87	2
30	Belgium	2	2	2	0.4	0	0
31	Chile	2	2	2	0.4	87	1
32	Malta	1	2	2	0.4	0	0
33	Finland	2	1	2	0.4	8	1
34	Sweden	2	1	2	0.4	26	1
35	Antigua and Barbuda	1	1	1	0.2	6	1
36	Argentina	1	1	1	0.2	3	1
37	Barbados	1	1	1	0.2	1	1
38	Brazil	1	1	1	0.2	1	1
39	Colombia	1	1	1	0.2	0	0
40	Cuba	1	1	1	0.2	6	1
41	Cyprus	1	1	1	0.2	0	0
42	Dominican Republic	1	1	1	0.2	6	1
43	Fiji	1	1	1	0.2	6	1
44	Iceland	1	1	1	0.2	13	1
45	Ireland	1	1	1	0.2	0	0
46	Jamaica	1	1	1	0.2	1	1
47	Martinique	1	1	1	0.2	6	1
48	Monaco	1	1	1	0.2	4	1
49	Qatar	1	1	1	0.2	13	1
50	Samoa	1	1	1	0.2	125	1
51	Seychelles	1	1	1	0.2	0	0
52	Singapore	1	1	1	0.2	8	1
53	Sudan	1	1	1	0.2	4	1
54	Surinam	1	1	1	0.2	6	1
55	Trinidad and Tobago	1	1	1	0.2	$\overset{\circ}{4}$	1
56	United Arab Emirates	1	1	1	0.2	0	0

Note: R = ranking; C = centers; A = authors; As = authorships; hi% = relative frequency; TC = total number of citations received for published articles; h-index = Hirsch's index. Source: Own elaboration.

The productivity by affiliation institution shows the presence of 286 different types of affiliation centres, among which universities concentrate 71.6% (212) of affiliations and research institutes 10.8%. The presence of affiliations associated with public sector units in the different countries is highlighted, as well as several museums of great international renown.

Table 4 shows the ranking of institutions that concentrate a greater number of affiliations. James Cook University (Australia) leads the ranking with 12 affiliations, followed by the University of Las Palmas de Gran Canaria, with 10 affiliations.

R	Institution	Country	A	As
1	James Cook University	Australia	12	12
2	University Las Palmas de Gran Canaria	Spain	10	13
3	University of Guadalajara	México	9	9
4	Griffith University	Australia	8	9
5	Universidade dos Açores	Portugal	8	8
6	Islamic Azad University	Iran	7	7
7	University of Groningen	Netherlands	7	7
8	Nova Southeastern University	United States	6	6
9	Universidad de La Laguna	Spain	6	6
10	Universiti Kebangsaan Malaysia (UKM)	Malaysia	6	6
11	Universiti Putra Malaysia	Malaysia	6	6
12	Wadden Academy-KNAW	Netherlands	6	6

Table 4. More productive institutions with authors and authorships.

Note: R = ranking; A = authors; As = authorships. Source: Own elaboration.

The collaboration networks that are generated within this thematic approach are built under two criteria: by geographical origin, where it is identified that 70.9% of the documents are carried out by academics residing within the same country and only 29.1% in collaboration with academics from different countries. The second criterion is by institutional affiliation, 100% of the documents produced in multiple collaboration at international level are by academics who are affiliated in centers located in different countries, whereas 58% of the documents produced nationwide are carried out with affiliated academics in the same center and 42% are carried out by academics from different centers, but always within the same country.

Through scientific mapping, it is identified that co-authorship networks among academics are endogamy, that is, they are isolated from each other (Figure 4).

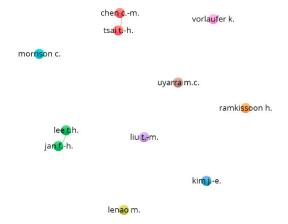


Figure 4. Co-author networks in Scopus. Source: Own elaboration.

3.4. Citations

In an initial citation analysis, it can be seen that throughout the 35 years of production evolution, the 185 documents indexed in Scopus have 2091 citations with a ratio of 11.30 citations/article. The Hirsch Index is 22, which means that at least 22 articles of the total documents have received 22 or more citations. 12% of the documents reach the citation threshold. 2010 is the year with the highest number of citations, with 15% of the total (317 citations).

Table 5 shows the most cited documents and it is observed that there are documents of 10 years or more. The absence of articles from recent years is due to the fact that they have not reached the required dissemination to be consolidated as references of the subject, a fact that limits the amount of citations they can receive [77].

The three most cited articles are: Cultural rural tourism: Evidence from Canada by MacDonald and Jolliffe [78], with 141 citations, followed by Implementing std on a small island: Development and use of sustainable tourism development indicators in Samoa by Twining-Ward and Butler [79], with 125 citations and finally, The sustainability of island destinations: Tourism area life cycle and teleological perspectives. The case of Tenerife by Oreja Rodríguez et al. [25], with 106 citations. Although the first two documents in the ranking accumulate 13% of the total citations, the paper by Oreja Rodríguez et al. [25] has the highest average citations/years.

On the other hand, the co-citation analysis reveals the frequency with which the authors of the previous literature are cited jointly by authors of subsequent literature. These groups generate clusters, which have a central node that is distinguished by size, that is, the volume reached by the shape that represents it determines the co-citation trend reached by each author (Figure 5).

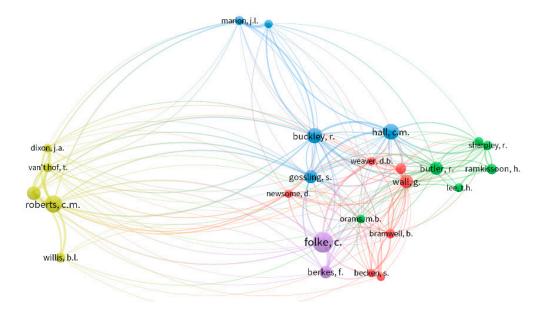


Figure 5. Author co-citation analysis (ACA) in Scopus. Source: Own elaboration.

Figure 5 shows a scientific mapping by ACA. The structure consists of 10,205 authors, 27 of which meet the threshold established in 15 citations, generating 5 clusters. The most cited authors were: Folke (37 co-citations), Roberts (31), Hall (28), Buckley (27) and Hawking (25). At this point, it is necessary to mention that 70% (19) of the authors are not represented within the database under review. Their presence within the scientific mapping is due to conceptual contributions in relation to sustainable development, ecotourism and sustainable tourism.

Table 5. Ranking of the most cited articles.

	Authors	Title	Year	TC	C/f
1	MacDonald and Jolliffe [78]	Cultural rural tourism: Evidence from Canada	2003	141	8.3
2	Twining-Ward and Butler [80]	Implementing std on a small island: Development and use of sustainable tourism development indicators in Samoa	2002	125	6.9
3	Oreja Rodríguez, Parra-López and Yanes-Estévez [25]	The sustainability of island destinations: Tourism area life cycle and teleological perspectives. The case of Tenerife	2008	106	8.8
4	Farrell and Runyan [79]	Ecology and tourism	1991	88	3.0
5	González, Montes, Rodriguez and Tapia [81]	Rethinking the Galapagos Islands as a complex social-ecological system: Implications for conservation and management	2008	86	7.6
6	Thur [82]	User fees as sustainable financing mechanisms for marine protected areas: An application to the Bonaire National Marine Park	2010	80	8.0
7	Beharry-Borg and Scarpa [83]	Valuing quality changes in Caribbean coastal waters for heterogeneous beach visitors	2010	78	7.8
8	Dodds, Graci and Holmes [84]	Does the tourist care? A comparison of tourists in Koh Phi Phi, Thailand and Gili Trawangan, Indonesia	2010	68	6.8
9	Uyarra, Watkinson and Côté [85]	Managing dive tourism for the sustainable use of coral reefs: Validating diver perceptions of attractive site features	2009	65	5.9
10	Semeniuk and Rothley [86]	Costs of group-living for a normally solitary forager: Effects of provisioning tourism on southern stingrays Dasyatis americana	2008	56	4.7

Note: R = ranking; TC = total number of citations received for published articles; C/f = average of citations received for published articles. Source: Own elaboration.

Each cluster in Figure 5 forms a "school of thought" [42,65,66], which allows us to observe the approaches shared between the authors. Cluster 1, which is violet, is composed of 2 academics that address traditional ecological knowledge, including Folke (37 co-citations) and Berkes (23). This school of thought focuses on linking social and ecological mechanisms to build resilience within human groups [87,88] and on the use of traditional ecological knowledge for resource management [89–91].

The yellow cluster 2 is made up of five authors, who focus on sustainable tourism development: Roberts (31), Hawkins (25), Willis (18), Van't hof (17) and Dixon (15). Among the main lines of this school are development of tourism sustainability [92,93], effects of tourism development [94,95], and economic analysis of natural resources [96,97].

The blue cluster 3 focuses on sustainable tourism and is made up of five academics: Hall (28), Buckley, R. (27), Gössling (24), Marion (16) and Cole (15). The subjects analysed include geographical perspectives [98–100], resource management [101,102], tourism perceptions [103,104] and tourist impacts [105–107]. The following green cluster consists of 6 authors: Butler (24), Ramkissoon (19), Sharpley (17), Cohen (16), Lee (16) and Orams (15) and issues related to tourist area management processes are addressed [108–113].

Finally, cluster 5, which is red, concentrates on 7 researchers: Wall (24), Butler, R. C. (19), Bramwell (17), Becken (15), Buckley (15), Newsome (15), and Weaver (15). These authors address governance and new tourism trends [114–117].

3.5. Journals

A total of 118 journals were identified. The most productive ones are Ocean and Coastal Management and Journal of Sustainable Tourism, with nine articles each. The latter has the highest number of citations received by accumulating 286 (Table 6).

A total of 94 of the total number of journals only publish one article, while the remaining 24 journals publish two or more. In relation to the geographical origin of the journals, 32.20% (38) were published mainly in the United Kingdom, followed by the United States, with 14.41% (17) of the total resources.

The quartile analysis shows a high inference evaluation on the quality of the documents produced within the thematic approach, that is, 8 out of the 10 most cited journals are classified in Q1, one in Q2 and one does not have the quartile calculation in Scopus yet. This distribution suggests that the thematic approach is being published in resources of high impact and quality, which is an approximate variable to measure the research quality (Figure 6).

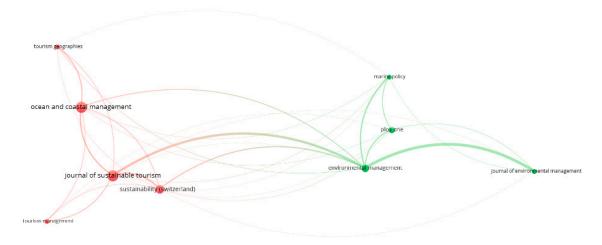


Figure 6. Bibliographic coupling of resources in Scopus. Source: Own elaboration.

Table 6. Ranking of the most productive journals.

R	Title	Area	Country	f	HI%	TC	H-Index	Q	
1	Ocean and Coastal Management	Social Sciences	United Kingdom	9	4.9	120	70	1	37
2	Journal of Sustainable Tourism	Agricultural and Biological Sciences	United Kingdom	9	4.9	286	83	1	53
3	Sustainability (Switzerland)	Social Sciences	Switzerland	7	3.8	41	53	2	34
4	Environmental Management	Environmental Sciences	Germany	6	3.2	153	102	1	74
5	WIT Transactions on Ecology and the Environment	Environmental Sciences	United Kingdom	6	3.2	4	19	0	0
6	PLoS ONE	Agricultural and Biological Sciences	United States	5	2.7	95	268	1	23
7	Marine Policy	Social Sciences	United Kingdom	4	2.2	94	79	1	24
8	Tourism Management	Agricultural and Biological Sciences	United Kingdom	4	2.2	140	159	1	15
9	Journal of Environmental Management	Social Sciences	United States	4	2.2	18	146	1	28
10	Tourism Geographies	Environmental Sciences	United States	4	2.2	76	49	1	18

Note: R = ranking; f = frequency (number of articles published; hi% = relative frequency; TC = total number of citations received for published articles h-index = Hirsch's index; Q = quartile. Source: Own elaboration.

The co-citation analysis of resources identifies the existence of two clusters (Figure 7). The first green cluster consists of 4 resources and collects the resources with the highest number of shared citations (between 253 and 42 citations), with the central node being Annals of Tourism Research, with 253 shared citations. The second red cluster, which consists of 10 resources, is made up of the resources with the least amount of shared citations (between 58 and 30 citations), with the central node being Ambio, with 58 shared citations.

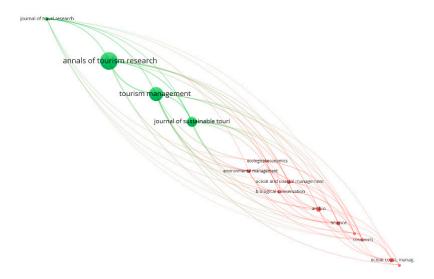


Figure 7. Analysis of co-citations of journals in Scopus. Source: Own elaboration.

Figure 8 shows the need to establish whether the Law of Bradford [118] is developed within this thematic approach, that is, to examine the production and identify whether a high percentage of studies are published in a small number of journals. The Minimum Bradford Zone (MBZ) at 47, which is a value that helps determine the Bradford core by identifying the group of journals that add a descending productivity equal to 47. It is observed that the MBZ is made up of 7 journals. Figure 8 shows the inequality generated in the publication trend of the articles in the resources identified within the review (Lorenz curve).

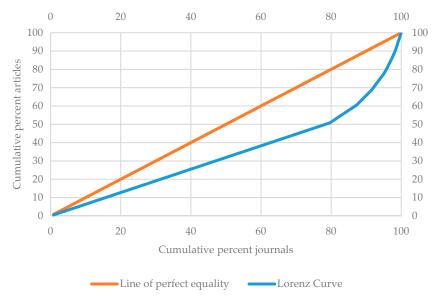


Figure 8. Lorenz curve of the journals and articles. Source: Own elaboration.

3.6. Thematic Areas

The thematic areas in which the resources are classified are shown in Table 7. It is observed that the area of knowledge of Social Sciences is the first one, with 73 articles and 39 journals, followed by Environmental Science, with 31 articles and 17 journals. A varied classification of resources such as Agricultural and Biological Sciences, Arts and Humanities, Business, Management and Accounting, Medicine, Computer Science, Energy, among others; determines the multidisciplinary nature of the approach.

TC C/f R Area I f 1 Social Sciences 39 73 1012 13.9 2 **Environmental Sciences** 17 31 345 11.1 3 Agricultural and Biological Sciences 16 33 433 13.1 4 Earth and Planetary Sciences 15 73 4.9 14 5 Arts and Humanities 9 9 28 3.1 6 Business, Management and Accounting 9 10 88 8.8 7 Economy, Econometrics and Finance 5 5 88 17.6 8 Medicine 3 3 9 3.0 9 Computer's Science 2 2 0 0.0 10 Multidisciplinary 2 10 5.0

Table 7. Classification of articles by subject area.

Note: R = ranking; J = journals; f = frequency (number of articles published; TC = total number of citations received for published articles; C/f = average of citations received for published articles. Source: Own elaboration.

3.7. Keywords

Despite the current relevance in the use of keywords within several analyses, 29 documents are identified during the review, which do not have this section. In the rest of the documents, the co-occurrence analysis of keywords is applied. The terms with a high coincidence (Table 8) are tourism (20), sustainable tourism (20), ecotourism (16), sustainable development (10) and sustainability (9).

R	Keywords	f	Total Bond Strength
1	Sustainable tourism	20	4
2	Tourism	20	9
3	Ecotourism	16	6
4	Sustainable development	10	8
5	sustainability	9	3
6	Conservation	7	8
7	Management	7	10
8	Caribbean islands	6	4
9	Cultural tourism	6	6
10	Coral reefs	5	5
11	Small island	5	4

Table 8. Co-word analysis.

Note: R = ranking; f = frequency. Source: Own elaboration.

Figure 9 shows the scientific mapping of the co-occurrence analysis of keywords, showing current or recent thematic nodes that are categorized as topics of interest. These are identified in yellow, highlighting topics such as "small islands", cultural tourism, biodiversity, development, sustainability, coral reefs and tourism activities such as scuba diving.

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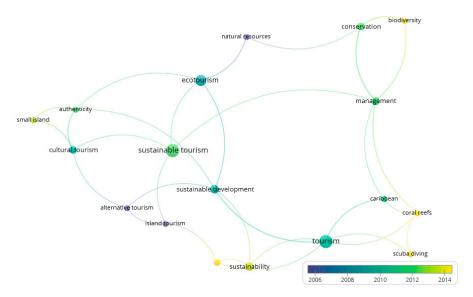


Figure 9. Map of co-words in Scopus. Source: Own elaboration.

3.8. Bibliographic Analysis

The bibliographic analysis follows the analysis methodology of Álvarez-García et al. [119], where the documents are organized in (Table 9):

- (a) Line of research which the study is aimed at 7 subcategories: carrying capacity; responsible environmental behavior; willingness to pay; destination management: resources and new products; impacts due to tourism development; perceptions about the local economy and willingness to visit).
- (b) Number of articles for each line of research.
- (c) Analyzed resources that are identified according to the UNESCO [5] classification (4 subcategories: natural, cultural/natural and cultural resources, but it also includes an additional one that groups the documents that address the study of both natural and cultural resources).
- (d) Objective, the process of applied study is detailed (3 subcategories: information analysis documents, documents that develop proposals and eminently theoretical documents).
- (e) Sources used, the type of sources from which the data used in the study are extracted are clarified (3 subcategories: primary sources, secondary sources and use of both primary and secondary sources).
- (f) Brief description of the research line.

Table 9. Bibliographic analysis of the thematic approach.

Line of Research		Aı	nalyzed	Resou	rces	Objectiv		Objective		Sources Used		Sources Used		Description
Line of Research	A	N	C/N	С	N/C	IA	D	T	1	2	1 and 2	Description		
Carrying capacity	5	5	-	-	-	4	-	1	3	1	1	The carrying capacity of areas aimed at tourism activities within islands is analyzed.		
Responsible environmental behavior	15	13	-	-	2	12	3	-	12	-	3	Studies are addressed on the behavior of tourists for a responsible use of resources through their actions and attitudes shown during their visits.		
Willingness to pay	12	10	1	1	-	12	-	-	9	1	2	Willingness to pay for the diversity of systemic services of the islands is studied, as well as the natural and cultural resources of that geographical space.		

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Table 9. Cont.

71 (P. 1		Ar	nalyzed	Resou	rces	C	bjectiv	e	s	ources	Used	Description
Line of Research	A	N	C/N	С	N/C	IA	D	T	1	2	1 and 2	Description
Destination management: resources and new products	127	78	1	23	25	105	16	6	47	58	22	Tourist destination management processes are examined to overcome latent difficulties; in addition, timely management of endemic natural resources, knowledge and tradition knowledge are analyzed; besides the proposals for the development of new tourism products that allow for sustainable management of the destinations under study.
Impacts due to tourism development	19	13	-	2	4	16	2	1	8	6	5	It is analyzed how the implementation of tourism products and activities affect both natural and cultural resources, causing degradation of their status and their loss.
Perceptions about the local economy	4	2	-	-	2	3	1	-	1	2	1	The perceptions about the economy are investigated based on the exploitation given to the different resources that host insular spaces.
Willingness to visit	3	1	-	2	-	3	-	-	2	1	-	The willingness that tourists show to visit tourist areas in which specific and unique resources are exploited within island territories is studied.

Note: A = articles; N = natural resource; C = cultural resource; C/N = cultural/natural resource; N/A = both types of resources; A = information analysis; D = development of proposals; D = development of D

4. Conclusions

The articulation of a systemic analysis, which consists of a bibliometric and bibliographic study, allows this research to be a consultation tool for researchers by providing a thorough mapping of the literature related to use the cultural and natural resources by tourism in island ecosystems.

The scientific production was made up of 185 documents identified in the international Scopus database. The bibliometric analysis determines that the thematic approach has been developed for 35 years, beginning with the first work in 1985. The years with the highest production are 2013 and 2017, with 18 articles each, while the year with the highest number of citations is 2010, with an accumulation of 15% of the total (317 citations).

The citation analysis shows that over 70% of documents receive between 1 and 24 citations. On the one hand, the ACA demonstrates the presence of co-citation of authors external to those identified in the review base due to the influx of studies that are inclined towards exploitation regarding sustainable development, ecotourism and sustainable tourism. On the other hand, the co-citation analysis of journals shows the 10 resources with the highest co-citation trend (see Table 6), being therefore the main publication resources on this subject.

With respect to production by authors, there is a predominance of transient researchers, with a low participation of aspiring authors, which indicates the youth of the subject. The co-authorship relationship is established as 2.65 authors/article, peer production is predominant. Production based on geographical affiliation has a clear Anglo-European dominance, led by the United States and Spain. In relation to institutional affiliation, universities predominate by concentrating 71.6% of affiliations, with the registration of affiliations to public sector units in different countries being novel, as well as to several internationally renowned museums. James Cook University based in Australia is the center with the highest number of affiliations.

Dispersion of articles is established based on Bradford's core, which raises considerable inequality by showing that 25% of review documents are published in 6% of the journals. The journals with the highest concentration of publications are Ocean and Coastal Management and Journal of Sustainable Tourism with 9 publications, but Annals of Tourism Research is the journal that reaches the highest co-citation, with 253 shared citations. Social Sciences predominates in the classification area. In addition, it is observed that of the top 10 most published journals, 80% are from quartile Q1 in the Scimago Journal and Country Rank. In the case of keywords, a correct use of keywords within studies can become a complex task to achieve, which in many cases is poorly recognized. The most co-occurring keywords are tourism, sustainable tourism, ecotourism, sustainable development and sustainability, which shows that there are new hot topics in the study trend.

The bibliographic analysis identifies 7 lines of research, the most important are destination management: resources and new products. Most studies use primary sources and there are very few studies that address the study of the use of cultural/natural resources by tourism developed in an environment such as the islands.

These results are coincident with bibliometric analyzes performed in different types of tourism; creative tourism [119], active tourism [120], adventure tourism [121], community-based tourism [122]; wine tourism [123], rural tourism [124], all these types of tourism depend on cultural and natural resources. Because they are specific types of tourism, the interest of researchers is lower than when tourism in general is investigated.

In summary, there is a growing interest in the subject in the last decade, but this does not end up consolidating. The majority of researchers are transients with a single document, not continuing with research in the area and therefore, not reaching an adequate level of specialization. This implies a small number of researchers on the subject and little research focused on tourism based on cultural and natural resources on island ecosystems. Research is emerging, there is an important niche, as well as a gap in the scientific literature that should be developed in the future.

The production trend line indicates that research will grow in the coming years. The topics discussed and included in Table 9 should continue to be addressed as they are incipient lines of research. However, there are many lines of research followed by researchers in studies in tourism in general or in other types of tourism that should be addressed by this theme (tourism based on the use of cultural and natural resources) in island ecosystems. Given the multidisciplinary nature of tourism, this involves a large number of areas of knowledge, the issue must be addressed from all of them (Business and Management, Sociology, Psychology, Geography, History, Education).

Regarding the topics to be addressed, the studies by Sáez et al. [125] and Koseoglu et al. [126] are taken into account. This latest research includes studies that suggest new frameworks on research topics and agendas such as that carried out by Ashworth and Page [127], Kandampully et al. [128], Kim et al. [129], Law et al. [130], Morrison [131], Tracey [132]. The topics to be addressed from the Business and management discipline are:

Marketing: quality of service, research in marketing-mix variables such as price or communication, ethics and social responsibility [126,133], customer loyalty [128,134], consumer behavior [129,135–137], image of destiny [138].

General management and strategic: Quality Management Systems [139,140], Human resources key element in tourism [132,141–146], entrepreneurial behavior in tourism (see lines proposed by li [147], entrepreneurial orientation, corporate entrepreneurship, etc.), study of SMEs in the tourism sector (see lines proposed by Thomas et al. [148], Morrison et al. [149]; innovation management, study of growth or failure). Sustainability issues and strategies [150].

Information technologies: application of new technologies [151–155], intelligent systems [156], knowledge transfer [157,158].

Other approaches such as Sociology propose: sociological approaches [159], residents' attitudes to tourism [160], social impacts of tourism [161], Sustainable tourism [162], resilience in tourism [163].

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Other sub-disciplines: destination planning and development, and tourism operators [164], event management [165], sustainable and environment [166], education techniques [167].

The first limitation of this research refers to the fact of focusing on a single database. Although Scopus together with Web of Science (WoS) are the two most important databases of an international scope, there are others of less relevance (Scielo, Latindex, Science Direct, Emeral, etc.). This implies that not all the scientific literature on the subject is included in the bibliometric analysis. The second limitation stems from the use of a given search equation. Although it was defined taking into account the greater number of relevant terms in the field of study, it cannot be said that they are all included.

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References

- 1. Brundtland, G.H. Bringing sustainable development to the mainstream. In *Sustainable Development in an Unequal World*; Puschra, W., Burke, S., Eds.; Friedrich-Ebert-Stiftung: New York, NY, USA, 2012; pp. 15–16.
- 2. United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development;* Resolution Approved by the General Assembly on 25 September 2015; United Nations: New York, NY, USA, 2016.
- 3. UNESCO. Convention Concerning the Protection of the World Cultural and Natural Heritage 1972. Available online: http://whc.unesco.org/ (accessed on 23 July 2019).
- 4. UNESCO. Convention for the Safeguarding of the Intangible Cultural Heritage 2003. Available online: http://www.unesco.org/culture/ich_convention/index.php (accessed on 23 July 2019).
- 5. UNESCO. Declaration Concerning the Intentional Destruction of Cultural Heritage 2003. Available online: http://portal.unesco.org/en/ev.php-URL_ID=17718&URL_DO=DO_TOPIC&URL_SECTION=201. html (accessed on 23 July 2019).
- 6. UNESCO. Third Proclamation of Masterpieces of the Oral and Intangible Heritage of Humanity 2005. Available online: http://www.unesco.org/culture/intangibleheritage/index.htm (accessed on 23 July 2019).
- 7. Toselli, C. El turismo en Sitios del Patrimonio Mundial MOOC MiriadaX: Oportunidades y retos del Turismo Cultural; USAL-Universidad del Salvador: San Salvador, El Salvador, 2019.
- 8. UNESCO. Museos Comprometidos con el Patrimonio Local: Una guía Para Capacitarse, Autoevaluarse, Obtener un Certificado de Aprovechamiento. 2011. Available online: https://comisionunesco.mec.gub.uy/innovaportal/v/31434/40/mecweb/museos-comprometidos-con-el-patrimonio-local:-guia-para-capacitarse-autoevaluarse-y-obtener-un-certificado-de-aprovechamiento?contid=28804 (accessed on 23 July 2019).
- 9. UNESCO. Conferencia Mundial Sobre las Políticas Culturales. México DF 26 de julio a 6 de agosto de 1982. Informe Final, CLT MD 01 Noviembre de 1982. Available online: http://portal.unesco.org/culture/es/files/35197/11919413801mexico_sp.pdf/mexico_sp.pdf (accessed on 23 July 2019).
- Australian Government—Department of the Environment. The Economics of Heritage: Integrating Costs and Benefits into Government Decision-Making; Australian Government: Canberra, Australia, 2007. Available online: https://www.environment.gov.au/system/files/resources/da10a766-2ef7-4989-b202-edac0f5d6f3e/files/economics-background.pdf (accessed on 23 July 2019).
- 11. Jha, S. Can Natural World Heritage Sites promote development and social harmony? *Biodivers. Conserv.* **2005**, *14*, 981–991. [CrossRef]
- Shackley, M. Visitor management at World Heritage Sites. In Managing World Heritage Sites; Leask, A., Fyall, A., Eds.; Butterworth-Heinemann (Elsevier): London, UK, 2006; pp. 83–94.
- 13. UNESCO. Wider Value of UNESCO in UK UNESCO in Scotland; UK National Commission for UNESCO: London, UK, 2016.
- 14. Ministry of Environment of Ecuador. *Boletín Informativo N° 13 del Sistema Nacional de Áreas Protegidas: Áreas Protegidas Aportan a la Economía del Estado;* MAE: Quito, Ecuador, 2016.
- 15. Van der Aa, B. *Preserving the Heritage of Humanity? Obtaining World Heritage Status and the Impacts of Listing;* University Library Groningen: Groningen, The Netherlands, 2000.
- 16. Frey, B.S.; Steiner, L. World heritage list: Does it make sense? Int. J. Cult. Policy 2011, 17, 555–573. [CrossRef]

Sustainability **2020**, 12, 724 21 of 26

17. Fyall, A.; Rakic, T. The future market for World Heritage Sites. In *Managing World Heritage Sites*; Leask, A., Fyall, A., Eds.; Butterworth-Heinemann (Elsevier): London, UK, 2006; pp. 159–176.

- 18. Yuksel, F.; Bramwell, B.; Yuksel, A. Stakeholder interviews and tourism planning at Pamukkale, Turkey. *Tour. Manag.* **1999**, 20, 351–360. [CrossRef]
- 19. Kim, M.S.; Kim, J.; Thapa, B. Influence of environmental knowledge on affect, nature affiliation and pro-environmental behaviors among tourists. *Sustainability* **2018**, *10*, 3109. [CrossRef]
- 20. Martín, J.M.M.; Martinez, J.M.G.; Moreno, V.M.; Rodríguez, A.S. An analysis of the tourist mobility in the island of Lanzarote: Car rental versus more sustainable transportation alternatives. *Sustainability* **2019**, *11*, 739. [CrossRef]
- 21. Alraouf, A.A. Regenerating urban traditions in Bahrain. Learning from Bab-Al-Bahrain: The authentic fake. *J. Tour. Cult. Chang.* **2010**, *8*, 50–68. [CrossRef]
- 22. Jolliffe, L.; Baum, T. *An Agenda for Cultural Tourism on the Periphery: The Case of Four North Atlantic Islands of Surrey*; University of Guilford: Guilford, UK, 1999.
- 23. Sdrali, D.; Chazapi, K. Cultural tourism in a greek insular community: The residents' perspective. *Tourismos* **2007**, *2*, 61–75.
- 24. Anderson, W. Promoting ecotourism through networks: Case studies in the Balearic Islands. *J. Ecotour.* **2009**, *8*, 51–69. [CrossRef]
- 25. Oreja Rodríguez, J.R.; Parra-López, E.; Yanes-Estévez, V. The sustainability of island destinations: Tourism area life cycle and teleological perspectives. The case of Tenerife. *Tour. Manag.* **2008**, *29*, 53–65. [CrossRef]
- 26. Jackson, I. Carrying capacity for tourism in small tropical Caribbean Islands. Ind. Environ. 1986, 9, 7–10.
- 27. Williams, P.W.; Ponsford, I.F. Confronting tourism's environmental paradox: Transitioning for sustainable tourism. *Futures* **2009**, *41*, 396–404. [CrossRef]
- 28. World Tourism Organization. Panorama OMT del Turismo Internacional; UNWTO: Madrid, Spain, 2018.
- 29. Office of the High Representative for the Least Developed Countries—Landlocked Developing Countries and Small Island Developing States [UN-OHRLLS]. *Small Island Developing States: Small Islands Big(ger) Stakes;* UN-OHRLLS: New York, NY, USA, 2013.
- 30. Thomas-Hope, E.; Jardine-Comrie, A. Valuation of environmental resources for tourism in small island developing states: Implications for planning in Jamaica. *Int. Dev. Plan. Rev.* **2007**, 29, 93–112. [CrossRef]
- 31. Akadiri, S.S.; Akadiri, A.C.; Alola, U.V. Is there growth impact of tourism? Evidence from selected small island states. *Curr. Issues Tour.* **2019**, 22, 1480–1498. [CrossRef]
- 32. Yiannakis, A.; Gibson, H. Roles tourists play. Ann. Tour. Res. 1992, 19, 287–303. [CrossRef]
- 33. Vanhove, N. Globalisation of tourism demand, global distribution systems and marketing. In *Tourism in the Age of Globalisation*; Routledge: London, UK, 2005; pp. 137–170.
- 34. Roessingh, C.; Duijnhoven, H. Small entrepreneurs and shifting identities: The case of tourism in Puerto Plata (Northern Dominican Republic). *J. Tour. Cult. Chang.* **2006**, *2*, 185–201. [CrossRef]
- 35. Manyara, G.; Jones, E. Community-based tourism enterprises development in Kenya: An exploration of their potential as avenues of poverty reduction. *J. Sustain. Tour.* **2007**, *15*, 628–644. [CrossRef]
- 36. OMT. UNWTO Panorama of World Tourism. World Tourism Organization Edition 2013. Available online: https://www.e-unwto.org/doi/book/10.18111/9789284415519 (accessed on 23 July 2019).
- 37. Hambrey Consulting. *Social, Economic and Environmental Benefits of World Heritage Sites, Biosphere Reserves, and Geoparks*; Scottish Natural Heritage Commissioned Report No. 248 (ROAME No. F06NC05); Scottish Natural Heritage: Perth, Australia, 2007.
- 38. Rebanks Consulting Ltd. *World Heritage Status. Is There Opportunity for Economic Gain?* Rebanks Consulting Ltd.: Penrith, UK; Trends Business Research Ltd.: Newcastle upon Tyne, UK, 2009.
- 39. Petanidou, T.; Dalaka, A. Mediterranean's changing saltscapes: A study of the abandonment of salt-making business in Greece. *Glob. NEST J.* **2009**, *11*, 415–433.
- Santana-Cordero, A.M.; Bürgi, M.; Hersperger, A.M.; Hernández-Calvento, L.; Monteiro-Quintana, M.L. A
 century of change in coastal sedimentary landscapes in the Canary Islands (Spain)—Change, processes, and
 driving forces. *Land Use Policy* 2017, 68, 107–116. [CrossRef]
- 41. Ding, Y.; Rousseau, R.; Wolfram, D. *Measuring Scholarly Impact. Methods and Practice*; Springer: Cham, Switzerland, 2014.
- 42. Yoopetch, C.; Nimsai, S. Science mapping the knowledge base on sustainable tourism development, 1990–2018. *Sustainability* **2019**, *11*, 3631. [CrossRef]

Sustainability **2020**, 12, 724 22 of 26

43. Hallinger, P.; Suriyankietkaew, S. Science mapping of the knowledge base on sustainable leadership, 1990–2018. *Sustainability* **2018**, *10*, 4846. [CrossRef]

- 44. Hernández-González, V.; Sans-Rosell, N.; Jové-Deltell, M.C.; Reverter-Masia, J. Comparación entre web of science y scopus, estudio bibliométrico de las revistas de anatomía y morfología. *Int. J. Morphol.* **2016**, *34*, 1369–1377. [CrossRef]
- 45. Falagas, M.E.; Pitsouni, E.I.; Malietzis, G.A.; Pappas, G. Comparison of pubmed, scopus, web of science, and google scholar: Strengths and weaknesses. *FASEB J.* **2008**, 22, 338–342. [CrossRef]
- 46. Fernández, M.T.; Bordons, M.; Sancho, I.; Gómez, I. El sistema de incentivos y recompensas en la ciencia pública española. In *Radiografía de la Investigación Pública en España*; Sebastián, J., Muñoz, E., Eds.; Biblioteca Nueva: Madrid, Spain, 1999.
- 47. Harzing, A.W.; Alakangas, S. Google scholar, scopus and the web of science: A longitudinal and cross-disciplinary comparison. *Scientometrics* **2016**, *106*, *787*–*804*. [CrossRef]
- 48. Rojas, J.I.; San-Antonio-Gómez, C. de. Análisis bibliométrico de las publicaciones científicas mexicanas en la categoría engineering, chemical de la base de datos web of science (1997–2008). *Rev. Mex. Ing. Química* **2010**, 9, 231–240.
- 49. Frank, M. Access to the scientific literature—A difficult balance. N. Engl. J. Med. 2006, 354, 1552–1555. [CrossRef]
- 50. Goldschmidt, P.G. Information synthesis: A practical guide. Health Serv. Res. 1986, 21, 215-237.
- 51. PRISMA Statement. 2019. Available online: http://www.prisma-statement.org/PRISMAStatement/ (accessed on 23 July 2019).
- 52. PRISMA. 2019. Available online: http://www.prisma-statement.org/PRISMAStatement/Checklist.aspx (accessed on 23 July 2019).
- 53. Perron, B.E.; Victor, B.G.; Hodge, D.R.; Salas-Wright, C.P.; Vaughn, M.G.; Taylor, R.J. Laying the foundations for scientometric research: A data science approach. *Res. Soc. Work Pract.* **2017**, *27*, 802–812. [CrossRef]
- 54. LaRowe, G.; Ambre, S.; Burgoon, J.; Ke, W.; Börner, K. The scholarly database and its utility for scientometrics research. *Scientometrics* **2009**, *79*, 219–234. [CrossRef]
- 55. Van Eck, N.; Waltman, L. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics* **2009**, *84*, 523–538. [CrossRef]
- 56. Van Eck, N.J.; Waltman, L. How to normalize cooccurrence data? An analysis of some well-known similarity measures. *J. Am. Soc. Inf. Sci. Technol.* **2009**, *60*, 1635–1651.
- 57. Van Eck, N.J.; Waltman, L.; Dekker, R.; Van den Berg, J. A comparison of two techniques for bibliometric mapping: Multidimensional scaling and VOS. *J. Am. Soc. Inf. Sci. Technol.* **2010**, *61*, 2405–2416. [CrossRef]
- 58. Waltman, L.; Van Eck, N.J.; Noyons, E.C.M. A unified approach to mapping and clustering of bibliometric networks. *J. Informetr.* **2010**, *4*, 629–635. [CrossRef]
- 59. Van Eck, N.J.; Waltman, L. Text mining and visualization using VOSviewer. ISSI Newsl. 2011, 7, 50–54.
- 60. Waltman, L.; Van Eck, N.J. A smart local moving algorithm for large-scale modularity-based community detection. *Eur. Phys. J.* **2013**, *86*, 1–14. [CrossRef]
- 61. Van Eck, N.J.; Waltman, L. Visualizing bibliometric networks. In *Measuring Scholarly Impact*; Springer: Cham, Switzerland, 2014; pp. 285–320.
- 62. Perianes-Rodriguez, A.; Waltman, L.; Van Eck, N.J. Constructing bibliometric networks: A comparison between full and fractional counting. *J. Informetr.* **2016**, *10*, 1178–1195. [CrossRef]
- 63. Escorcia-Otálora, T.A.; Poutou-Piñales, R.A. Análisis bibliométrico de los artículos originales publicados en la revista Universitas Scientiarum (1987–2007). *Univ. Sci.* **2008**, *13*, 236–244.
- 64. Klavans, R.; Boyack, K.W. Which type of citation analysis generates the most accurate taxonomy of scientific and technical knowledge? *J. Assoc. Inf. Sci. Technol.* **2017**, *68*, 984–998. [CrossRef]
- 65. McCain, K.W. Mapping authors in intellectual space: A technical overview. *J. Am. Soc. Info. Sci.* **1990**, 41, 433–443. [CrossRef]
- 66. Zupic, I.; Čater, T. Bibliometric Methods in Management and Organization. *Organ. Res. Methods* **2014**, *18*, 429–472. [CrossRef]
- 67. Boyack, K.W.; Klavans, R. Co-citation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately? *J. Am. Soc. Inf. Sci. Technol.* **2010**, *61*, 2389–2404. [CrossRef]
- 68. Chen, X.; Chen, J.; Wu, D.; Xie, Y.; Li, J. Mapping the research trends by co-word analysis based on keywords from funded project. *Proced. Comput. Sci.* **2016**, *91*, 547–555. [CrossRef]

Sustainability **2020**, 12, 724 23 of 26

69. Yang, Y.; Wu, M.; Cui, L. Integration of three visualization methods based on co-word analysis. *Scientometrics* **2012**, *90*, 659–673. [CrossRef]

- 70. Zong, Q.J.; Shen, H.Z.; Yuan, Q.J.; Hu, X.W.; Hou, Z.P.; Deng, S.G. Doctoral dissertations of Library and Information Science in China: A co-word analysis. *Scientometrics* **2013**, *94*, 781–799. [CrossRef]
- 71. Domroes, M. Tourism resources and their development in Maldive Islands. *GeoJournal* **1985**, *10*, 119–126. [CrossRef]
- 72. Price, De. The exponential curve of science. Discovery 1956, 17, 240–243.
- 73. McDonald, K. Physicist Proposes New Way to Rank Scientific Output. PhysOrg. Available online: http://www.physorg.com/news7971.html (accessed on 8 November 2005).
- 74. Crane, D. Social structure in a group of scientists: A test of the "invisible college" hypothesis. In *Social Networks*; Leinhardt, S., Ed.; Academic Press: New York, NY, USA, 1977; pp. 161–178.
- 75. Berelson, B. Content Analysis in Communication Researches; Free Press: Glencoe, IL, USA, 1952.
- 76. López López, P. *Introducción a la Bibliometría*; Promolibro: Valencia, Spain, 1996.
- 77. Merigó, J.M.; Mas-Tur, A.; Roig-Tierno, N.; Ribeiro-Soriano, D. A bibliometric overview of the journal of business research between 1973 and 2014. *J. Bus. Res.* **2015**, *68*, 2645–2653. [CrossRef]
- 78. MacDonald, R.; Jolliffe, L. Cultural rural tourism: Evidence from Canada. *Ann. Tour. Res.* **2003**, *30*, 307–322. [CrossRef]
- 79. Farrell, B.H.; Runyan, D. Ecology and tourism. Ann. Tour. Res. 1991, 18, 26-40. [CrossRef]
- 80. Twining-Ward, L.; Butler, R. Implementing std on a small island: Development and use of sustainable tourism development indicators in Samoa. *J. Sustain. Tour.* **2002**, *10*, 363–387. [CrossRef]
- 81. González, J.A.; Montes, C.; Rodriguez, J.; Tapia, W. Rethinking the Galapagos Islands as a complex social-ecological system: Implications for conservation and management. *Ecol. Soc.* **2008**, *13*. [CrossRef]
- 82. Thur, S.M. User fees as sustainable financing mechanisms for marine protected areas: An application to the Bonaire National Marine Park. *Mar. Policy* **2010**, *34*, 63–69. [CrossRef]
- 83. Beharry-Borg, N.; Scarpa, R. Valuing quality changes in Caribbean coastal waters for heterogeneous beach visitors. *Ecol. Econ.* **2010**, *69*, 1124–1139. [CrossRef]
- 84. Dodds, R.; Graci, S.R.; Holmes, M. Does the tourist care? A comparison of tourists in Koh Phi Phi, Thailand and Gili Trawangan, Indonesia. *J. Sustain. Tour.* **2010**, *18*, 207–222. [CrossRef]
- 85. Uyarra, M.C.; Watkinson, A.R.; Côté, I.M. Managing dive tourism for the sustainable use of coral reefs: Validating diver perceptions of attractive site features. *Environ. Manag.* **2009**, *43*, 1–16. [CrossRef]
- 86. Semeniuk, C.A.D.; Rothley, K.D. Costs of group-living for a normally solitary forager: Effects of provisioning tourism on southern stingrays Dasyatis Americana. *Mar. Ecol. Prog. Ser.* **2008**, *357*, 271–282. [CrossRef]
- 87. Berkes, F.; Folke, C. *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience*; Cambridge University Press: Cambridge, UK, 2000.
- 88. Berkes, F.; Colding, J.; Folke, C. *Navigating Social-Ecological Systems: Building Resilience for Complexity and Change*; Cambridge University Press: Cambridge, UK, 2003.
- 89. Berkes, F.; Colding, J.; Folke, C. Rediscovery of traditional ecological knowledge as adaptive management. *Ecol. Appl.* **2000**, *10*, 1251–1262. [CrossRef]
- 90. Folke, C. Traditional knowledge in social-ecological systems. Ecol. Soc. 2004, 9, 7. [CrossRef]
- 91. Hughes, T.P.; Gunderson, L.H.; Folke, C.; Baird, A.H.; Bellwood, D.; Berkes, F.; Norberg, J. Adaptive management of the great barrier reef and the Grand Canyon world heritage areas. *AMBIO J. Hum. Environ.* **2007**, *36*, 586–593. [CrossRef]
- 92. Hawkins, J.P.; Roberts, C.M. The growth of coastal tourism in the Red Sea: Present and future effects on coral reefs. *AMBIO* **1994**, 23, 503–508.
- 93. Hawkins, J.P.; Roberts, C.M.; Kooistra, D.; Buchan, K.; White, S. Sustainability of scuba diving tourism on coral reefs of Saba. *Coast. Manag.* **2005**, *33*, 373–387. [CrossRef]
- 94. Hawkins, J.P.; Roberts, C.M.; Van'T Hof, T.; De Meyer, K.; Tratalos, J.; Aldam, C. Effects of recreational scuba diving on caribbean coral and fish communities. *Conserv. Biol.* **1999**, *13*, 888–897. [CrossRef]
- 95. Lamb, J.B.; True, J.D.; Piromvaragorn, S.; Willis, B.L. Scuba diving damage and intensity of tourist activities increases coral disease prevalence. *Biol. Conserv.* **2014**, *178*, 88–96. [CrossRef]
- 96. Dixon, J.A. Economic benefits of marine protected areas. Oceanus 1993, 36, 35–41.

Sustainability **2020**, 12, 724 24 of 26

97. Dixon, J.A.; Scura, L.; van't Hof, T. An economic and ecological analysis of the Bonaire Marine Park. In *Collected Essays on the Economics of Coral Reefs*; Cesar, H.S.J., Ed.; CORDIO (Coral Reef Degradation in the Indian Ocean); Kalmar University: Kalmar, Sweden, 2000; pp. 40–54.

- 98. Hall, C.M.; Page, S.J. Progress in tourism management: From the geography of tourism to geographies of tourism—A review. *Tour. Manag.* **2009**, *30*, 3–16. [CrossRef]
- 99. Page, S.J.; Hall, C.M. *The Geography of Tourism and Recreation: Environment, Place and Space*; Routledge: New York, NY, USA, 2014.
- 100. Place, S.; Hall, C.M.; Lew, A. Sustainable Tourism: A Geographical Perspective; Prentice Hall: Upper Saddle River, NJ, USA, 1998.
- 101. Buckley, R. Conservation Tourism; CABI: New York, NY, USA, 2010.
- 102. Hall, C.M. Response to Yeoman et al: The fakery of 'The authentic tourist'. *Tour. Manag.* **2007**, *28*, 1139–1140. [CrossRef]
- 103. Gössling, S.; Bredberg, M.; Randow, A.; Sandström, E.; Svensson, P. Tourist perceptions of climate change: A study of international tourists in Zanzibar. *Curr. Issues Tour.* **2006**, *9*, 419–435. [CrossRef]
- 104. Gössling, S.; Hall, C.M.; Peeters, P.; Scott, D. The future of tourism: Can tourism growth and climate policy be reconciled? A mitigation perspective. *Tour. Recreat. Res.* **2010**, *35*, 119–130. [CrossRef]
- 105. Cole, D.N. *Monitoring the Condition of Wilderness Campsites*; US Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station: Ogden, UT, USA, 1983.
- 106. Farrell, T.A.; Marion, J.L. Identifying and assessing ecotourism visitor impacts at eight protected areas in Costa Rica and Belize. *Environ. Conserv.* **2002**, *28*, 215–225. [CrossRef]
- 107. Marion, J.L.; Farrell, T.A. Management practices that concentrate visitor activities: Camping impact management at Isle Royale National Park, USA. *J. Environ. Manag.* 2002, 66, 201–212. [CrossRef]
- 108. Butler, R. The Tourism Area Life Cycle; Channel View Publications: Clevedon, UK; Bristol, UK, 2006; Volume 1.
- 109. Cohen, E. Authenticity, equity and sustainability in tourism. J. Sustain. Tour. 2002, 10, 267–276. [CrossRef]
- 110. Lee, T.H. How recreation involvement, place attachment and conservation commitment affect environmentally responsible behavior. *J. Sustain. Tour.* **2011**, *19*, 895–915. [CrossRef]
- 111. Nunkoo, R.; Ramkissoon, H. Developing a community support model for tourism. *Ann. Tour. Res.* **2011**, *38*, 964–988. [CrossRef]
- 112. Orams, M.B. Marine ecotourism as a potential agent for sustainable development in Kaikoura, New Zealand. *Int. J. Sustain. Dev.* **2002**, *5*, 338–352. [CrossRef]
- 113. Sharpley, R. Tourism in Cyprus: Challenges and opportunities. Tour. Geogr. 2001, 3, 64–86. [CrossRef]
- 114. Becken, S. Harmonising climate change adaptation and mitigation: The case of tourist resorts in Fiji. *Glob. Environ. Chang.* **2005**, *15*, 381–393. [CrossRef]
- 115. Belle, N.; Bramwell, B. Climate change and small island tourism: Policy maker and industry perspectives in Barbados. *J. Travel Res.* **2005**, *44*, 32–41. [CrossRef]
- 116. Dowling, R.K.; Newsome, D. Global Geotourism Perspectives; Goodfellow Publishers Limited: Oxford, UK, 2010.
- 117. Weaver, D. Mass tourism and alternative tourism in the Caribbean. In *Tourism and the Less Developed World: Issues and Case Studies*; Harrison, D., Ed.; CABI: London, UK, 2001; pp. 161–174.
- 118. Bradford, S.C. Sources of information on specific subjects. Engineering 1934, 137, 85–86.
- 119. Álvarez-García, J.; Maldonado-Erazo, C.P.; del Río-Rama, M.D.L.C.; Sánchez-Fernández, M.D. Analysis of the studies regarding the impacts of creative tourism indexed in the Scopus and WoS Base. *Rev. Port. Estud. Reg.* **2018**, *48*, 17–32.
- 120. Durán-Sánchez, A.; Álvarez-García, J.; del Río-Rama, M.D.L.C. La investigación en turismo activo: Revisión bibliográfica (1975–2013). *Rotur Rev. Ocio Tur.* **2015**, *8*, 62–76.
- 121. Cheng, M.; Edwards, D.; Darcy, S.; Redfern, K. A tri-method approach to a review of adventure tourism literature: Bibliometric analysis, content analysis, and a quantitative systematic literature review. *J. Hosp. Tour. Res.* 2018, 42, 997–1020. [CrossRef]
- 122. Álvarez-García, J.; Durán-Sánchez, A.; del Río-Rama, M.D.L.C. Scientific coverage in community-based tourism: Sustainable tourism and strategy for social development. *Sustainability* **2018**, *10*, 1158. [CrossRef]
- 123. Durán-Sánchez, A.; del Río-Rama, M.D.L.C.; Álvarez-García, J. Bibliometric analysis of publications on wine tourism in the databases Scopus and WoS. *Eur. Res. Manag. Bus. Econ.* **2017**, *23*, 8–15. [CrossRef]
- 124. Bozok, D.; Kılıç, S.N.; Özdemir, S.S. Bibliometric analysis of rural tourism on tourism literature Turizm literatüründe kırsal turizmin bibliyometrik analizi. *J. Hum. Sci.* **2017**, *14*, 187–202. [CrossRef]

Sustainability **2020**, 12, 724 25 of 26

125. Sáez, C.A.A.; Fuentes, M.D.M.F.; Haro-Domínguez, M.C. La investigación española en turismo con impacto internacional (1997–2011). Una perspectiva desde la economía y la dirección de la empresa. *Cuad. Econ. Dir. Empresa* 2013, 16, 17–28.

- 126. Köseoglu, M.A.; Sehitoglu, Y.; Ross, G.; Parnell, J.A. The evolution of business ethics research in the realm of tourism and hospitality: A bibliometric analysis. *Int. J. Contemp. Hosp. Manag.* **2016**, *28*, 1598–1621. [CrossRef]
- 127. Ashworth, G.; Page, S.J. Urban tourism research: Recent progress and current paradoxes. *Tour. Manag.* **2011**, 32, 1–15. [CrossRef]
- 128. Kandampully, J.; Zhang, T.; Bilgihan, A. Customer loyalty: A review and future directions with a special focus on the hospitality industry. *Int. J. Contemp. Hosp. Manag.* **2015**, 27, 379–414. [CrossRef]
- 129. Kim, M.; Wang, C.; Mattila, A.S. The relationship between consumer complaining behavior and service recovery: An integrative review. *Int. J. Contemp. Hosp. Manag.* **2010**, 22, 975–991.
- 130. Law, R.; Qi, S.; Buhalis, D. Progress in tourism management: A review of website evaluation in tourism research. *Tour. Manag.* **2010**, *31*, 297–313. [CrossRef]
- 131. Morrison, A. Hospitality research: A pause for reflection. Int. J. Tour. Res. 2002, 4, 161-169. [CrossRef]
- 132. Tracey, J.B. A review of human resources management research: The past 10 years and implications for moving forward. *Int. J. Contemp. Hosp. Manag.* **2014**, *26*, 679–705. [CrossRef]
- 133. Alcañiz, J.E.B.; Simó, L.A.; García, I.S.; Herrera, A.A. Investigación internacional en marketing turístico: Análisis de contenido sobre temas y metodologías. *PASOS. Rev. Tur. Patrim. Cult.* **2008**, *6*, 391–398. [CrossRef]
- 134. Yoo, M.; Bai, B. Customer loyalty marketing research: A comparative approach between hospitality and business journals. *Int. J. Hosp. Manag.* **2013**, *33*, 166–177. [CrossRef]
- 135. Wen, I. Factors affecting the online travel buying decision: A review. *Int. J. Contemp. Hosp. Manag.* **2009**, 21, 752–765. [CrossRef]
- 136. Johns, N.; Pine, R. Consumer behaviour in the food service industry: A review. *Int. J. Hosp. Manag.* **2002**, *21*, 119–134. [CrossRef]
- 137. Mattila, A.S. Consumer behavior research in hospitality and tourism journals. *Int. J. Hosp. Manag.* **2004**, 23, 449–457. [CrossRef]
- 138. Pike, S. Destination image analysis—A review of 142 papers from 1973 to 2000. *Tour. Manag.* **2002**, 23, 541–549. [CrossRef]
- 139. Crick, A.; Spencer, A. Hospitality quality: New directions and new challenges. *Int. J. Contemp. Hosp. Manag.* **2011**, 23, 463–478. [CrossRef]
- 140. Riley, M. Role interpretation during service encounters: A critical review of modern approaches to service quality management. *Int. J. Hosp. Manag.* **2007**, *26*, 409–420. [CrossRef]
- 141. Guerrier, Y.; Deery, M. Research in hospitality human resource management and organizational behaviour. *Int. J. Hosp. Manag.* **1998**, *17*, 145–160. [CrossRef]
- 142. Davidson, M.; McPhail, R.; Barry, S. Hospitality HRM: Past, present and the future. *Int. J. Contemp. Hosp. Manag.* **2011**, 23, 498–516. [CrossRef]
- 143. Lucas, R.; Deery, M. Significant developments and emerging issues in human resource management. *Int. J. Hosp. Manag.* **2004**, *23*, 459–472. [CrossRef]
- 144. Singh, N.; Hu, C.; Roehl, W.S. Text mining a decade of progress in hospitality human resource management research: Identifying emerging thematic development. *Int. J. Hosp. Manag.* **2007**, *26*, 131–147. [CrossRef]
- 145. Kusluvan, S.; Kusluvan, Z.; Ilhan, I.; Buyruk, L. The human dimension a review of human resources management issues in the tourism and hospitality industry. *Cornell Hosp. Q.* **2010**, *51*, 171–214. [CrossRef]
- 146. Deery, M.; Jago, L. Revisiting talent management, work-life balance and retention strategies. *Int. J. Contemp. Hosp. Manag.* **2015**, 27, 453–472. [CrossRef]
- 147. Li, L. A review of entrepreneurship research published in the hospitality and tourism management journals. *Tour. Manag.* **2008**, *29*, 1013–1022. [CrossRef]
- 148. Thomas, R.; Shaw, G.; Page, S.J. Understanding small firms in tourism: A perspective on research trends and challenges. *Tour. Manag.* **2011**, *32*, 963–976. [CrossRef]
- 149. Morrison, A.; Carlsen, J.; Weber, P. Small Tourism Business Research Change and Evolution. *Int. J. Tour. Res.* **2010**, *12*, 739–749. [CrossRef]

Sustainability **2020**, 12, 724 26 of 26

150. Aragon-Correa, J.A.; Martin-Tapia, I.; de la Torre-Ruiz, J. Sustainability issues and hospitality and tourism firms' strategies analytical review and future directions. *Int. J. Contemp. Hosp. Manag.* **2015**, 27, 498–522. [CrossRef]

- 151. Buhalis, D.; Law, R. Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of Tourism research. *Tour. Manag.* 2008, 29, 609–623. [CrossRef]
- 152. Kirk, D.; Pine, R. Research in hospitality systems and technology. *Int. J. Hosp. Manag.* **1998**, 17, 203–217. [CrossRef]
- 153. O'Connor, P.; Murphy, J. Research on information technology in the hospitality industry. *Int. J. Hosp. Manag.* **2004**, 23, 473–484. [CrossRef]
- 154. Law, R.; Leung, D.; Au, N. Progress and development of information technology in the hospitality industry evidence from Cornell Hospitality Quarterly. *Cornell Hosp. Q.* **2013**, *54*, 10–24. [CrossRef]
- 155. Law, R.; Buhalis, D.; Cobanoglu, C. Progress on information and communication technologies in hospitality and tourism. *Int. J. Contemp. Hosp. Manag.* **2014**, *26*, 727–750. [CrossRef]
- 156. Gretzel, U. Intelligent systems in tourism: A social science perspective. *Ann. Tour. Res.* **2011**, *38*, 757–779. [CrossRef]
- 157. Hallin, C.A.; Marnburg, E. Knowledge management in the hospitality industry: A review of empirical research. *Tour. Manag.* **2008**, *29*, 366–381. [CrossRef]
- 158. Shaw, G.; Williams, A. Knowledge transfer and management in tourism organisations: An emerging research agenda. *Tour. Manag.* **2009**, *30*, 325–335. [CrossRef]
- 159. Cohen, E.; Cohen, S.A. Current sociological theories and issues in tourism. *Ann. Tour. Res.* **2012**, *39*, 2177–2202. [CrossRef]
- 160. Nunkoo, R.; Ramkissoon, H.; Gursoy, D. Use of structural equation modeling in tourism research: Past, present, and future. *J. Travel Res.* **2013**, *52*, 759–771. [CrossRef]
- 161. Deery, M.; Jago, L.; Fredline, L. Rethinking social impacts of tourism research: A new research agenda. *Tour. Manag.* **2012**, *33*, 64–73. [CrossRef]
- 162. Buckley, R. Sustainable tourism: Research and reality. Ann. Tour. Res. 2012, 39, 528–546. [CrossRef]
- 163. Luthe, T.; Wyss, R. Assessing and planning resilience in tourism. Tour. Manag. 2014, 44, 161–163. [CrossRef]
- 164. Cheng, C.; Li, X.; Petrick, J.F.; O'Leary, J.T. An examination of tourism journal development. *Tour. Manag.* **2011**, *32*, 53–61. [CrossRef]
- 165. Getz, D. Event tourism: Definition, evolution, and research. Tour. Manag. 2008, 29, 403-428. [CrossRef]
- 166. Myung, E.; McClaren, A.; Li, L. Environmentally related research in scholarly hospitality journals: Current status and future opportunities. *Int. J. Hosp. Manag.* **2012**, *31*, 1264–1275. [CrossRef]
- 167. Feinstein, A.H.; Parks, S.J. The use of simulation in hospitality as an analytic tool and instructional system: A review of the literature. *J. Hosp. Tour. Res.* **2002**, *26*, 396–421. [CrossRef]



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