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Landscape and Tourism, Landscapes of Tourism

Edited by
Theano S. Terkenli

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Editorial

Research Advances in Tourism-Landscape Interrelations: An Editorial

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The significance of the landscape to a variety of experiences that are sought or unfold at a visited destination is well established and considered paramount to the study of tourism [1,2]. Landscape is central to sightseeing and tourism; without landscape there may not be tourism, and, by definition, no landscape could be considered such without its viewer/observer. This interdependence is also reflected in the European Landscape Convention, whereby landscape is 'an area, as perceived by people [including visitors], whose character is the result of the action and interaction of natural and/or human factors' (Chapter 1, Article 1, p. 9) [3]. Landscape is key to the development, marketing/promotion, and consumption of tourism destinations, and to triggering and sustaining tourism markets, and enticing tourist dreams, fantasies, and behaviors. From 'sight-seeing' practices—at the basis of all tourism activities—all the way up to the overall spatial planning and management of a destination for tourism development, indeed, all types of landscapes and places (whether spectacular or ordinary) may potentially hold interest for some types of visitors for the purposes of consumption of goods, services, activities, experiences, etc. [4]. Moreover, a long series of time–place–culture contingent tourist/visitor services and experiences are provided by landscapes, i.e., pleasure, change, relaxation, excitement, education, inspiration, well-being, etc. [5,6].

Nonetheless, the intertwined relationship between tourism and landscape comes with a series of costs and benefits within the context of tourism landscapes. Landscapes of tourism reflect and stage recreational trends, multifunctional livelihood systems, conflicts and opportunities for employment and income generation, as well as for human, cultural, and natural resource management and use [4]. Such landscapes are increasingly coming into the foreground of current debates about the future of the planet, in conjunction with various human and environmental crises (e.g., economic depression, climatic change, and the COVID-19 pandemic), which offer significant opportunities but also carry a serious bearing on the realms of both tourism and landscape. One positive trend in this direction is the current enormous proliferation of a broad range of alternative and special interest/purpose forms of tourism/leisure, variably (and, often, intricately) connected to visited landscapes. The main goals of such endeavors tend to be increasingly compatible with sustainable/'green' development for the landscape, for local societies, and for tourism, while catering to a variety of broadly accessible tourism/leisure pursuits and activities [4]. Nonetheless, rising rates and globalizing patterns of mobility and consumption continue to require renewed and more in-depth scientific investigation into the sites and attractions sought by visitors and to the role of landscape in visitor experiences [1].

At the outset of any such endeavor, it should be taken into consideration that significant confusion exists in scholarly tourism literature around the terms tourist vs. tourism in conjunction with the concept of landscape [6,7]. The term 'tourism landscape' is intended to refer to the processes through which a landscape, activity, development, and so forth is shaped to serve the purposes of tourism (also, i.e., 'landscapes of tourism'). The term 'tourist landscape' indicates the ways, reasons, and processes in or through which such landscapes are substantiated and/or appropriated via the phenomenon of tourism. In other words, the term 'tourism landscapes' implies the ways in which these landscapes are

produced, whereas 'tourist landscapes' rather implies the ways in which these landscapes are consumed [6].

The interface between these two broad and interrelated areas of scientific study, tourism and landscape, has lately elicited a variegated body of research in terms of its nature, focus, and approach—often consciously signaling multiple and shifting points of view in the context of leisure economy production and consumption [1,8]. Nevertheless, there is, as yet, no comprehensive and cohesive conceptual/theoretical framework to support this increasingly interdisciplinary body of work. However, interest in the study of the landscapes of tourism and tourism itself has been growing, especially in the last decade, as reflected in the increased number of publications and research questions addressed to this area of study [6,7,9,10]. Many challenges are involved in this task, and much remains to be understood and ascertained as the landscape and tourism—two highly complex and multifaceted scientific areas—come together in a variety of ways across time, space, and culture. The latter constitutes the objective of this Special Issue, which aims to enhance the interdisciplinary scientific dialogue on these issues and challenges, while highlighting their range and significance for tourism and the landscape, in terms of theory, empirical practice, approach, policy, ethics, and future prospects.

This Special Issue contains 16 contemporary scientific approaches to the tourist–landscape relationship, covering the entire spectrum of scholarly advances. The contributions come from and/or represent applications from a series of countries, such as Spain, the Netherlands, China, Slovakia, Poland, Japan, and Italy.

Acknowledging the significant links and synergies between the landscape and tourism, Heslinga, Groote, and Vanclay [11] use the case study of Terschelling, a Dutch island in the UNESCO World Heritage Wadden Sea, and an important tourism destination renowned for its outstanding landscapes, to provide overarching recommendations for the improvement of decision making toward regional resiliency. They suggest that tourism–landscape synergies are preconditions for building such resiliency, and that such synergies may be achieved through integrated policies aimed at joint interactions with the inclusion of all pertinent stakeholders, co-creating a clear and shared vision of the future in the context of the historical institutional regional framework, daring to experiment but flexible in terms of local implementation.

In order to understand the evolutionary processes taking place in coastal areas of post-communism tourism destinations, Bal and Czalczynska-Podolska [12] analyze both internal and external drivers of tourism-induced historical change in the cultural landscape of the Baltic coastline of Poland. On the basis of transformations of nature and forms of recreation, they identify four distinct stages in the shaping of spatial/landscape elements in such seaside resorts and relevant recreational architecture: (a) formation—elite resorts era (early 19th–20th centuries); (b) regionalism—national resort development (1918–1939); (c) socialization—resorts for working masses (1945–1989); and (d) pluralism—egalitarian health resort development (since 1989). The study contributes to the discussion of commonly known models of tourism development, with the view of supporting the sustainable planning and development of such coastal tourism destinations.

Chakraborty [13] describes the complex interrelationship developing between emerging patterns of mountain tourism and the landscape in the Kamikochi Valley, situated in the Northern Japan Alps, and assesses sustainable tourism challenges, primarily from a landscape point of view and secondarily from a tourist point of view. The study, part of a two-year-long ongoing research project, reveals that the intensity of visitation results in direct pressures on the landscape and wildlife, as well as more subtle pressures in the form of ongoing infrastructure buildup and modification of key geomorphic processes. It also reveals a general demand for such information from tourists, who tend to have minimal knowledge of such pressures and impacts. Further, it underlines that the overarching challenge to managing tourism in a sustainable manner remains understanding, appreciating, and proactively conserving the biophysical mechanisms of such places.

A two-way perspective is also employed for the analysis of the mining tourism landscape in Cartagena-La Unión, Spain, by approaching the landscape as digital content and as a smart tourism destination. The emphasis of this research by Pardo Abad and Fernández Álvarez [14] is on eliciting the potential of different mining areas for tourism development, while illustrating the role of new information and communication technologies (ICTs) in such development. After laying out the scenic and aesthetic variables of mining landscapes, the researchers investigate the extent to which the landscape is used for tourism purposes as well as its presence on the Internet and its digitization for tourism purposes. Their work features the ways that such an area can be regarded as a landscape suitable for the smart promotion of tourism, through the application of innovative digital techniques facilitating and disseminating tourism and efficient resource management. They further show how such ICTs may generate a large amount of digital content about landscapes and their aesthetic characteristics, with interesting information for tourists about the most significant natural and cultural attractions of the destination.

The role of the landscape in both the sustainable territorial management of natural resources and the socio-economic development of marginal rural areas is the basis of the study by Bonadonna, Rostagno, and Beltramo in the northwest of Italy [15]. The main tenet of the researchers is that land consolidation associations (LCAs) are a useful tool/means of territorial management, as LCAs aim to improve the link between the landscape and tourism in holistic, participatory, and integrated ways. Accordingly, the researchers proceed to compare the different LCAs operating in the Piemonte region, in terms of their differences and similarities, for purposes of tourism development improvement. The study showcases this approach as a useful tool in the management of fragmented territories for rural communities, aiming to stimulate and revitalize their ability to produce environmental, economic, and social value, ensuring territorial sustainability and tourism–landscape synergies.

Although the latter synergies between landscape and tourism have proven to be fertile ground for research that has been broad and diverse in nature, subject matter, and methodology, in recent years, there has not been adequate organization and theorization of this interdisciplinary subject matter. In this regard, the article by Jiménez-García, Ruiz-Chico, and Peña-Sánchez maps this compound research area, using bibliometric techniques (VOSviewer and Science Mapping Analysis Software Tool (SciMAT) software) [9], and presents the evolution of this scientific field, including the main concepts and approaches to their study but, also, work themes that have been and continue to be fundamental to the construction of the field. They conclude that, in the past decade, (a) the subject of the tourism–landscape interrelationship has been analyzed by a large number of authors, but few groups have specialized in it; and (b) this increase in the number of publications has been reflected in the increase of research topics dealing with landscape and tourism. They also signal significant shifts away from research themes that have been the center of interest in the past toward new emerging ones which seem to carry the field in the direction of more dynamic and further developed areas of future research.

The next study by Cheng, Gao, Shao, and Iqbal [16] delves into the contribution of the landscape to campus tourism, in relation to the Wangjiang Campus of Sichuan University in China. In order to decipher the comprehensive influence of specific natural and human-induced environmental aspects on campus landscapes of three multi-scalar perspectives (point, line, and plane), the study employs different research themes comprising of (i) landscapes of buildings and vegetation, (ii) color landscapes, (iii) landscapes of campus space utilization, and (iv) thermal landscapes. The outcomes of this study advocate for the comprehensive consideration of the characteristics of different campus landscapes at different scales as conducive to the design, planning, and experience of campus tourism, which may serve as a reference for the development of university campus tourism at other locations.

A further study by Bal and Czalczynska-Podolska [17] on the coastline of Western Pomerania, Poland, addresses the negative potential impact of tourism development on the cultural landscape of seaside resorts and provides recommendations for landscape shaping, management, and conservation. The authors evaluate 11 development projects (including

a range of hotels, luxury residential buildings, and hotel suites) built between 2009 and 2020 through: (a) an assessment of each project's architecture-and-landscape integration, using four groups of evaluation criteria (aesthetic, socio-cultural, functional, and locational factors); (b) a historical interpretative study (iconology, iconography, historiography), and (c) an examination of architecture-and-landscape integration using a pre-prepared evaluation form. This study demonstrates that it is possible to identify detrimental impacts of tourism on destination landscapes and offers recommendations for protective measures, in order to ensure that new developments at these destinations conform to landscape/spatial structures and characteristics in line with the area's original cultural profile and identity.

In China, Luo and Chiou [18] propose a hierarchical framework for the development of cultural tourism attractiveness in Chinese historic districts, combining 2 aspects (the physical environmental and the cultural/natural environmental) and 5 criteria (including landscape morphology and tourism infrastructure), along with 21 elements of the Chinese historic districts, in order to support these districts in terms of cultural tourism development while taking into account landscape conservation, district management, and living convenience. The contribution of this work lies in the establishment of the hierarchical framework outlining the components of cultural tourism attractiveness for Chinese historic districts in a systematic way. This framework may serve as a theoretical reference in future efforts toward the sustainable and coordinated planning of cultural tourism attractiveness, while supporting landscape conservation in Chinese historic districts.

Another study of the interrelationship between tourism and mountainous landscapes is presented by Abellán and García Martínez, purporting to evaluate landscape as a heritage and tourism resource, focusing on its capacity to reactivate depressed rural areas of inland Spain (midmountain areas in the southeast of the autonomous region of Castilla-La Mancha), according to the opinions and perceptions of its visitors, collected through a field survey [19]. The study identifies processes of socio-territorial transformation which have led to the expansion of the area's tertiary sector due to a rise in tourism, an activity closely linked to the characteristics of the territory, its landscape, and the ecosystem resources (constituting its primary attractions as a tourist destination). The landscape and its features emerge as the primary tourist attraction in these mountain areas and as a key element of the tourism system from a resource perspective, thus highlighting the need for landscape education programs aimed at preserving the elements of these resources.

Another proposal, also based in China, comes from Li, Zhou, and Zhang [20] in the form of a compilation of a set of strategies for landscape planning in peri-urban rural tourism, with a view toward establishing the local natural and cultural character of the landscape for the purposes of integrating and encapsulating it in such tourism development. In order to contribute to a better understanding of comprehensive landscape planning, integrating natural and cultural dimensions in peri-urban villages, this research compares and critically discusses the relevant strategies of two such Chinese villages (Heshu village and Pu'an village in the Yangtze River Delta) in terms of their integration of natural and cultural elements forming landscapes with a distinctive local character, aiming to boost tourism development. While differences emerge between the two case studies in the latter regard, the overall conclusion is that it is essential to consider the interests of both locals and tourists in the process of identifying, preserving, and enhancing the locality of rural peri-urban landscapes.

The study by Terkenli, Skowronek, and Georgoula [6] goes a step further in investigating the relationship between landscape and tourism, in a comprehensive and integrated way, on the basis of a broad questionnaire survey of European landscape and tourism experts. The latter's notions and perceptions of the reciprocal relationship between the landscape and tourism are analyzed and assessed regarding: (a) understandings and visions of future optimization of the relationship tourism–landscape, (b) their conceptualizations of 'landscapes of tourism', and (c) their assessments of the prospects (opportunities) and challenges (threats) of the tourism–landscape relationship, both for the tourism industry and the local societies. Besides the emergence of a definition for 'landscapes of tourism', the

findings point to the high significance of the tourism–landscape relationship, vis-à-vis both its positive and negative aspects, but reveal an inclination toward its negative aspects. The study also exhibits that the experts express crucial socio-environmental concerns regarding the tourism–landscape interrelationship but support the principles of sustainability, locality, and participatory governance, while calling for appropriate future governmental planning.

Another very valuable study focusing on the theorization of the tourism–landscape interrelationship comes from Meneghello [21], who conducts a bibliographic analysis of scholarly contributions to the nexus and conceptualization of 'tourist landscapes' and other relevant terms, in order to map different ways of defining and understanding this complex interrelationship as it emerges from the main research areas. The findings of the study enrich the scientific reflections on this relationship, providing new definitional contributions and a conceptual framework able to influence coherently both theory and practice. The implemented bibliometric analysis brings up three main research topics: planning and governance, situated spatial–social–symbolic interrelations, and impact evaluation. The study unveils a recent increase in the awareness of terminological issues, despite a more general lack of attention to the actual use of specific terms. It also illustrates reflections on the relational dimension of landscape, as the latter have been maturing in tourism studies from around 2010, but have only very recently begun to be consolidated and increasingly guide pertinent theoretical investigations.

The next article, by Wang and Marafa [22], complements previous approaches to the tourism–landscape relationship, by exploring the production, reproduction, and development of tourist landscape imaginaries—and, specifically, agricultural cultural heritage sites—in a case study of the Honghe Hani Rice Terraces in China. For this purpose, and based on theories of social and tourism imaginaries, the authors conduct content analysis on tourist discourses and images on social media, as well as in-depth interviews with stakeholders and participant observations. A gap between tourism imaginaries and the actual Hani landscape becomes apparent, with the latter being imagined as a stereotyped terraced view/prospect staged for gazing, as dictated by the tourism industry, but disconnected from the realities of local community life and environmental predicaments. In addition to emphasizing the need for the formulation of appropriate resource management policies to protect the physical landscape, the findings advocate for the preservation of the cultural significance of the landscape and the empowerment of local communities, toward the promotion of knowledge- and community-based tourism.

Relationships between the scenic beauty of geosites, their scientific value, and tourists' geoscientific knowledge is investigated by Tessema, Poesen, Verstraeten, and Van Rompaey, in a large survey of 34 geosites in southeastern Spain [23]. The survey enlisted 29 respondents with a geoscience background who visited the 34 geosites, 43 respondents with a geoscience background who did not visit the geosites, and 104 respondents with no geoscience background who also did not visit the geosites. The findings unveil a significant relationship between the geosites' scenic beauty and their scientific value. Furthermore, the significance of this relationship seems to increase with the geoscientific knowledge of the respondent. These findings have important implications for geoconservation, geoheritage management/protection, and sustainable geotourism development, as more geoscience education and geointerpretation seem to facilitate people's appreciation of the geosites' scenic beauty. Furthermore, the study shows that the presence of viewpoints seems to be an important factor in scenic beauty rating and, more generally, that geosites combining certain features are more interesting to all types of respondents, irrespective of the latter's geoscientific background.

Finally, from the Slovak Republic, is a study on the life cycle of landscape transformation—both positive and negative—through tourism, undertaken in six very diverse localities. Oremusová, Nemčíková, and Krogmann [24] rely on the Drivers–Pressures–State–Impact–Response (DPSIR) model for their integrated environmental assessment of such transformation and on the methodology of the tourism destination life cycle, using integrated sustainable development indicators. This contribution highlights the transformation pro-

cesses leading to the creation of a tourist landscape and critically evaluates their effects on the overall environment and land uses of the selected sites. The authors also present possibilities of further directions in sustainable tourism planning and development, while pointing out related benefits and risks, and taking into consideration the landscape character, identity, and future visions of the territory.

We hope that this collective effort will play a role in promoting and advancing the increasingly growing and expanding interdisciplinary area where landscape and tourism come together. This task will have been successful only if it is seen to contribute to relevant theory, methodology, and empirical knowledge, offering further research insights and questions that may open up even broader possibilities for scientific exploration and sustainable options for tourism and landscape planning, management, marketing, and appropriation. Such prospects are especially relevant, valuable, and timely—even urgent—in today's context of a fast-changing world and constitute an excellent opportunity for humanity's response to crises and conflicts that lie at the heart of our survival and well-being.

References

1. Cartier, C.; Lew, A.A. (Eds.) *Seductions of Place: Geographical Perspectives on Globalization and Touristed Landscapes*; Routledge: Abingdon, UK, 2005.
2. Terkenli, T.S. Landscapes of tourism. In *The Wiley-Blackwell Companion to Tourism*; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; John Wiley & Sons: New York, NY, USA, 2014.
3. Council of Europe. European Landscape Convention. 2000. Available online: https://rm.coe.int/16802f80c6 (accessed on 29 April 2021).
4. Encyclopedia of Tourism Management and Marketing. In *Encyclopedia of Tourism Management and Marketing*; Edward Elgar Publishing: Cheltenham, UK, 2021.
5. Crouch, D. *Leisure/Tourism Geographies: Practices and Geographical Knowledge*; Routledge: Abingdon, UK, 1999.
6. Terkenli, T.; Skowronek, E.; Georgoula, V. Landscape and Tourism: European Expert Views on an Intricate Relationship. *Land* **2021**, *10*, 327. [CrossRef]
7. Skowronek, E.; Tucki, A.; Huijbens, E.H.; Jóźwik, M.J. What is the tourist landscape? Aspects and features of the concept. *Acta Geogr. Slov.* **2018**, *58*, 73–85. [CrossRef]
8. Terkenli, T.S.; d'Hauteserre, A.-M. (Eds.) *Landscapes of a New Cultural Economy of Space*; Springer: Dordrecht, The Netherlands, 2006.
9. Jiménez-García, M.; Ruiz-Chico, J.; Peña-Sánchez, A.R. Landscape and Tourism: Evolution of Research Topics. *Land* **2020**, *9*, 488. [CrossRef]
10. Gkoltsiou, A.; Terkenli, T.S.; Koukoulas, S. Landscape indicators for the evaluation of tourist landscape structure. *Int. J. Sustain. Dev. World Ecol.* **2013**, *20*, 461–475. [CrossRef]
11. Heslinga, J.; Groote, P.; Vanclay, F. Towards Resilient Regions: Policy Recommendations for Stimulating Synergy between Tourism and Landscape. *Land* **2020**, *9*, 44. [CrossRef]
12. Bal, W.; Czalczynska-Podolska, M. The Stages of the Cultural Landscape Transformation of Seaside Resorts in Poland against the Background of the Evolving Nature of Tourism. *Land* **2020**, *9*, 55. [CrossRef]
13. Chakraborty, A. Emerging Patterns of Mountain Tourism in a Dynamic Landscape: Insights from Kamikochi Valley in Japan. *Land* **2020**, *9*, 103. [CrossRef]
14. Abad, C.J.P.; Álvarez, J.F. Landscape as Digital Content and a Smart Tourism Resource in the Mining Area of Cartagena-La Unión (Spain). *Land* **2020**, *9*, 112. [CrossRef]
15. Bonadonna, A.; Rostagno, A.; Beltramo, R. Improving the Landscape and Tourism in Marginal Areas: The Case of Land Consolidation Associations in the North-West of Italy. *Land* **2020**, *9*, 175. [CrossRef]
16. Cheng, D.; Gao, C.; Shao, T.; Iqbal, J. A Landscape Study of Sichuan University (Wangjiang Campus) from the Perspective of Campus Tourism. *Land* **2020**, *9*, 499. [CrossRef]
17. Bal, W.; Czalczynska-Podolska, M. Assessing Architecture-and-Landscape Integration as a Basis for Evaluating the Impact of Construction Projects on the Cultural Landscape of Tourist Seaside Resorts. *Land* **2020**, *10*, 17. [CrossRef]
18. Luo, H.; Chiou, B.-S. Framing the Hierarchy of Cultural Tourism Attractiveness of Chinese Historic Districts under the Premise of Landscape Conservation. *Land* **2021**, *10*, 216. [CrossRef]
19. Abellán, F.; Martínez, C.G. Landscape and Tourism as Tools for Local Development in Mid-Mountain Rural Areas in the Southeast of Spain (Castilla-La Mancha). *Land* **2021**, *10*, 221. [CrossRef]

20. Li, W.; Zhou, Y.; Zhang, Z. Strategies of Landscape Planning in Peri-Urban Rural Tourism: A Comparison between Two Villages in China. *Land* **2021**, *10*, 277. [CrossRef]
21. Meneghello, S. The Tourism–Landscape Nexus: Assessment and Insights from a Bibliographic Analysis. *Land* **2021**, *10*, 417. [CrossRef]
22. Wang, Z.; Marafa, L. Tourism Imaginary and Landscape at Heritage Site: A Case in Honghe Hani Rice Terraces, China. *Land* **2021**, *10*, 439. [CrossRef]
23. Tessema, G.; Poesen, J.; Verstraeten, G.; Van Rompaey, A.; van der Borg, J. The Scenic Beauty of Geosites and Its Relation to Their Scientific Value and Geoscience Knowledge of Tourists: A Case Study from Southeastern Spain. *Land* **2021**, *10*, 460. [CrossRef]
24. Oremusová, D.; Nemčíková, M.; Krogmann, A. Transformation of the Landscape in the Conditions of the Slovak Republic for Tourism. *Land* **2021**, *10*, 464. [CrossRef]

Towards Resilient Regions: Policy Recommendations for Stimulating Synergy between Tourism and Landscape

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Abstract: To make regions more resilient, a useful idea is that of synergy between tourism and landscape (i.e., a win-win situation). To help policymakers manage for synergy, we provide practical recommendations. Using the case of Terschelling (the Netherlands), an island that is part of the UNESCO World Heritage listed Wadden Sea, we analyzed how policy and public opinion have been changing, and how multilevel governance is arranged. We recommend that: policymakers seek to understand the historical institutional context of a region; strive for integrated policy aimed at synergetic interactions; gain an overview of all stakeholders in the decision-making process; include all stakeholders; develop a shared story; co-create a clear vision for the future; but also allow flexibility in local implementation; and dare to experiment. Overall, we conclude that synergy is a promising concept that requires a different approach to decision-making.

Keywords: resilience; island tourism; social-ecological systems; protected area management; landscapes; deliberativeness; social inclusion; community engagement; inclusiveness

1. Introduction

Tourism destinations around the world are facing social and ecological changes that will worsen over the coming years [1,2]. Tourism has much potential to make regions more resilient and to assist them in coping with these changes [3]. A region can benefit from tourism in economic terms, through an increase in jobs, wellbeing and livability [4]. Conversely, because a tourism destination is dependent upon attractive landscapes and highly biodiverse habitats, tourism managers should seek to protect landscapes to ensure the tourists keep coming [5]. Nevertheless, in practice, balancing nature protection and tourism development often remains challenging given the disruptive effects tourism can also have on communities and landscapes [6].

In this paper, it is argued that synergy between tourism development and nature protection is a precondition to building resilience in regions. Synergies are about striving for win-win situations by balancing the twin goals of nature protection and economic development. Focusing on synergies helps in overcoming an excessive focus either on nature protection or on economic development. When tourism and nature are balanced, this helps build social-ecological resilience in an area. Resilience is a concept that has been widely discussed, but its practical application remains limited [2]. In practice, the extent to which synergies are acknowledged and activated is very much dependent on the effectiveness of decision-making processes. Therefore, decision-making processes and how these have been changing over time are the main focus in this paper.

The role of policy and how local stakeholders act are important in steering the course of development [7]. Despite the need for win-win and balance, the emphasis in policy is often either on economic development or on the protection of landscapes. This results in outcomes that are conflicting rather than mutually strengthening. Opportunities for synergies between tourism and nature are generally overlooked [4,8].

To help policy makers manage tourism and nature better and avoid undesirable outcomes, this paper provides recommendations to improve decision-making. To do this, it was necessary to identify the factors that enable and constrain the synergies between tourism and landscape. The extent to which synergies are likely to be acknowledged and acted upon is related to the quality of the decision-making processes. It is also important to assess the institutional context [9] from different angles, and to understand how policy has developed over time, how public opinion has changed, and how multilevel governance was and is arranged. To discuss the concept of synergetic interactions in tourism, we report on a case study of Terschelling, a Dutch island in the UNESCO World Heritage Wadden Sea. The island is renowned for its outstanding landscapes, and is an important tourism destination. This current paper is based on our previous papers [3,10–12], however, it goes beyond the previous papers by offering overarching policy recommendations.

2. Towards Resilient Regions

Striving for synergies between tourism and landscape can help build the resilience of regions and tourism destinations [10]. Resilience is a key concept in social-ecological system (SES) thinking and implies that a system is able to cope with and positively adapt to future social and ecological changes [13,14]. In order to progress towards resilient regions, there is a need to understand the way tourism and landscape interact, and how these interactions can be improved to find a good balance between economic development and nature protection [15,16].

The concept of synergies is elaborated by Heslinga et al. [3] and refers to situations of mutual gains in which the interactions between the elements of a system combine in ways that result in a sum-total that is larger than the sum of its parts [17]. The general idea is that synergies steer away from trade-offs between economic development and nature protection, where one is chosen over the other, and instead look for win-win outcomes. A situation with an extreme focus only on nature protection leads to the exclusion of human activities, something that might be regarded as socially undesirable. An extreme focus on economic development will likely lead to environmental degradation, which is ecologically undesirable. Synergetic interactions are about win-win situations, meaning that nature protection and economic development are not conflicting, but can help strengthen each other [11]. When tourism-landscape interactions are balanced, this helps to build social-ecological resilience in a region [1–3].

The extent to which synergies are acknowledged is dependent on policy and decision-making processes [18–21]. This is because the role of policy and how stakeholders act are important in steering development. To make future policies on tourism and nature, it is vital to understand how decisions are made, and have been made in the past [7]. Whether synergies actually contribute to resilience is affected by how policy has changed over time, the fluctuating nature of public discourse, and the extent to which all stakeholders (despite differing interests and power relations) are involved in governance processes [22,23]. These three issues are analyzed in this paper.

3. Terschelling as an Exemplar for Analyzing Tourism-Landscape Interactions

It is generally accepted that the use of real-life examples can assist in explaining a concept [24]. Therefore, this paper uses of the case of Terschelling (see Figure 1), the Netherlands, to discuss tourism-landscape interactions. Terschelling is an island located in the Wadden Sea region, a UNESCO World Heritage site in the north of the Netherlands. The Wadden is renowned for its ecological qualities (birds, seals, etc.) and highly-valued landscapes (mudflats, saltmarshes, dunes, forest). Due to its attractiveness, tourism has been increasing over the past decades and is now a significant activity in the

Wadden [25]. Each year, the area is visited by many tourists who enjoy hiking, bicycling, swimming, sunbathing, birdwatching and other activities.
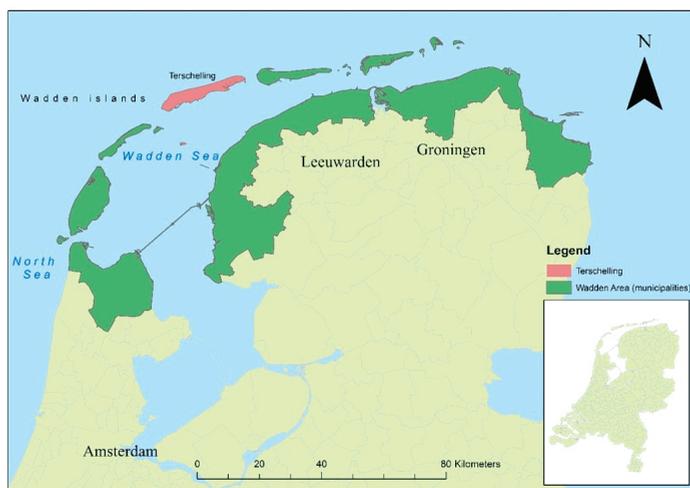
Figure 1. Map of the northern Netherlands showing the location of Dutch Wadden and Terschelling.

Taking Terschelling as an example is relevant because the twin goals of economic development and nature protection come together here and potentially clash. Terschelling is successful as a tourism destination, but is highly dependent on nature and its beautiful landscapes. There are many stakeholder groups with an interest in Terschelling that seek to be involved in decision-making processes relating to nature, tourism, and the development of the island.

4. Methodology

Essentially, our research method is a single case study (Terschelling), in which a case is used as an exemplar of the concept being described. In our case study, a multi-methods approach was applied in order to triangulate data. Although, the qualitative and quantitative methods we used in our research are explained in greater detail in our other papers [10–12], here we provide a short overview. First, a literature review was undertaken to better understand the academic discussion about tourism-landscape interactions and the case study area. Second, a content analysis was conducted on relevant policy documents and newspaper articles to understand how the policy discourse and public opinion about tourism-landscape interactions have changed over time (especially in the period 1945 to 2015). Third, a stakeholder analysis was done to learn how current decision-making takes place. This analysis helped to map the relevant stakeholders, position them on an influence-interest matrix and consider the way the stakeholders interact with each other. Fourth, in-depth interviews were undertaken with 14 key informants to gain deeper insights about governance processes on Terschelling. Finally, the lead author engaged in local panel discussions to observe the way decision-making on the island took place.

A major part of our research was an historical document analysis. This was especially helpful in understanding change over a longer time span than would be possible by interviewing people [26,27]. However, interviews were used to cross-validate the results of the content analysis. They also helped in building the coding scheme and in the interpretation of results. This dual method prevents researchers cherry picking evidence to support their argument. Combining results from content analysis and interviews is important for ensuring the reliability and validity of findings [26].

5. What Influences Tourism-Landscape Interactions

To determine to what extent the idea of synergy works in practice, a series of key factors that influence synergetic interactions between tourism and landscapes were identified based on the research on Terschelling. These key factors can be grouped into those that relate to: (1) 'policy', which refers to things like path dependencies in the historical institutional context, fluctuations in policy orientations, the recent increase in synergies in policy, and clear rules and regulations; (2) 'public discourse', e.g., short-termism, the influence of environmental summits and international declarations on public debate, the cyclical way synergies occur within public debates; or (3) 'governance processes', e.g., inclusion of all stakeholders, an attitude of openness and effective communication between all stakeholders, the changing attitude of influential stakeholders, flexibility to enable innovation, and the lack of capacity of local government. These factors can each be constraining and/or enabling.

5.1. Policy

The historical institutional context in which future decision making takes place is important in that it can enable or constrain synergetic interactions between tourism and landscape. Because of path dependency, this can be highly influential in determining the future course of the interactions between tourism and landscape. This current institutional context is a product of past policy, which potentially could hinder other development trajectories. Looking at the institutional context from an historical perspective provided an indication of how the interactions between tourism and landscape have been managed. It can also indicate which opportunities and threats affect the course of future developments.

The content analysis of policy document revealed that one constraining factor is the fluctuating nature of policy orientations between an emphasis either on economic development or on nature protection. This past black-and-white thinking does not fit with the idea of a tourism destination being a social-ecological ensemble. Given that synergies are desirable, a focus on either economic development or nature protection is a constraining factor.

From the document analysis and interview data, it became clear that, in the past, creating integrated policy was difficult and acknowledgement of possible synergies was limited. However, the content analysis also showed that this has been improving over time. Despite this increase in the attention given to synergies, the conventional silo-based way of designing policy is subject to path-dependency and is not easy to change. From an SES perspective, a more integrated policy is desirable, as this could enable synergetic interactions between tourism and landscape.

5.2. Public Opinion

Public opinion is a crucial factor that can constrain or enable synergetic tourism–landscape interactions. One constraining factor is the fluctuations in public thinking over time between economic development, nature protection, and synergies. Short-term economic thinking is another key factor that constrains synergetic thinking. The content analysis of newspaper articles revealed that the prevailing economic situation strongly influences public opinion in relation to the need for nature protection and economic development. At some points in time, nature protection became more important. From the interviews, it became clear that this change in focus was usually prompted by external (and often macro) triggers, such as a perceived global need to care for nature, landscape and the environment. Reflecting on SES theory, it can be concluded that Terschelling is part of a multi-scalar system [28], in which macro events at higher levels influence lower levels. For tourism destinations, it is important to realize that issues do not only occur at the local level, but also that social and ecological changes take place at higher levels, and that these changes could have consequences for developments at the lower level.

The extent of thinking in terms of synergies on Terschelling has been increasing over time. The content analysis of newspaper articles found that the factors that have influenced the development of synergies are 'collaboration', 'working together' and 'being involved'. Recently, 'thinking about

sustainability' has also become more pronounced. Our analysis found that synergies were also present at various times in the past. The resilience literature states that it is not always possible to steer everything in the desired direction [29–31]. Situations can be very persistent and therefore adapting to change can take a long time. However, when a tipping point is reached, a situation can also change very suddenly. Steering towards synergetic tourism-landscape interactions for building social-ecological resilience is a matter of timing and momentum.

Another observation from our research is that policy often lags behind public opinion and societal changes. The debate about these issues on Terschelling was often ahead of policy interventions. The Wadden area became prominent as national nature area only in the 1970s, whereas our data from the content analysis and interviews indicated that there were already protection initiatives going on at the local level since the 1950s.

To have effective protection, it is essential to have strong connections between people and nature areas [28]. Of course, tourism has social and ecological impacts on nature areas, but people also highly appreciate these areas and feel strongly connected to them. As argued in this paper, tourism can contribute to strengthening this connection between people and nature. Tourism can assist in the protection of nature areas by helping them become an important societal issue and consequently to be positioned on the political agenda. This observation indicates that there is a need to further combine SES theory with social and political factors as important forces that can affect the course of development [32,33].

5.3. Governance Processes

Some key factors with regard to partnerships in governance processes and the way stakeholders interact with each other were identified. The extent to which stakeholders are included in governance processes is of great importance. It was seen that greater inclusiveness of stakeholders led to increased public support. Civilians and entrepreneurs want to be informed, but they also have ideas for future developments and are often willing to take part in nature protection activities. An attitude of openness, effective communication, and good collaboration between all relevant stakeholders are essential for facilitating synergies between tourism and landscape. Individuals and organizations, as well as the way they collaborate, are highly influential [34].

The attitude of the national forest management agency, Staatsbosbeheer (SBB), was a constraining factor, because, as a large landowner, this agency was very powerful, and in the past, it operated in a top-down manner. However, their attitude and manner of engagement changed over time, and they have become accepting of synergetic tourism-landscape interactions. The reason for this shift was that there was the realization within the organization that locking-up nature areas was not socially desirable. SBB realized that it needed to have public understanding and support of its mission and associated activities. From our analysis, it became clear that an attitude of openness and effective communication with all stakeholders were important conditions to achieve a social license to operate [35]. It was also found that local government has the potential to facilitate synergies at the local level. Nevertheless, based on interview data, it was observed that local governments often struggle with this, because they lack resources and often choose to be risk-averse in their decision making. Consequently, there are only limited initiatives that acknowledge synergies between tourism and landscape proposed, and these are often obstructed.

Opportunities for synergies can be constrained at the local level. Regulations from higher governmental levels also constrain possibilities for synergies at the local level. Nevertheless, how these regulations are implemented at the local level can promote or retard specific opportunities. However, without clear decision making by local government, synergetic interactions are constrained even further. A necessary factor that was mentioned is to have clear rules and regulations, but there is also a need to have room for innovation and adaptation to changing circumstances. At the local level, a more flexible attitude could provide more opportunities for enabling synergies between tourism and landscape. SES theory advocates for a multilevel system in which the higher levels influence the local

level, and vice versa. From our example, it was evident that, given the multilevel system, it essential that solutions and opportunities for synergy be strived for at the local level.

Allowing some flexibility in policy implementation is important, because a tourism destination such as Terschelling needs to have the capacity to adapt and to cope with the changing demands of tourists. Tourism is a sector that changes rapidly, because the demands of tourists are fickle [11,36]. Whenever a tourism destination is unable to innovate, it runs the risk that tourists will prefer other destinations. Not being able to cope with these changes could mean that many local stakeholders would miss out on the benefits that can be derived from tourism. The observations from our case study showed that providing flexibility for synergies and multi-functional use of space where different functions can be connected to each other need to be considered. In an SES perspective, the world is constantly in flux, and therefore to cope with changing circumstances, a system requires flexibility to build social-ecological resilience. Conversely, the policy response is typically stubbornness, persistence and maintaining the status quo [13].

The final factor that influenced synergetic interactions on Terschelling was a difference between temporal and non-temporal land use activities. Flexibility in land use enables synergetic interactions to occur, partly because it enables experimentation. Tourism entrepreneurs, for example, can work together with nature protection organizations to provide short-term tourism activities in nature areas. The case study showed that recently more flexibility was provided by the major land owners, notably SBB. Through experimentation and learning-by-doing, opportunities for synergies were revealed. What can be learned from all this is that, apart from setting rules and regulations, it is crucial to build trust between stakeholders. Flexibility regarding land use can be difficult. Real estate developments, for example, were problematic because they lock up the land for decades or even permanently and may cause problems into the future.

6. Eight Policy Recommendations for Stimulating Synergy

We provide eight policy recommendations to help facilitate synergies between tourism development and nature protection. These recommendations are based on the results of the research undertaken on Terschelling. Since every tourism destination is different (i.e., context dependent), these recommendations are not panaceas that will necessarily work in every context, instead they are suggestions to consider. Thinking about these recommendations will help policy makers and planners understand and guide the process of stimulating synergy.

1. Understand the historical institutional context of a region

It is vital for policy makers and planners to understand the local context in which they operate. Looking back on how policy and public discourse has been evolving can make policy makers aware of the obstacles and opportunities in making effective future policies. This can help policy makers identify path-dependencies that may impede alternative policy options. Content analysis [10,11] can be a user-friendly tool to systematically analyze the way the institutional context has been changing over a long time period.

2. Strive for integrated policy aimed at synergetic interactions

The starting point of this paper was that tourism and landscape are highly interlinked and should be managed that way. For policy makers, this implies a different way of protecting nature areas. Especially for nature areas that are in the vicinity of places where people live, work and play, it is impossible to fully close them off from human influence. For people to support nature protection, they need to know what is being protected and why, and ideally, they need to personally experience the area [37,38]. To balance the social and ecological aspects, whenever possible, policy makers are recommended to develop integrated policies, taking the synergetic interactions between tourism and landscape into account.

3. Gain an overview of all stakeholders

To get an overview of the relevant stakeholders, how they can be categorized and the way they interact with each other, stakeholder analysis [12] is helpful. In particular, the influence-interest matrix

assists policy makers in making strategic choices for dealing with the different type of stakeholders. The matrix assists in making interactions more effective; as it suggests where to intervene in interactions that are limiting or stimulating synergies.

4. Include all stakeholders

The involvement of all stakeholders is essential to generate public support for the proper management of tourism-landscape interactions. There can be differences in the extent to which stakeholders are involved, but they should, at the very least, be informed about future developments. Potential decisions need to be explained properly and stakeholders need to have opportunities to share their views on them. Connecting with different stakeholders is not only about legitimatizing decisions, it is necessary for understanding each other's perspectives and finding common ground and shared values. In addition, involving local inhabitants and entrepreneurs can be beneficial, because they often have interesting ideas and are willing to contribute positively to deliberative processes. Local knowledge can be of great use for policy makers.

5. Develop a shared story

The intention to develop a shared vision is a useful mechanism to get all stakeholders to engage in a participatory process. Such participation can build trust, commitment and willingness to take collective action. It can also remove the prejudices, fear and myth that create barriers and conflict. However, given that stakeholder group have their own interests, when everyone strives to achieve their own self-interest, this will negatively affect the collective goal. To create a shared vision, it is necessary to develop a story together, that all stakeholders can connect to. This storytelling creates direction for all stakeholders and is helpful in making choices. Two important conditions for this are an attitude of openness and transparent communication by all stakeholders [39].

6. Co-create a clear vision for the future

It is recommended that policy makers and other stakeholders co-create a clear vision for the future that is aimed at synergetic interactions between tourism and landscape. Clarity in the rules and regulations is needed, as this decreases uncertainty about future policy directions for stakeholders. Rules and regulations that are unclear, confusing or conflicting can lead to risk-averse behavior by stakeholders. Interestingly, this seems to apply to local governments as well. They are often challenged by the many regulations they have to comply with and they often lack the resources and capacity to interpret and apply policy.

7. Allow for flexibility in the local implementation

Although clarity in rules is desirable, policy makers are also recommended to allow some flexibility in the implementation of initiatives at the local level. Rules and regulations from higher government levels restrict the flexibility at the local level, but opportunities for finding flexibility lie in implementation at the local level. Having space for innovation is crucial for a tourism destination [40], as the demands of tourism are volatile. A tourism destination needs to be able to cope with these changing demands. Creating space for development and the amount of freedom that should be given to entrepreneurs is something that needs to be continually discussed. Especially with regards to land use, flexibility is highly recommended. For non-temporal forms of land use, such as the development of new real-estate projects, it is recommended to be cautious and risk-aversive. Real-estate related issues are a challenge for local governments, because ownership of land is fragmented and house price tend to increase rapidly in popular tourism destinations.

8. Dare to experiment

To prevent or break a stalemate in decision making, experimenting can be helpful. Experimentation starts thinking creatively (allowing people to think), trialing options, reflecting on them, and re-design. An approach that entails 'trial and error' can be promising when a situation is complex. In situations of complexity, important stakeholders can behave in a risk-averse way. Consequently, decision making for future developments can be postponed or obstructed. Instead of talking about an issue at length, experimentation can demonstrate how the system responds to interventions and what the consequences might be. Policy makers can learn from these experiments. It allows them to

stimulate developments that are working, but also to adjust and reorient when things are not working out as expected. In addition, demonstrating how interventions work out will build trust among stakeholders and support for activities that, for example, recognize synergetic interactions between tourism and landscape.

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References

1. Davidson, D.J. The applicability of the concept of resilience to social systems: Some sources of optimism and nagging doubts. *Soc. Nat. Resour.* **2010**, *23*, 1135–1149. [CrossRef]
2. Lew, A.A. Scale, change and resilience in community tourism planning. *Tour. Geogr.* **2014**, *16*, 14–22. [CrossRef]
3. Heslinga, J.H.; Groote, P.D.; Vanclay, F. Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas. *J. Tour. Futures.* **2017**, *3*, 23–38. [CrossRef]
4. Libosada, C.M. Business or leisure? Economic development and resource protection-concepts and practices in sustainable ecotourism. *Ocean Coast. Manag.* **2009**, *52*, 390–404. [CrossRef]
5. McCool, S.F.; Spenceley, A. Tourism and protected areas: A growing nexus of challenge and opportunity. *Koedoe* **2014**, *56*, 1–2. [CrossRef]
6. Peeters, P.; Gössling, S.; Klijs, J.; Milano, C.; Novelli, M.; Dijkmans, C.; Eijgelaar, E.; Hartman, S.; Heslinga, J.; Isaac, R.; et al. *Research for TRAN Committee—Overtourism: Impact and Possible Policy Responses*; European Parliament, Policy Department for Structural and Cohesion Policies: Brussels, Belgium, 2018.
7. Dredge, D. Governance, tourism and resilience: A long way to go? In *Resilient Destinations: Governance Strategies of Tourism in the Transition Towards Sustainability*; Saarinen, J., Gill, A.M., Eds.; Routledge: Abingdon, UK, 2019; pp. 48–66.
8. Hartman, S. Towards adaptive tourism areas? A complexity perspective to examine the conditions for adaptive capacity. *J. Sustain. Tour.* **2016**, *24*, 299–314. [CrossRef]
9. Alexander, E.R. Institutional transformation and planning: From institutionalization theory to institutional design. *Plan. Theory* **2005**, *4*, 209–223. [CrossRef]
10. Heslinga, J.H.; Groote, P.D.; Vanclay, F. Understanding the historical institutional context by using content analysis of local policy and planning documents: Assessing the interactions between tourism and landscape on the Island of Terschelling in the Wadden Sea Region. *Tour. Manag.* **2018**, *66*, 180–190. [CrossRef]
11. Heslinga, J.H.; Groote, P.D.; Vanclay, F. Strengthening governance processes to improve benefit sharing from tourism in protected areas by using stakeholder analysis. *J. Sustain. Tour.* **2019**, *27*, 773–787. [CrossRef]
12. Heslinga, J.H.; Groote, P.D.; Vanclay, F. Examining social-ecological resilience: Using content analysis to assess changes in public perceptions of the synergetic interactions between tourism development and landscape protection. In *Resilient Destinations: Governance Strategies of Tourism in the transition towards sustainability*; Saarinen, J., Gill, A.M., Eds.; Routledge: Abingdon, UK, 2019; pp. 153–170.
13. Folke, C.; Carpenter, S.R.; Walker, B.; Scheffer, M.; Chapin, T.; Rockstrom, J. Resilience thinking: Integrating resilience, adaptability and transformability. *Ecol. Soc.* **2010**, *15*, 4. [CrossRef]
14. Imperiale, A.J.; Vanclay, F. Experiencing local community resilience in action: Learning from post-disaster communities. *J. Rural Stud.* **2016**, *47*, 204–219. [CrossRef]
15. Terkenli, T.S. Tourism and landscape. In *A Companion to Tourism*; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; Blackwell: Oxford, UK, 2004; pp. 339–348.
16. Strickland-Munro, J.K.; Allison, H.E.; Moore, S.A. Using resilience concepts to investigate the impacts of protected area tourism on communities. *Ann. Tour. Res.* **2010**, *37*, 499–519. [CrossRef]
17. Persha, L.; Agrawal, A.; Chhatre, A. Social and ecological synergy. *Science* **2011**, *331*, 1606–1608. [CrossRef] [PubMed]

18. Anderies, J.M.; Janssen, M.A.; Ostrom, E. A framework to analyze the robustness of social ecological systems from an institutional perspective. *Ecol. Soc.* **2004**, *9*, 1–18. [CrossRef]
19. Ostrom, E. A general framework for analyzing sustainability of social-ecological systems. *Science* **2009**, *325*, 419–422. [CrossRef]
20. Ostrom, E.; Cox, M. Moving beyond panaceas: A multi-tiered diagnostic approach for social ecological analysis. *Environ. Conserv.* **2010**, *37*, 451–463. [CrossRef]
21. Brondizio, E.S.; Ostrom, E.; Young, O.R. Connectivity and the governance of multilevel socioecological systems: The role of social capital. *Annu. Rev. Environ. Resour.* **2012**, *34*, 253–278. [CrossRef]
22. Dredge, D. Institutional and policy support for tourism social entrepreneurship. In *Social Entrepreneurship and Tourism: Philosophy and Practice*; Sheldon, P.J., Danielle, R., Eds.; Springer: New York, NY, USA, 2017; pp. 35–55.
23. Saarinen, J.; Gill, A.M. Tourism, resilience and governance strategies. In *Resilient Destinations: Governance Strategies of Tourism in the Transition Towards Sustainability*; Saarinen, J., Gill, A.M., Eds.; Routledge: Abingdon, UK, 2019; pp. 15–33.
24. Wesley, A.; Pforr, C. The governance of coastal tourism: Unravelling the layers of complexity at Smiths Beach, Western Australia. *J. Sustain. Tour.* **2010**, *18*, 773–792. [CrossRef]
25. Sijtsma, F.J.; Broersma, L.; Daams, M.N.; Hoekstra, H.; Werner, G. Tourism development in the Dutch Wadden area: Spatial-temporal characteristics and monitoring needs. *Environ. Manag. Sustain. Dev.* **2015**, *4*, 217–241. [CrossRef]
26. Yin, R.K. *Case Study Research: Design and Methods*, 5th ed.; Sage: Thousand Oaks, CA, USA, 2014.
27. Babbie, E. *The Practice of Social Research*, 12th ed.; CENGAGE Learning: Boston, MA, USA, 2010.
28. Parra, C.; Moulaert, F. The governance of the nature-culture nexus: Lessons learned from the San Pedro de Atacama case-study. *Nat. Cult.* **2016**, *3*, 1–26. [CrossRef]
29. Kingdon, J.W. *Agendas, Alternatives, and Public Policies*; Harper Collins: New York, NY, USA, 1995.
30. Olsson, P.; Gunderson, L.H.; Carpenter, S.R.; Ryan, P.; Lebel, L.; Folke, C.; Holling, C.S. Shooting the rapids: Navigating transitions to adaptive governance of social-ecological systems. *Ecol. Soc.* **2006**, *11*, 18. [CrossRef]
31. Sorensen, A. Taking path dependence seriously: An historical institutionalist research agenda in planning history. *Plan. Perspect.* **2015**, *30*, 17–38. [CrossRef]
32. Wilkinson, C. Social-ecological resilience: Insights and issues for planning theory. *Plan. Theory* **2012**, *11*, 148–169. [CrossRef]
33. Fabinyi, M.; Evans, L.; Foale, S. Social-ecological systems, social diversity, and power: Insights from anthropology and political ecology. *Ecol. Soc.* **2014**, *19*, 28. [CrossRef]
34. Jamal, T.; Stronza, A. Collaboration theory and tourism practice in protected areas: Stakeholders, structuring and sustainability. *J. Sustain. Tour.* **2009**, *17*, 169–189. [CrossRef]
35. Vanclay, F. Principles to gain a social licence to operate for green initiatives and biodiversity projects. *Curr. Opin. Environ. Sustain.* **2017**, *29*, 48–56. [CrossRef]
36. Cheer, J.; Lew, A. Sustainable tourism development: Towards resilience in tourism. *Interaction* **2017**, *45*, 10–15.
37. Vanclay, F.; Lane, R.; Wills, J.; Coates, I.; Lucas, D. 'Committing to Place' and evaluating the higher purpose: Increasing engagement in natural resource management through museum outreach and educational activities. *J. Environ. Assess. Policy Manag.* **2004**, *6*, 539–564. [CrossRef]
38. Lane, R.; Wills, J.; Vanclay, F.; Lucas, D. Vernacular heritage and evolving environmental policy in Australia: Lessons from the Murray-Darling Outreach Project. *Geoforum* **2008**, *39*, 1305–1317. [CrossRef]
39. Sarkissian, W.; Hofer, N.; Shore, Y.; Vajda, S.; Wilkinson, C. *Kitchen Table Sustainability: Practical Recipes for Community Engagement with Sustainability*; Earthscan: London, UK, 2009.
40. Heslinga, J.; Hillebrand, H.; Emonts, T. How to improve innovation in sustainable tourism? Five lessons learned from the Austrian Alps. *J. Tour. Futures.* **2019**, *5*, 35–42. [CrossRef]

The Stages of the Cultural Landscape Transformation of Seaside Resorts in Poland against the Background of the Evolving Nature of Tourism

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Abstract: The development of tourism determines the cultural landscape transformation, spatial development of coastal localities, scale of recreational architecture and other forms of development related to tourism services. The article presents research aiming to analyze tourism development in the context of its impact on the cultural landscape of Polish coastal localities, taking into account the specificity of post-communist countries and supra-regional tendencies. The main objective of this study was to analyze the development of tourism in the context of its impact on the cultural landscape seaside towns and to identify, on the basis of the changes, the nature of tourism and forms of recreation in particular stages of the shaping of elements in coastal locality spaces and recreational architecture. The research was based on historical-interpretation studies, field studies of selected coastal localities, including urban-planning inventories, landscape, and functional and spatial analyses. The research carried out resulted in the identification of the stages of the cultural landscape transformation of coastal localities and indication of characteristic features of architecture and landscape. The journey along the coastline is a temporal journey through the changing nature of buildings, allowing observation of the stage-by-stage nature of investment processes in response to the changing needs of tourists.

Keywords: Baltic coast; coastal resorts; cultural landscape; development of seaside resorts; tourism architecture; tourism development

1. Introduction and Past Studies on Tourism Development

1.1. Introduction

The Baltic Sea coast is one of the most attractive tourist regions in Poland, visited by four million tourists annually, while the coastal regions of Pomerania and West Pomerania have the highest indicators of tourism intensity in the country, significantly exceeding the national average [1]. The landscape, natural and cultural values are conducive to recreation tourism, health-resort, sightseeing and sport-based tourism. Nowadays, "marine and coastal tourism is one of the fastest-growing areas within the world's largest industry" [2] (p. 601). The development of tourism and recreation functions has a significant impact on the transformation of the cultural and natural landscape of the coast, which, being a peculiar area between land and sea, is characterized by high sensitivity and susceptibility to changes caused by urbanization. The era of industrial tourism was characterized by change, commercialization and commoditization, while the post-industrial era of tourism is characterized by meaning, novelty and identity [3]. Nowadays, the 4A model of tourism prevails (attractions, amenities, accommodation, access). It is commonly observed that traditional tourism marked with the "3S" symbol (sun, sea, sand) has been largely replaced by 3E tourism (entertainment, experience,

education). Moreover, statistics from the World Tourism Organization (UNWTO) and the World Travel and Tourism Council (WTTC) show a steady and continuous increase in both the number of tourists and the revenue from tourism [4,5]. This entails significant spatial management changes aimed at expanding the offer and program.

In regions where tourism takes on a mass character, we can observe the progressive westernization or "McDonaldization" of the landscape [6] and problem with authenticity [7], which results from the commercialization of space. It can lead to the destruction of landscape values that have attracted tourists in the past [8]. Where tourism is seen as a problem, "islands of affluence are built within the country, walled in and separate from the rest of the population" [9] (p. 7). This is the so-called "tourism bubble effect"; that is, the creation of a safe and familiar environment for tourists from rich societies [10] and exclusively planned space [11]. Intensive expansion of the tourism function means that hotels of well-known chains with extensive catering, sports and recreation facilities become the basis for the development of seaside resorts. This makes seaside towns and cities more and more similar to each other. These changes are widespread and affect most tourist regions. One distinctive feature of the changes occurring in tourism and recreation on the Polish coast was the emergence of holiday centers of the Workers Holiday Fund, characteristic of socialist countries (especially in the years 1960–1980), forming specific enclaves of large facilities or camping houses. On the other hand, in recent years, there is a clearly increasing expansion of tourism development into areas of natural value, dunes and coastal forests.

Therefore, changes in tourism and recreation are both global (trends observed in the world and in Europe) and local (dynamic transformation of tourist processes at the Polish sea and in post-communist countries). Understanding the evolutionary processes taking place on the coast is necessary to support the sustainable planning and development of the coast [12].

1.2. Past Studies

The current state of research into changes occurring under the influence of tourism development are illustrated by tourism area life-cycle models, which allow identification of factors of tourism development [13], as well as the concepts of "path dependence", "path creation" and "lock-in" as key ingredients in constructing an evolutionary approach to tourism studies. They represent alternative frameworks to explain trends and stages in the management and development of touristic areas.

One of the first authors to do research on this field was Gilbert [14], who has indicated three phases of the tourist area life cycle: discovery, growth and decline. Among the general concepts developed, we can find models aimed at identifying spatial factors for tourism development [15–17], planning and management [18–20] and economic growth [21,22]. Butler's Tourism Area Life Cycle [18], a general model of an evolution of a hypothetical tourist area, is one of the best known and most cited concepts [2,23]. Due to its universality, TALC is willingly used for studies in selected tourism areas [24–27], as well as a basis and starting point for the work on modified development concepts. However, according to Choy [28], tourist areas should be analyzed on a case-by-case basis, with their specific characteristics. Therefore, there is a need to develop concepts that include the nature, history and local resources of tourist regions.

Few models recognize the specificity of tourist regions and relate strictly to the coastline and coastal towns. In this context, the following models can be considered exceptional: Liszewski's phases of development of tourist space [29], Butowski's model of development of maritime tourism areas for sailing tourism [30,31], Gormsen's model of tourism development specific to a coastal resort [32] and Smith's beach resort model [33].

Gormsen's model [32] drew from historical studies of the development of coastal tourism and was based on the following criteria: nature of accommodation, the level of local and non-local participation in tourism development, and social structure of tourists. With these criteria, Gormsen identified four 'peripheries' (regions): Periphery I (Channel and Baltic coast resorts), Periphery II (Mediterranean Europe), Periphery III (North Africa, Balearic and Canary Islands) and Periphery IV (resorts in West

Africa, Caribbean, Pacific and Indian Oceans, South East Asia). Each of the indicated regions is passing through its successive stages of development. In the early stages, there are few tourists accommodated in hotels and external investors operate. In subsequent stages, accommodation is more diversified, and the local community becomes more involved. The beach resort model put forward by Smith [33] shows eight stages of a resort (pre-tourism datum, second homes, first hotel, resort established, business district established, inland hotels, transformation and city resort), which are characterized by differentiated morphological, physical, environmental, economic and political features. Barrett's beach resort model [34] was based on studies on seaside resorts in England and Wales. According to this concept, resorts develop from "the core of central businesses inland from a beach-front strip of holiday shops and accommodation with hotels occupying prime locations around core facilities. Boarding houses and bed-and-breakfast accommodation are located less centrally" [33] (p. 189). According to Liszewski [35], there are three phases of development of seaside towns. In the first phase, there is an influx of tourists, but it is simultaneous to an absence of any tourism investment projects and other functions still dominate in the economy. The second phase is characterized by a change in the economy of the town, that is, tourism services are becoming increasingly important and the first investments appear in connection with tourism development. The third phase involves an increase in the wealth of inhabitants and emergence of tourism investments and external investors. There are transformations of space that permanently change the character of towns.

The tourism development models created so far are mostly general and highlight the roles of location, planning and management, transport or economic development. Research conducted mainly by geographers and economists does not contain any direct references to architecture and cultural landscape. There is an insufficient number of studies on the development of coastal tourism that would analyze changes taking place in the cultural landscape and forms of development. The studies concerning the spatial development of the Polish coast are few and most often partial. It is thus necessary to analyze the development of tourism in the context of its impact on the cultural landscape of Polish seaside resorts, taking into account both the specificity of post-communist countries and supra-regional tendencies.

1.3. Research Goals

Identification of the stages of the cultural landscape transformation of seaside resorts may be an alternative and a contribution to the discussion on commonly known models of tourism development. A good understanding of the cultural landscape transformation process is the basis for sustainable coastal development.

The main purposes of this study are:

- To analyze tourism development for its impact on the cultural landscape of seaside resorts on the Baltic coastline of Poland;
- To identify, on the basis of transformations of the nature and forms of recreation, the particular stages of the shaping of spatial elements in seaside resorts and recreational architecture and to indicate characteristic features of architecture and landscape.

2. Materials and Methods

The research topics are interdisciplinary and concern architecture, urban planning, landscape architecture and tourism geography.

The research process was based on a descriptive and interpretative method as part of historical and landscape studies of selected seaside resorts and carried out through their:

- Iconology and iconography—interpretation of graphic representations (e.g., historic postcards),
- Historiography—archival research (e.g., archived documents),
- Secondary description (aerial photographs),
- Observation—site studies and photography analysis,

- Query project documentations.

The research methods included historical-interpretation studies based on the analysis of source materials, primarily cartographic and iconographic (photographs and historical drawings), guidebooks and leaflets, as well as field studies of selected seaside resorts, including urban-planning inventories, landscape analysis and functional-spatial analysis. The source materials used in the analysis include coast development maps with a scale of 1:25,000 from the year 1890, aerial and satellite photographs. Source materials were obtained primarily from commune offices, the Provincial Office for the Protection of Monuments, the National Digital Archives and websites with archival materials.

The article is the result of many years of research. It is a kind of summary of a certain stage of studies and analyses regarding the history of tourist architecture. The authors' observations are presented in chronological order, presenting linear, historical conditions of geopolitical changes (changes regarding the state borders, length of its coast as well as national and cultural changes in the studied area). This allowed to highlight the characteristic stages of the development of tourist architecture.

The territorial scope of the research covers the strip of the southern coast of the Baltic Sea located currently in Poland that extends from the west (Pomeranian Bay, Szczecinski Lagoon) to the east (Gdańsk Bay, the Vistula Lagoon) over a distance of 528 km (Figure 1). Detailed analysis focuses on the seaside region of Western Pomerania (communes and municipalities: Świnoujście, Międzyzdroje, Kamień Pomorski, Dziwnów, Rewal, Trzebiatów, Kołobrzeg, Ustronie Morskie, Będzino, Mielno, Sławno, Darłowo, Postomino). This analysis concerns selected seaside resorts located in Poland and before the war, in Germany: Świnoujście, Międzyzdroje, Kołobrzeg, for which field studies were conducted. The temporal extent of the research is the period from the second half of the 19th century (when tourism began to develop in the analyzed area) to present times.

Figure 1. The territorial scope of the research. Source: Authors' work.

3. Results: Development of Tourism in the Context of Its Impact on the Architecture and Cultural Landscape of Seaside Resorts in Poland

Social and economic transformations related to the increasing wealth of societies and the development of means of transport occurred throughout the world in the 19th century, especially in Europe. These changes created favorable conditions for the development of tourism in Poland as well as other countries in Europe. However, this process took place on Polish territory in a slightly different way than in other European countries and was historically connected with political partition, changes of borders, influences of neighboring countries and social events.

3.1. From 19th Century to 1918

In general, coastal tourist resorts were established in locations of former fishing settlements or small harbor towns. The idea of creating the first holiday resorts in Pomerania was born in the circles of the German aristocracy, in parallel to the popularity of sea baths growing in England.

The oldest of these are the English Scarborough [36], founded in 1720 and Brighton, founded in 1780. In 1793, Heiligendamm in Mecklenburg, Germany, was founded as the first seaside resort of the European continent. The first known Baltic seaside health resorts, such as Heiligendamm and Putbus, were established in the gentry era. However, as early as at the beginning of the nineteenth century, there came about small bathing resorts in Pomerania, using local buildings as accommodation facilities, such as those in Boltenhagen and Międzyzdroje (Misdroy) [37]. Therefore, the recreation culture has been shaped at the Baltic Sea in the Pomerania since the first half of the 19th century. In 1802, a bathing resort in Brzeźno was established, and in 1823, a swimming facility in Sopot was established. In 1813, Pałąga (Lithuanian: Palanga) began to function as a bathing resort.

The coastal tourism in the southern strip of the Baltic Sea initially developed when the lands of the Republic of Poland were being annexed (Figure 2).

Figure 2. Partitions of Poland, (1772, 1793, 1795). The map shows the collapse of Poland divided into parts by its neighbors. As a result, Poland disappeared from the maps for 123 years and lost access to the sea and the opportunity to shape coastal buildings. Source: Halibutt, Wikipedia, the free encyclopedia.

German resorts, such as Sopot (Zoppot), Świnoujście (Swinemünde) or Kołobrzeg (Kolberg), developed on the lands that were annexed by Prussia. The section of the coast, together with the first Polish seaside resort of Połąga was annexed by Russia. At the end of the 19th century, Poles rested mainly in two resorts: Sopot, which was visited by residents of the Prussian partition and Połąga, available to residents of the former Kingdom of Poland as part of the Russian partition [38].

Although the beginnings of the developments focused on therapeutic functions date back in the early 19th century, most of the seaside resorts in Western and Central Pomerania were developed only in the interwar period. This was the result of the evolution of pre-existing settlements and villages into so-called summer resorts, climatic stations or resorts (various forms and scales of holiday resorts). Some of them eventually attained the status of a health resort (Table 1). For example, Świnoujście, which in the 18th century functioned as an important port town, in the 1820s, became a resort, and then,

after discovering deposits of brine and therapeutic mud, became a health resort. Kołobrzeg was developed in a similar way—being a fortress-town in the 17th century, it was transformed into a resort and health resort in the 19th century.

The evolution of recreation by the sea, apart from undeniable natural values (wide sandy beaches, dunes, forests, high content of iodine and ozone, deposits of brine and therapeutic mud), was significantly influenced by the development of railways (Table 1). The opening of a railway line connecting a seaside resort with a larger urban center has always been associated with improved accessibility and development of both the therapeutic function and the whole town.

This was the case with Świnoujście and Kołobrzeg, which, thanks to convenient railway connections, became the most important health resorts at the end of the 19th century. Before the war, thanks to the good railway connection with Berlin, Świnoujście was visited by between 20,000 and 50,000 patients and clients every year. The construction of railway lines also stimulated the growth of smaller holiday resorts. After the railway line to Ustka was established in 1878, the number of holidaymakers annually visiting the small settlement increased to several thousand. In the middle of the 19th century, the number of patients visiting the Sopot bathing beaches in summer reached 800–1200 per year. The construction of the railway line contributed to the number of holiday-makers arriving in Sopot, reaching 12,500 in 1900.

Table 1. Genesis and direction of transformations of selected seaside resorts. Source: Authors' work.

Locality	Establishment	Origin	Beginning of the Therapeutic Function [1]	Factors Influencing the Development	Direction of Changes
Świnoujście (Swinemünde)	1743	port town	1824	railway line to Berlin (1876) brine deposits (1890–1898)	Luxury resort, health resort
Międzyzdroje (Misdroy)	12th century	fishing village	1832	railway line to Świnoujście (1902)	summer resort, bathing resort
Dziwnów (Divenov)	12th century	fishing village	1828	brine deposits (late 19th century)	summer resort, bathing resort
Pobierowo (Poberow)	14th century	knights' estate	1906	bus link to Berlin (early 20th century)	summer resort, bathing resort
Rewal (Rewahl)	2nd half of the 14th century	fishing village	1895	narrow-gauge railway line to Gryfice (1896)	summer resort, bathing resort
Niechorze (Horst)	14th century	fishing village	1870	narrow-gauge railway line to Gryfice (1896)	summer resort, bathing resort
Ustronie Morskie (Henkenhagen)	13th century	fishing village	1899	railway line from Koszalin to Kołobrzeg (1899)	bathing resort, health resort
Kołobrzeg (Kolberg)	8th century	port town	1830	deposits of brine and therapeutic mud (early 19th century) railway connections with Szczecin and Gdańsk (1859) decommissioning of fortifications (1872)	health resort
Dąbki (Neuwasser)	13th century	fishing village	1915	road from Koszalin to Darłowo (1927)	bathing resort, health resort
Ustka (Stolpmunde)	5th–6th century	port town	1911	railway line (1878)	bathing resort, health resort
Łeba (Leba)	13th century	fishing village	1906	road from Łeba to Lębork railway line to Lębork (1899)	summer resort, bathing resort
Sopot (Zoppot)	13th century	fishing village	1819	railway line from Koszalin to Gdańsk (1870)	Luxury resort
Jurata	1928	part of the town of Jastarnia	1931	railway line from Gdynia to Hel (1922/1923)	Luxury resort
Hel (Hela)	12th century	fishing village	1896	railway line from Gdynia to Hel (1922)	summer resort, health resort
Połąga (Palanga)	early 19th century	summer seat of the Polish aristocracy	1840s	Investments of the Tyszkiewicz family	Gentry resort

[1] The town is granted the status of a bathing or health resort, often associated with the official opening of the first summer season or printing a village name in a tour guide to holiday resorts on the Baltic Sea.

Initially, the architecture of seaside health resorts was modeled on English examples, but over time it developed into an original building style [37]. As a rule, seaside resorts from the beginning of the 19th century had features more specific to sanatoriums than to bathing resorts, such as hotels typical for sanatoriums. This was due to the nature of seaside recreation at the time, which was aimed at improving health as people bathed in the sea for therapeutic rather than recreational purposes. The first forms of sea bathing were wooden beach wagons equipped with a special hood that protected a bather and special rooms, where they waited for a bath and were served seawater as a curative drink [37]. Few people could swim. For this reason, they enjoyed the sea cautiously and for a short time. Tanning became popular only in the 1920s and 1930s on the wave of socio-cultural changes and more modern forms of leisure culture. In the 19th century, pale skin was still associated with a higher social status. Until the end of World War I, men and women bathed separately, which had a significant influence on the management and functioning of the beach (Figure 3). For example, at Świnoujście and Kołobrzeg, there were three beaches: for men, for women and for families, and in Ustronie Morskie (German: Henkenhagen), bathing hours were different depending on gender.

Figure 3. The beach in Dziwnow—the postcards. Source: Author's private collection.

In the 19th century, the nature of travel meant that "going to the sea" and "meeting" there was mainly for higher social circles, such as aristocracy, which contributed to the exclusivity of recreation by the sea. Aristocrats including Tsar Nicholas, Emperor Frederick William II and Emperor Franz Joseph I visited Świnoujście. Other resorts, such as Sopot and Kołobrzeg, primarily attracted doctors, lawyers and civil servants. Both Polish aristocracy and artists rested in Połąga.

The seaside resorts were given a setting that was in line with the lifestyle of the guests staying there. In the 19th century, the wealthiest elite rested by the seaside, usually arriving with their entire family and servants to stay for a few months. The seaside resorts of the 19th century had to be able to rent entire villas. With the influx of patients, new villas and guest houses were built, as well as places that satisfied the needs for entertainment and rest, including numerous cafés, restaurants and casinos. The public space played an important part in the functioning of a resort and dominated over the private zone, being a kind of elites' drawing room (Figure 4). The most important element of the resort's arrangement, serving as the heart of the public space, was a walking promenade running parallel to the shoreline. When shaping the public space, patterns were drawn from inland health resorts. The most important and most representative buildings of the resort were the spa house and the impressive beach palaces. Seaside health resorts also developed a specific method of beach space management, where distinctive U-shaped wooden structures of bathing facilities were introduced, shaped by a system of specially separated changing rooms and piers. Other facilities established included piers, concert shells and architectural forms (such as winter gardens and conservatories, and buildings with verandas and loggias) that allowed people to experience nature [39].

Figure 4. Public space in Sopot. Source: Fotopolska.eu.

As one example, Połąga, the only health resort founded by the Polish aristocrats, Tyszkiewicz, functioned in 1813 as a balneological station, at that time including a park establishment (designed by Édouard André) with an area of over 80 hectares with a pond, cave and rose garden available for patients. They built a spa house designed by the Berlin architect Franz Heinrich Schwechten in 1886 and a summer theatre for 600 spectators in 1908 with a bathing facility and wooden beach changing rooms for rent. In Świnoujście, Spa Park was established in 1827, designed by Piotr Józef Lenne. The first bathhouses at Spa Park were built in the 19th century, to which seawater was brought in barrels. A promenade was also established, being a walking path along the sea, leading to the most important places in the spa quarter—bathrooms forming a bathing complex located at the beach. Between 1899 and 1913, about 300 new houses were built, mainly in the present seaside quarter [40] (collection of documents, maps and photographs on the history of the city Świnoujście and West Pomeranian coast). Staying by the sea in such a unique place was considered food for the soul and body, the experience of comfort, luxury, aesthetics, various forms of art and intellectual development.

3.2. The Interwar Period (1918–1939)

The beginnings of mass tourism date back to the first half of the 19th century, but recreation by the sea became fashionable for many people only in the interwar period (1918–1939). The popularization of tourism in this period made trips to seaside resorts sought-after not only by aristocracy but by the lower social classes.

After World War I, as Poland regained independence in 1918 (after 146 years of bondage), she also gained access to the Baltic Sea through the Gulf of Gdańsk, Gulf of Puck and the Hel Peninsula, the framework of the Pomeranian Voivodeship. As a result of the post-war transformations and geopolitical divisions, the new Poland was granted 140 km of the coastline, a "window on the world" (Figure 5a,b). Poles tried to make the most of this new treasure, in both economic and touristic aspects. Due to the strong sense of statehood, seaside recreation became national in character. It was considered to be almost every Pole's duty and an expression of patriotic attitudes.

Even though Poland had only a small part of the Pomeranian coastline, each kilometer of coast received 30 times more investment as compared to the land border [41] (p. 8). For many towns, the tourist function became dominant [42]. The basis for future development was the seaside road built in 1921, leading from Hallerowo to Karwia. This coastal strip and its development was a matter of particular concern for the authorities, leading to the establishment of the Coastal Settlement Agency in 1931, which dealt with the development of the coastline, compiling plans for individual localities and the evaluation of land parceling plans. Comprehensive development plans were drawn up, new seaside towns built and existing ones expanded, which increased the interest in coastal tourism. Even so, the social division of the patients remained clear. Sopot, Jurata and Jastarnia were exceptionally popular in the artistic and aristocratic circles. People looking for less expensive holidays went to fishing villages or suburban bathing resorts, such as Brzeźno, Jelitkowo, Dębki, Karwia, Karwieńskie

Błoto, Bór, Chałupy or Chłapowo. Holiday resorts differed in terms of class of accommodation and price [43–47].
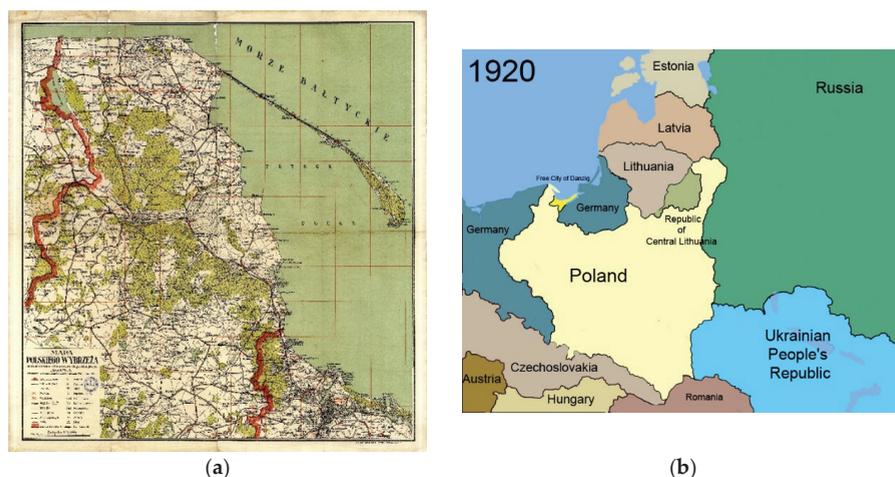
Figure 5. Map of the Polish coast (1930) and borders of Poland in 1920. Source: Mapster (**a**); Esemono (Public domain) Wikimedia Commons, the free media repository (**b**).

The coastline was expanded to include new locations in the 1920s and 1930s. Completely new health resorts and summer resorts were established in previously undeveloped coastal areas, such as Wielka Wieś-Hallerowo (Władysławowo), Jurata, Jastrzębia Góra. One important development was Gdynia, where a bathing beach (1920), Hotel "Polska Riviera" (1922–1925), wooden bathrooms (1925), and a spa house (1929) were built [45,47,48]. In Jurata, which was developed on raw land and designed as a European resort, the first summer season opened in 1931. A holiday estate with typical single-story wooden houses, Jurata included custom-designed villas, the Lido Hotel (1932–1933) and, right on the shore, the Cafe Cassino with a dance hall (1935). These buildings represented the trend of modern, avant-garde, modern architecture. In the 1920s, Jastrzębia Góra was developed after a property purchased by engineer Jerzy Osmołowski was divided into parcels and gradually built up. Between 1921 and 1922, the first house "Kaszubka" was built. The Baltic spa house (1930) was built with swimming pools supplied with seawater, and subsequent villas, guest houses and small summer houses were built according to repetitive designs. At a newly developed housing colony called Jasne Wybrzeże, buildings included the villa of Marshal Piłsudski, the villa of President Ignacy Mościcki and villas of various members of the government. Several modernist-style spa villas were built at that time in the health resort of Hel, although the resort's growth was suspended for a long time due to the strategic decision to create a militarized zone in this area. In Jastarnia, a modern fishing port (1927–1938), a shipping station exemplifying an inspiration by ship design, a spa house with almost completely glazed façades (1938) and a number of modernist villas and guest houses were constructed (Figure 6a–d).

Originally, in the first years of the interwar period, the architecture of Polish seaside localities continued the tradition of the 19th-century national and regional architecture. Its form was desired to be native and not based on adapted or existing German patterns. Any ties to the Swiss style, popular in 19th-century German resorts, and the Prussian half-timbered construction were cut off. Therefore, most of the summer villas built in the 1920s were in the manor style, continuing the regional architecture and contributing to desires to develop an original, national style. This trend subsided over time, and, in the following years, new buildings were kept in the modernist style. In the 1930s,

health resorts willingly modeled development based on the French Riviera as well as the ship's style, with windows resembling portholes and superstructures in the shape of a captain's bridge.
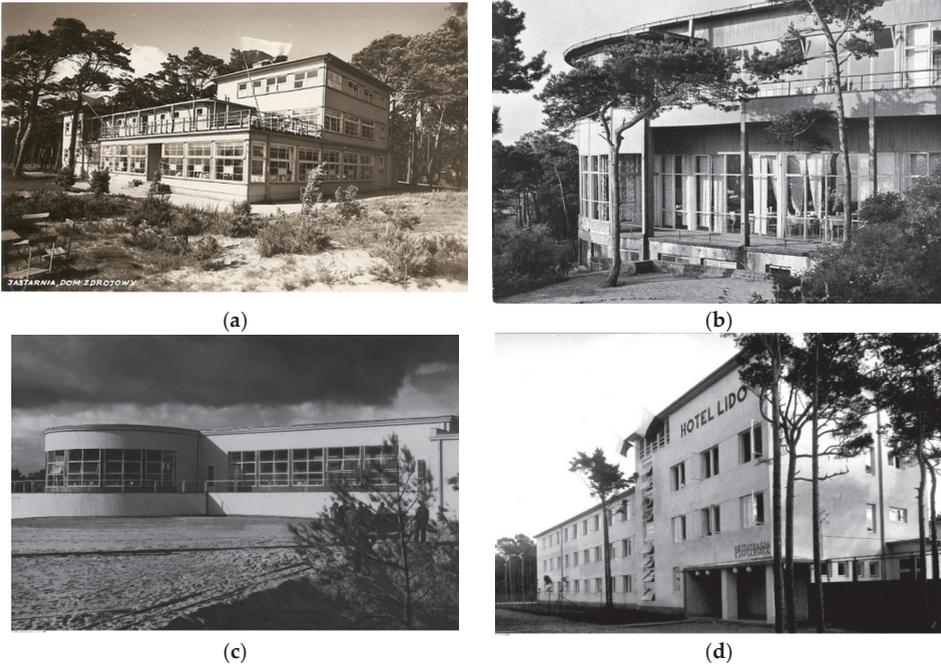
Figure 6. Modernist architecture: Spa House in Jastarnia (**a**,**b**), Cafe Casino in Jurata (**c**), Lido Hotel (**d**). Source: fotopolska.eu (**a**); wolneforumgdansk.pl (**b**); The National Digital Archives (**c**,**d**).

3.3. The Post-War Period (1945–1989)

After World War II, Poland gained access to a coastline of over 770 km with a 440 km sea border (Figure 7a,b).
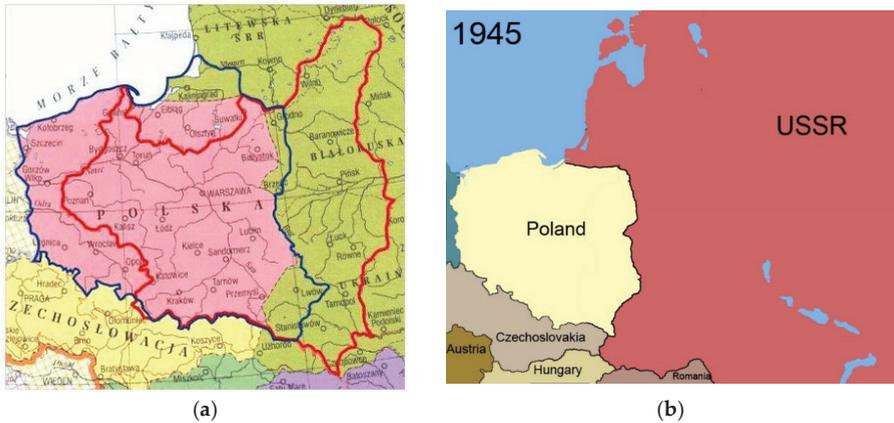
Figure 7. Map of Poland after 1945. Source: Narodowi Konserwatyśći.pl (**a**), Esemono (Public domain) Wikimedia Commons, the free media repository (**b**).

In this belt were developed seaside resorts of various origins and cultural traditions, both German and Polish. There were areas, which, until that time, had been within the borders of Germany (including Pommern province, East Prussia and Free City of Gdańsk), with a fully-formed structure of health resorts and health spas, including Świnoujście, Kołobrzeg and Łeba.

However, the early years of post-war Poland saw a collapse in tourism and recreation. The necessary infrastructure was lacking, and the authorities focused on the reconstruction of the country from post-war destruction and the introduction of a new socio-political order. The new areas were inhabited by displaced persons, often being people who had not previously been tied to the seaside economy.

In the mid-1950s, however, the construction of new resorts began, as national propaganda began to see tourism as its tool—citizens resting on the Baltic Sea were to manifest the Polish identity of the coastline and social equality. According to the Constitution of 1952, Polish citizens were guaranteed the right to rest, including annual holidays and "package recreation", both covered by the state [49]. Already in 1945, the Workers' Holidays Department was established, which in 1949 became Workers' Holidays Fund, an institution that was responsible for organizing holidays in Poland following the example of solutions provided by the USSR. Regularized trips and collective spending of free time were supposed to combine leisure and cultural life, meant to play an educational role and thus shape desirable social attitudes, ensure egalitarianism and even out social differences. This was a pretense, though. People occupying the highest positions in the People's Republic of Poland rested far away from ordinary citizens. Closed holiday centers were established for the employees of the Central Committee of the Polish United Workers' Party (PUWP), the Office of the Council of Ministers and senior party officers only. Such centers by the sea existed in Sopot, Jurata and Międzyzdroje. The factories and works, which were crucial for the economy, received subsidies for building new holiday resorts in attractive coastal areas. Others rested in more modest facilities, often camping sites, including cabins built of fiberboard, a separate brick building with a canteen and a recreation room for guests or tent sites. The model of the state-arranged recreation worked in the entire period of the People's Republic of Poland, until 1989. At that time, the most popular health resorts included Kołobrzeg, Międzyzdroje, Krynica Morska, Sopot, Chałupy and Jurata.

The architecture of cheap holiday accommodation was typified and standardized, with houses forming complexes of pavilions or terraced housing predominant in places such as Dźwirzyno, Międzyzdroje and Dziwnów. However, there were also a fair number of well-designed custom buildings that recognized the situational context. Hotels and recreation centers built at that time were interesting and often futuristic examples of modernist architecture. Utilizing dynamic shapes and forms, buildings with lightweight constructions and large glazings were created. Examples of these forms can be found in the Health Resort Sanatorium "Baltic" and Sanatorium "Kormoran" buildings in Kołobrzeg (Figure 8a). The facade at the Skalpol Hotel and Natural Medicine Facility was covered with mosaic, characteristic for the architecture of the 1960s and 1970s. In Jelitkowo, a Craft and Recreation Center was established (Figure 8b), while in Jastrzębia Góra, a Recreation Center "Gwarek" and "Thorez" were established.

The dominant formula of rest (organized, collective and prescriptive), contributed to the emergence of large resorts, influencing both the "proletarian" availability of resorts and economic success (through the implementation of the social package, full occupancy was ensured during the season). The post-war period for seaside resorts was the beginning of the journey towards egalitarianism and pluralism, which began to manifest very clearly in the landscape of seaside resorts.

(**a**)
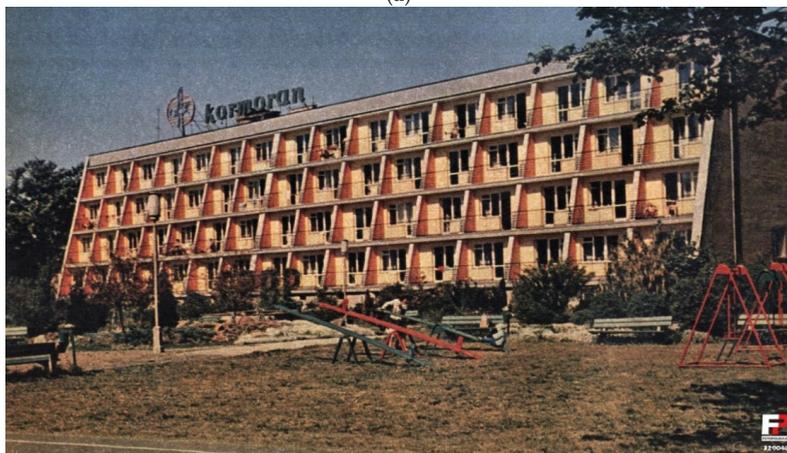
(**b**)

(**c**)

Figure 8. Architecture of the 1960s and 1970s: Health Resort Sanatorium "Baltic" (**a**) and Sanatorium Kormoran in Kołobrzeg (**b**), Recreation Centre "Rzemieślinik" in Jelitkowo (**c**)—a postcard (1960–1963), Sources: Fotopolska.eu. (**a**,**b**). Fot. J. Rydzewski, Journal "Morze", no. 524 (**c**).

3.4. The Period after 1989

After 1989, socio-economic changes took place, which had a direct impact on the functioning of tourism and spatial development of seaside resorts. The commercialization of tourist services occurred alongside a simultaneous decrease in real incomes of the society, increase in prices of services and enterprises and workplaces limiting the co-financing of tourist trips from the social fund. This led to a regression in package tourism, which has been replaced by individual tourism and going on leave, distinctive for the free market economy.

Many holiday centers run by workplaces (mostly belonging to WHF) have closed down. According to GUS data, in 1990, there were 4200 recreation centers in Poland. A decade later, their number decreased by half, and in 2010, there were only about one thousand [50] (GUS, 2010). Instead, private accommodation, guesthouses and hotels have become the basis for the nation's rest. Large centers that were previously part of state-owned companies had to find a way to continue operating. Some of them have privatized, thoroughly reconstructed and adapted to new standards of recreation (Figure 9), including Hotel Stary Dziwnów, Porta Mare Wellness and Spa suites in Dziwnówek. Others were demolished to use their valuable locations for new investments, such as Cristal Wellness Center in Dźwirzyno. The remaining ones have operated until the end of the 1990s, as less prestigious holiday centers, exploited as much as possible.

Figure 9. Aurora Hotel in Międzyzdroje, before and after changes. Source: Author's work.

Since the beginning of the 21st century, we have observed a very intensive development of coastal development with a clear tendency towards the unification of architecture, building closer to the shoreline and intensification of buildings (Figure 10a,b). Generally, large hotel facilities of high standard are being built with extensive recreational and catering facilities, which are mostly situated in the first line close to the beach. An example is the Baltic Park complex in Świnoujście, consisting of 12 buildings that invasively shape the waterfront. In 2017, the five-star Radisson Blue Resort on the Świnoujście promenade and the Hilton Świnoujście Resort and Spa were completed. The buildings' volume and height dominate the surrounding land development. Rising above the line of the forest, they are the only structures visible from the beach. In 2020, the Gołębiewski Hotel in Pobierowo will be completed—a 10-story hotel facility that has the chance to become the largest facility of this type in Poland.

Such large hotel facilities of a high standard often provide not only food and accommodation but also plenty of entertainment and recreation, generating the so-called "tourist bubble" effect. More and more frequently, landlords have invested in so-called "second houses", a phenomenon affecting the landscape and the life of seaside resorts. A complex of five 11-story Wave Apartments apartment buildings will be built in Międzyzdroje in 2021, which will be located on the first shoreline, just 60 m from the beach. The residential function of the development is complemented by recreational, sport, and shopping and service functions. There is a new specificity in the use of apartment buildings by

a wealthy social group, who are able to invest funds in real estate, which remains uninhabited for most of the year.

(**a**)
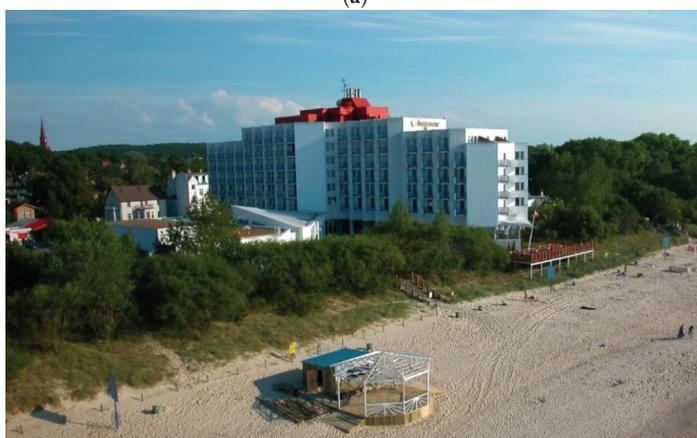
(**b**)

Figure 10. Intensive development of seaside resorts. Source: Author's work (**a**), C. Skórka, 4Dfoto (**b**).

4. Discussion—Stages of Transformation of the Cultural Landscape of Coastal Towns in Poland

The development of tourism in seaside towns has had a significant impact on their spatial development [51,52], land and landscape [53–55]. Cubic capacity and physiognomy of residential buildings are changing [56] and foreign architectural forms often appear [35], leading to deformation of the coexistence of spatial cultures [57]. The landscape and the way seaside towns are shaped has changed since the early health resorts, which is visible and inevitable. This results from changes in tourism influenced by social, demographic [58], economic and political factors [59].

A number of authors [33,60,61] have suggested that resort development goes through a predictable sequence of stages, moving from a discovery stage to full tourism development. In Poland, tourism development is most often divided into five basic periods: the first—precursor (early-historical); the second—founding or discovery, falling in the nineteenth and early twentieth century; the third—flourishing, covering the interwar period (1918–1939); the fourth—falling in the years of People's Poland related to the development of mass tourism and social tourism (1945–1989);

and the fifth—beginning after the political changes in 1989, the period of creating a free tourism market, tourism economy and mass commercial tourism [62–64]. This division is quite general and is based only on key events in the history of Poland, not directly related to changes in architecture. On the other hand, researchers of the history of architecture usually identify the stages of architecture development and indicate the characteristic features of buildings, without combining them with the specificity of the development of seaside resorts [65,66]. Polish historians of architecture and urban planning focus on political conditions [67–69] without referring to the specifics of seaside tourist architecture. The division into stages of the development of seaside resorts proposed below combines two perspectives: the history of architecture and urban planning and the development of tourism.

In most seaside towns in Poland, the tourist function was initiated in the second half of the 19th century and further developed in the interwar period. The analysis of its evolution allowed the identification of four basic phases of cultural landscape transformations and architectural transformations:

- Stage I: Formation—Elite resort (main features: elite tourism, the first buildings associated with the recreation and therapeutic function, public space as an important compositional element, architecture adapted to the expectations of the elite) (Supplementary Materials available online: Supplementary Materials S1—Stage I: Elite resort—architecture and landscape);
- Stage II: Regionalism—National resort (main features: tourism becoming common, intensive development of the curative idea, a mature form of a seaside resort, search for a national style) (Supplementary Materials available online: Supplementary Materials S2—Stage II: National resort—architecture and landscape);
- Stage III: Socialization—A resort for working masses (main features: model of the state organization of recreation, loss of cultural continuity of the landscape, devaluation of public space, the establishment of holiday centers) (Supplementary Materials available online: Supplementary Materials S3—Stage III: A resort for working masses—architecture and landscape);
- Stage IV: Pluralism—Egalitarian resort (main features: mass tourism, numerous investments strongly interfering with the landscape, architectural eclecticism, regional features reduced to a minimum, unification) (Supplementary Materials available online: Supplementary Materials S4—Stage IV: Egalitarian resort—architecture and landscape).

All stages have characteristic architectural features and have a specific impact on the landscape (Table 2).

This analysis of changes also allows hypotheses in the direction of further development. Further development of coastal towns is likely to be based on the continuation of mass tourism development. As a result, we expect to see a deepening of trends visible in Stage IV. In this case, Stage V—Unified Pluralism—Networked Tourist Resort—may be the stage at which coastal towns will create unified structures devoid of regional features. Stopping changes towards further unification of architecture and devastation of the landscape and moving away from mass tourism to sustainable tourism, may, however, bring an alternative: Stage V—Secondary regionalization—Sustainable Resort—the stage reflecting a return to the original curative idea.

From the point of view of architecture and landscape transformation of coastal towns on the Polish coast, the stages indicated do not correspond exactly to the stages indicated by Butler and his followers. Processes for the development of culture, art and architecture, although linked to economic development, do not always develop in parallel. The phase of education of a mature form of a seaside town (stage II: regionalism—national resort, 1918–1939) is not at the same time as the stage of the tourist development of the town, numerous investments and mass tourism.

Table 2. Stages of cultural landscape transformations of seaside resorts in Poland—landscape and architectural features. Source: Authors' work.

Stage of Shaping Seaside Resorts	Tourism	Architectural Features	Impact on Landscape
Stage I: Formation—Elite resort (early 19th century 20th century)	Elite tourism	the first buildings associated with the recreation and therapeutic function; representative buildings inspired by Renaissance and Classicism; villas with bay windows, sophisticated towers; "Swiss style"—wooden summer architecture (late 19th century); Norwegian style architecture (until 1910)	few tourists and little impact on the landscape; areas with low forest coverage; the first parks, promenades, walking alleys and squares; public space as an important compositional element and summer drawing room for the upper classes cultural landscape formation
Stage II: Regionalism—National resort (1918–1939)	Popularized tourism	rejection of the Swiss style; regionalism, manor style; search for the national style—modernism inspired by ship style; new leisure facilities	intensive development of the curative idea and developing a mature form of a seaside town (national resort); new holiday resorts founded on raw root; the main arrangement element—a promenade parallel to the shoreline, a pier—a perpendicular element going out into the sea; characteristic elements of the landscape: beach pavilions and bathing areas;
Stage III: Socialization—Resort for working masses (1945–1989)	Package tourism (in socialism)	establishment of holiday centers (usually large buildings or complexes of cabins); introduction of facilities with non-matching appearance; standardization and repeatability of solutions; futuristic examples of modernist architecture	gradual loss of the original founding character of resorts; point devaluation of the landscape; partly appropriated beaches (gastronomic services in the dunes belt); devaluation of public space; loss of landscape cultural continuity;
Stage IV: Pluralism—an Egalitarian health resort (since 1989)	Mass tourism—snowballing	the development based on hotels of renown chains ("second houses"), large hotel complexes ("luxury residential buildings"); dense, "frontage buildings" the dominance of buildings of large cubic capacity, self-sufficient facilities with extensive catering, sports and recreation base; architectural eclecticism, regional features reduced to a minimum	numerous investments on the coast strongly interfering with the landscape; mass degradation of landscape localities becoming more and more similar to each other; urbanization and commercialization of space; attractions such as amusement parks; chaos and lack of spatial order; discontinuity of the public space; the phenomenon of the 'merging' of towns

5. Conclusions

The development of tourist and leisure functions has a significant impact on the cultural landscape. It significantly determines the spatial development of seaside towns and cities, the scale of recreational architecture and other forms of development related to tourism services. The stage-wise nature of this process results from evolutionary changes in the culture of recreation and habits connected with tourist trips since the colonization of the coast.

Identified stages of transformation of the cultural landscape and architecture of coastal towns on the Polish coast (formation, regionalism, socialization, pluralism) clearly differ in the way the sea is used and the form of recreation, which directly affects the way the town and the beach are developed and functioning (new forms of development and their location).

The changes are accompanied by worrying trends that affect the blurring of the founding idea of seaside resorts, such as the lack of proper protection and display of historical buildings, leading to the loss of its value and replacement with newer buildings; expansion of development and apartment

buildings into valuable natural areas, leading to the chaotic and unbalanced expansion of the village and loss of natural and landscape resources; and the lack of planning protection of cultural heritage and provision in the development plans of common (public) spaces essential for the continuation of the original curative idea. Spatial diagnosis is unambiguous—we observe a progressing decline in its quality and disharmonious growth in size. Assuming that holiday towns are built in accordance with the existing culture of recreation and they reflect the culture, we should think that we are witnessing a clear cultural crisis. At present, despite the fact that modern, increasingly large developments are being delivered in the coastal area, it is still not being diagnosed or created with reference to its founding tradition, creating a modern development perspective, building a new, cultural identity with an awareness of the place.

It seems that the condition for further development of coastal towns without losing their natural and cultural values is reaching for the roots and somehow stepping back in the approach to shaping space to the stage of Regionalism, which was characterized by a relative balance in its management and legibility of the founding (curative) idea. Defining the "old" identity and confronting it with contemporary universal culture present in the recreation space may be the basis for building a "new" identity and cultural awareness of the coastal region. It seems desirable to initiate protective actions related to the creation of a cultural park consisting of several therapeutic autonomous areas and to undertake detailed research aimed to select landscape units, separate areas and enclaves with revitalization potential.

As a result, assumptions of sustainable development, in which the tradition of place and respect for the landscape, cultural and natural resources play an important role, will be realized.

References

1. GUS-Statistical Office. *Tourism in 2018, Statistical Analyses*; Zakład Wyd. Statystycznych: Warszawa, Poland, 2018. Available online: https://stat.gov.pl/obszary-tematyczne/kultura-turystyka-sport/turystyka/turystyka (accessed on 10 September 2019).
2. Hall, C. Trends in ocean and coastal tourism: The end of the last frontier? *Ocean Coast. Manag.* **2001**, *44*, 601–618. [CrossRef]
3. Hughes, H. *Arts, Entertainment and Tourism*; Butterworth-Heinemann: Burlington, UK, 2003.
4. World Tourism Organization. *Compendium of Tourism Statistics, Data 2013–2017*; UNWTO: Madrid, Spain, 2019. Available online: https://www.e-unwto.org/doi/book/10.18111/9789284420421 (accessed on 10 September 2019).
5. World Travel & Tourism Council. *City Travel & Tourism Economic Impact Report*; WT&TC: London, UK, 2019. Available online: https://www.wttc.org/economic-impact/city-analysis#undefined (accessed on 10 September 2019).
6. Ritzer, G. *The McDonaldization of Society: An Investigation into the Changing Character of Contemporary Social Life*; Pine Forge Press: Thousand Oaks, CA, USA, 1993.
7. Henderson, J.C. Planning, Changing Landscapes and Tourism in Singapore. *J. Sustain. Tour.* **2005**, *13*, 123–135. [CrossRef]
8. Relph, E. *Place and Placelessness*; Pion: London, UK, 1976.
9. Goonatilake, S. *Tourism in Sri Lanka. The Mapping of Intrantional Inequalities and Their Internal Structural Effects*; Centre for Developing Area, McGill University: Montreal, QC, Canada, 1978.

10. Boorstin, D. *The Image: A Guide to Pseudo-Events in America*; Harper: New York, NY, USA, 1964.

11. Saarinen, J. Enclavic tourism spaces: Territorialization and bordering in tourism destination development and planning. *Tour. Geogr.* **2017**, *19*, 425–437. [CrossRef]

12. Chang, Y.; Chu, K.; La Chuang, L.Z. Sustainable coastal zone planning based on historical coastline changes: A model from case study in Tainan, Taiwan. *Landsc. Urban Plan.* **2018**, *174*, 24–32. [CrossRef]

13. Getz, D. Tourism Planning and Destination Life Cycle. *Ann. Tour. Res.* **1992**, *19*, 752–770. [CrossRef]

14. Gilbert, E.W. The growth of inland and seaside health resorts in England. *Scott. Geogr. Mag.* **1939**, *55*, 16–35.

15. Christaller, W. Some considerations of tourism location in Europe. *Pap. Reg. Sci. Assoc.* **1963**, *12*, 95–105.

16. Lundgren, J.O.J. The Tourist Frontier of Nouveau Quebec: Functions and regional linkages. *Tour. Rev.* **1982**, *37*, 10–16. [CrossRef]

17. Miossec, J.M. *Elèments Pour une Thèorie de l'Espace Touristique, Les Cahiers du Tourisme*; CHET: Aix-en-Provence, France, 1976.

18. Butler, R.W. The concept of the tourist area life-cycle of evolution: Implications for management of resources. *Can. Geogr.* **1980**, *24*, 5–12. [CrossRef]

19. Keller, C.P. Stages of Peripheral Tourism Development—Canada's Northwest Territories. *Tour. Manag.* **1987**, *8*, 20–32. [CrossRef]

20. Zhang, C.H.; Xiao, H. Destination development in China: Towards an effective model of explanation. *J. Sustain. Tour.* **2014**, *22*, 214–233. [CrossRef]

21. Lewis, J.B. A Rural Tourism Development Model. *Tour. Anal.* **1998**, *2*, 91–105.

22. Ritchie, J.R.B.; Crouch, G.I. *The Competitive Destination, A Sustainable Tourism Perspective*; CABI Publishing: Wallingford Oxon, UK, 2003.

23. Bianchi, R. Tourism Development and Resort Dynamics: An Alternative Approach. In *Progress in Tourism, Recreation and Hospitality Management*; Cooper, C.P., Lockwood, A., Eds.; Belhaven: London, UK, 1994; Volume 5, pp. 181–193.

24. Liu, W.; Vogt, C.A.; Lupi, F.; He, G.; Ouyang, Z.; Liu, J. Evolution of tourism in a flagship protected area of China. *J. Sustain. Tour.* **2016**, *24*, 203–226. [CrossRef]

25. Nelson, R.; Wall, G. Transportation and accommodation: Changing interrelationships on Vancouver Island. *Ann. Tour. Res.* **1986**, *13*, 239–260. [CrossRef]

26. Petrevska, B.; Collins-Kreiner, N. A double life cycle: Determining tourism development in Macedonia. *J. Tour. Cult. Chang.* **2017**, *15*, 319–338. [CrossRef]

27. Williams, S. *Tourism. Critical Concepts in the Social Sciences*; Routledge: London, UK, 2004.

28. Choy, D.J.L. Life Cycle Models for Pacific Island Destinations. *J. Travel Res.* **1992**, *30*, 26–31. [CrossRef]

29. Liszewski, S. Przestrzeń turystyczna. *Turyzm* **1995**, *5*, 87–103.

30. Butowski, L. Maritime Tourism Space. *Turyzm* **2014**, *24*, 57–64. [CrossRef]

31. Butowski, L. Model of sustainable tourism. Teoretical and empirical approach. *Folia Tur.* **2014**, *33*, 9–33.

32. Gormsen, E. The spatio-temporal development of international tourism: Attempt at a centre-periphery model. In *La Consommation d'Espace par le Tourisme et sa Preservation*; Intenational Geographical Union, Ed.; CHET: Aix-en-Provence, France, 1981; pp. 150–170.

33. Smith, R.A. Beach resorts: A model of development evolution. *Landsc. Urban Plan.* **1991**, *21*, 189–210. [CrossRef]

34. Barrett, J.A. The Seaside Resort Towns of England and Wales. Ph.D. Thesis, University of London, London, UK, 1958.

35. Liszewski, S. Przestrzeń turystyczna i osadnictwo turystyczne. In *Kompendium wiedzy o turystyce*; Gołembski, G., Ed.; Wyd. Naukowe PWN: Warszawa, Poland, 2002; pp. 77–109.

36. Hollowey, J.C.; Taylor, N. *The Business of Tourism*; Pearson Education: London, UK, 2006.

37. Bal, W. *Specyfika krajobrazu kulturowego kurortów nadmorskich. Próba określenia tożsamości kulturowej regionu nadmorskiego w kontekście postępującej degradacji krajobrazu kulturowego kurortów nadmorskich na Pomorzu Zachodnim [Specificity of the Cultural Landscape of seaside resorts. An attempt to determine the cultural identity of a coastal region in the context of the progressive degradation of the cultural landscape of seaside resorts in Western Pomerania]*; Wyd HOGBEN: Szczecin, Poland, 2009.

38. Gawkowski, R. *Wypoczynek w II Rzeczpospolitej: Kururty, rekreacja, zabawa [Recreation in the Second Polish Republic: Resorts, Recreation, Fun]*; Dragon: Bielsko Biała, Poland, 2011.

39. Grey, F. *Designing the Seaside*; Reaction Books: London, UK, 2006.

40. *Collection of Documents Maps and Photographs on the History of the City Świnoujście and West Pomeranian Coast*; Museum of Sea Fisheries in Świnoujście: Świnoujście, Poland, 1890–1945.

41. *Gazeta Morze [Sea Newspaper]*; Organ Ligi Morskiej i Rzecznej: Warszawa, Poland, 1928.

42. Orłowicz, M. *Plan Rozwoju Polskiego Wybrzeża [Development Plan for the Polish Coast]*; Ministerstwo Robót Publicznych: Warszawa, Poland, 1928.

43. *Polskie Uzdrowiska [Polish Spas.] (a booklet)*; Zakłady Graficzne im. Marcina Kasprzaka w Poznaniu: Poznań, Poland, 1950.

44. Dobrowolska-Kieryl, M. *Przedwojenne Wybrzeże. Najpiękniejsze Fotografie [Pre-War Coast. The Most Beautiful Photographs.]*; Wyd. RM: Warszawa, Poland, 2011.

45. Staśko, J. *Przewodnik po polskiem wybrzeżu [Polish Coast Guide]*; PTKK RUCH: Kraków, Poland, 1926.

46. Lachowski, J. (Ed.) *Monografia wielkiego Pomorza i Gdyni [Monograph of Greater Pomerania and Gdynia]*; Wyd. "Polska Niepodległa": Toruń, Poland, 1939.

47. Zimmermann, D. *Każdy chce zobaczyć z bliska Gdańsk i bałtyckie kąpieliska. Als Reieseziel erwahl sich jader Danzig und seine Ostseebader [Everyone Wants to See Gdańsk and the Baltic Seaside Resorts Up Close]*; Bernardinum: Pelplin, Poland, 2008.

48. Archiwum Cyfrowe Gdynia w Sieci [Digital Gdynia Archive on the Web]. Available online: http://www.gdyniawsieci.pl/kolekcje-archiwum-cyfrowego/orlowo-i-kolibki-na-pocztowkach-do-1939-roku/ (accessed on 10 October 2019).

49. Konstytucja Polskiej Rzeczypospolitej Ludowej [Constitution of the Polish People's Republic]. Dz.U. 1952 no. 33 poz. 232. Available online: http://prawo.sejm.gov.pl/isap.nsf/download.xsp/WDU19520330232/O/D19520232.pdf (accessed on 15 October 2019).

50. GUS-Statistical Office. *Tourism in 2010, Statistical Analyses*; Zakład Wyd. Statystycznych: Warszawa, Poland, 2010. Available online: https://stat.gov.pl/obszary-tematyczne/kultura-turystyka-sport/turystyka/ (accessed on 15 October 2019).

51. Durydiwka, M.; Duda-Gromada, K. Influence of Tourism on the Spatial Development of Seaside Resorts: Selected Aspects. *Tourism* **2014**, *24*, 59–65. [CrossRef]

52. Saarinen, J. Destinations in change: The transformation process of tourist destinations. *Tour. Stud.* **2004**, *4*, 161–179. [CrossRef]

53. Jennings, S. Landscape Sensitivity and Tourism Development. *J. Sustain. Tour.* **2004**, *12*, 271–288. [CrossRef]

54. Stoffelen, A.; Vanneste, D. An integrative geotourism approach: Bridging conflicts in tourism landscape research. *Tour. Geogr.* **2015**, *17*, 544–560. [CrossRef]

55. Stumpf, T.S.; Cheshire, C.L. The land has voice: Understanding the land tenure—Sustainable tourism development nexus in Micronesia. *J. Sustain. Tour.* **2019**, *27*, 957–973. [CrossRef]

56. Dziegdzieć, E. Urbanizacja turystyczna terenów wiejskich w Polsce [Tourist urbanization of rural areas in Poland]. *Turyzm* **1995**, *5*, 5–56.

57. Bal, W. Pluralistic directions of development of the coastal landscape in Western Pomerania. *Files Urban Plan. Archit. Comm. Branch PAS Krakow* **2018**, *46*, 483–495.

58. Williams, A.M.; Hall, C.M. Tourism and migration: New relationships between production and consumption. *Tour. Geogr.* **2000**, *2*, 5–27. [CrossRef]

59. Salinas, E.; Mundet, L.; Salinas, E. Historical Evolution and Spatial Development of Tourism in Cuba, 1919–2017: What is Next? *Tour. Plan. Dev.* **2018**, *15*, 216–238. [CrossRef]

60. Smith, R. Review of Integrated Beach Resort Development in Southeast Asia. *Land Use Policy* **1992**, *9*, 209–217. [CrossRef]

61. Young, B. Touristization of Traditional Maltese Fishing-farming Villages. *Tour. Manag.* **1983**, *4*, 35–41. [CrossRef]

62. Kraś, J. Początki turystyki w Polsce [The beginnings of tourism in Poland]. *Saec. Christanum* **2008**, *15*, 165–179.

63. Lewan, M. *Zarys Dziejów Turystyki w Polsce [An Outline of the History of Tourism in Poland]*; Proksenia: Kraków, Poland, 2004.

64. Lijewski, T.; Mikułowski, B.; Wyrzyskowski, J. *Geografia Turystyki [Tourism Geography]*; PWE: Warszawa, Poland, 1992.

65. Pevsner, N. *An Outline of European Architecture*; Penguin Books: Harmondsworth, UK, 1960.

66. Sharp, D. (Ed.) *The Rationalists: Theory and Design in the Modern Movement*; Architectural Press: London, UK, 1978.

67. Kotarbiński, A. *Rozwój Urbanistyki i Architektury Polskiej Wlatach 1944–1964 [Development of Urban Planning and Polish Architecture in 1944–1964]*; PWN: Warszawa, Poland, 1967.

68. Szafer, T. *Współczesna architektura polska: Antologia czterdziestolecia. Contemporary Polish Architecture*; Arkady: Warsaw, Poland, 1987.

69. Czyżewski, A. *Polska Architektura Nowoczesna. Modern Polish Architecture*; Stowarzyszenie Architektów Polskich SARP: Warszawa, Poland, 2010.

Article

Emerging Patterns of Mountain Tourism in a Dynamic Landscape: Insights from Kamikochi Valley in Japan

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Abstract: This article analyzes the emerging contours of mountain tourism in a highly popular destination in the North Japan Alps by reporting the findings of a two-year long study at the Kamikochi Valley. The main aim was to understand the dynamic character of the biophysical landscape and the perceptions of tourism service providers and visitors. The study was conducted using a qualitative design and involved in-depth interviews, observations, and a questionnaire survey for visitors. It was found that while different stakeholders held different perceptions of the landscape, there was a general lack of understanding among tourism service providers and visitors regarding the relationship between long-term processes and fine-scale heterogeneity of the landscape. The prevalence of an engineering approach has led to sweeping changes of key landscape interaction pathways over the years, threatening the heterogeneity and resilience of the natural environment. The findings also indicate a general visitor demand of information on the biophysical environment, and therefore it is of urgent need to address the biophysical integrity of such landscapes, and raise visitor awareness through the provision of relevant information.

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1. Introduction

This article presents the outcomes of a two-year long research project at the Kamikochi Valley of North Japan Alps that assessed sustainable tourism challenges from a landscape point of view. Mountains occupy an important position in the international tourism landscape: collectively they attract 15–20% of global tourists, making them the second most popular destination category after islands and beaches [1]. Mountain environments are typically dynamic due to their physical properties and processes such as high relief, seasonal variations, and denudation and transport regimes [2–4]. Vigorous physical regimes also imply that mountain landscapes are more than passive backdrops to human activities of meaning-making and constructing landscapes, the intractable materiality of mountains interact actively with human schemes [5,6], and frequently pose difficult questions regarding satisfactory management of such places [7]. In addition, the history of land use is an important factor influencing landscape characteristics of mountain destinations: mountains have been inhabited or used for millennia by local societies [8–10]. While long-term human interaction with mountains can also engender landscape heterogeneity and maintain socio-ecological landscapes over time [8,9], an overall trajectory of clearing of original vegetation and intensification of impact during modern times has been observed [8,10]. Some recent works variously contend that mountain landscapes are also vulnerable under accelerating global environmental change [4], that mountain destination management in different countries have different priorities and perceptions [11], and that that summer visitation will further intensify under a warming climate, but mountain destinations are inadequately prepared for such change [12]. Regarding the issue of managing change in mountain destinations,

a number of works are available on the topic of climate change [13–15] as well as cultural constructions of mountain landscapes [16,17], but relatively little literature is available on anthropogenic alteration of physical processes that engender landscape diversity of mountain destinations. This is a major research gap and a pertinent point of inquiry, as it has been observed that humans currently influence major geomorphological processes in mountain regions, resulting in a far-reaching effect on the integrity of those landscapes [18–20]. As tourism in mountains is highly context specific [1], and as visitors typically have a complex range of preferences and needs [21–23], case studies that offer insights on the specificities of mountain destinations and challenges are clearly of much relevance and import.

This study focused on the Kamikochi Valley of North Japan Alps, which is one of the most popular mountain destinations in the Japanese Islands, in order to analyze recent anthropogenic changes in landscape characteristics and perceptions of tourism stakeholders and visitors. It was a part of a four-year long larger research project on the North Japan Alps area that is currently ongoing. The principal aims of this study were to (i) highlight the dynamic properties of this landscape and (ii) describe the perception of service providers and visitors. As there is a scarcity of research literature in English available on the Japan Alps, this case study makes a timely, important, and clear contribution to the field.

2. Description of the Study Site

Kamikochi is a valley located within the Azusa River watershed in the North Japan Alps (Figure 1). The Azusa River finds its headwaters in the highest peaks of the North Japan Alps—Mt. Yari (3180 m. asl.) and Mt. Hotaka (3190 m. asl.)—and flows down by the Matsumoto basin to eventually form the longest river of Japan, the Shinano (370 km). The upper parts of the watershed are known for large glacier eroded valleys such as the Yarisawa—and are also home to some of the most vigorous uplift and denudation processes in the Japanese Islands [24]. While uplift and crustal deformation remain principal drivers of elevation, recent research has demonstrated that the peaks of Mt. Yari and Mt. Hotaka are remnants of a large Quaternary caldera volcano [25,26]; and Mt. Yake (2455 m. asl.), an active volcano, still spews smoke by the riverside.
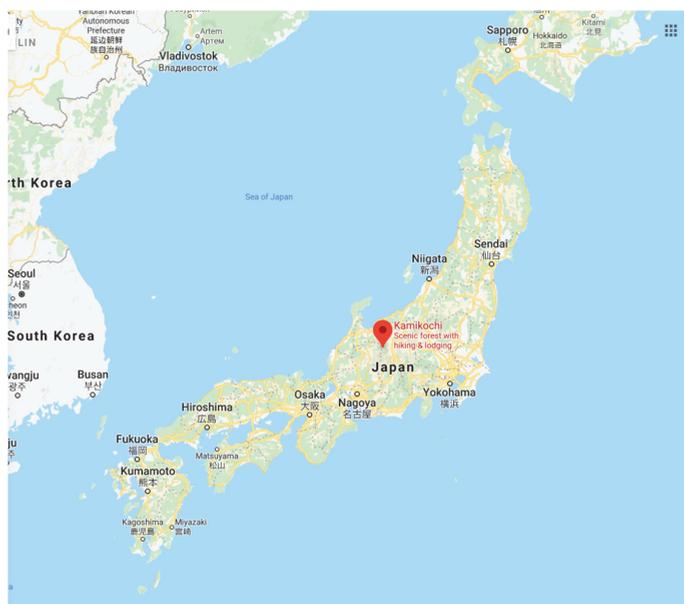
Figure 1. Location of Kamikochi in Japan (Google Maps).

Kamikochi is a major gateway for the peaks of the North Japan Alps. While accurate visitor statistics are not available (a common problem even for major visitor destinations in Japan) a total 'usage frequency' of 1.27 million was recorded in 2014 [27]. Although this number is potentially inflated by multiple use of the same facility by a single user, the figure still indicates significant visitor pressure on this landscape, resulting in ongoing tension between visitor demand for an enjoyable environment and the inherent dynamism of the mountain landscape [28].

The biophysical landscape of Kamikochi is characterized by active riverbed formation of the Azusa River (Figure 2), which is further driven by uplift, deformation, and denudation processes operating at the highest ridgeline of North Japan for over 1.7 million years [24,29]. Recent glaciation events left their imprints in the form of large valleys scoured by glacial erosion, through which the headwaters of the river flow. These dynamic processes cause frequent landslides, movement of boulders and coarse gravel on the riverbed, and flooding. During the past 100 years, human modification of this landscape has intensified. Major modification of the basin hydrology began with river engineering and road construction in the late 19th century. In the 20th century construction of recreation and accommodation facilities followed, and further channel modification took place. The relationship between dynamic physical agents of the landscape operating over millions of years and human agents modifying it for a few hundred years therefore encapsulates a constant tension.

Figure 2. Kamikochi, with Azusa River in the foreground, *Salix arbutifolia* growing on the gravelly riverbed, and the Hotaka Range in the background. Photo by author.

Before Japan's modernization, Kamikochi was only accessible by a 44 km long trek through the Tokugo Pass from Matsumoto. Available records indicate that prior to Japan's European-style modernization in late 19th century, villagers working under the Matsumoto fief logged local forests for several centuries; timber extracted from the forest was floated down the Azusa River to Matsumoto [30]. As a result of such activities, substantial sections of the mountain forest were logged off during the Edo Period (1603–1868). Murakushi (2005) [31] detailed the transformation of the valley during the premodern, early modern, and post-World War II periods. During the early modernization of Japan at the end of the 19th century, consolidation of the central state led to restrictions on logging and the forests recovered somewhat, even as road and hydroelectric engineering began. Side by side, landscape modification by planting Japanese larch (*Larix kaempferi*) around what is the present-day bus

terminal, ensued [30]. Starting from 1885, there was a brief period when pasturing was introduced to the area, but as tourist use of the landscape became increasingly popular in the 20th century, pasturing moved to the background and was eventually phased out in 1934. Early form of mass tourism is dated at 1909 [31], but the major phase of touristic development in the valley began with the opening up of the Kama Tunnel in 1933 [32]. The Kama Tunnel forms the main artery of transport to this day. The Kamikochi Bus Terminal is located at 1500 m. asl. and is used by most visitors to this area. Thus, an overall pattern of incremental impact of recreational use on the landscape throughout the 20th century can be discerned.

This picturesque valley also played a crucial role in the formulation of Japan's National Park system. In the early 20th century, a plan was mooted to construct a large dam that would have submerged the entire valley under an artificial reservoir. Tsuyoshi Tamura and Seiroku Honda, influential figures who shaped the early National Park movement, opposed the scheme and emphasized tourism as an alternative development pathway for Kamikochi [31,32]. Kamikochi was successfully protected when it was registered inside the Chubu Sangaku National Park in 1934. The Chubu Sangaku National Park is one of the most important National Parks in Japan, and is among the largest national parks in the Honshu Island. After the opening of the Kama Tunnel, a rapid increase of visitors ensued in the mid-1950s, and the popularity of the valley also increased due to its portrayal in the novel 'Hyoheki' (Ice-wall) by the famous novelist Yasuhi Inoue [33]. Increased tourism in turn created the problems of littering, air pollution, and traffic congestion during the middle of the 20th century, before private car access was eventually blocked in 1975 [33]. Today, although the valley retains its attractive scenery, a number of dams just below Kamikochi have rendered the flow of the Azusa River largely artificial and there is ongoing modification of the river even within the National Park area [29,34]. In addition, a proliferation of roads, numerous trails, and accommodation facilities have contributed to the steady increase of human footprint in the valley.

3. Materials and Methods

The main findings are based on three components: content analysis of a document that reports long-term monitoring of the place; information gained from 7 in-depth (open-ended) interviews with local stakeholders and personal observations of the author; and data from a sample of 80 valid questionnaires (Figure A1) aimed at visitors.

During the research, a qualitative case study method was followed [35–37]. The case study was a part of a four-year long ongoing research project on the North Japan Alps area. The spatial unit of the Kamikochi valley was chosen as a 'case', in an approach in consistence with Swanborn (2010). [38] The case was selected because of its intrinsic importance [35]: as described above, Kamikochi played a crucial role in the formulation of Japan's National Park system in the early 20th century [31], and it remains one of the two most prominent gateway locations in North Japan Alps [28]. The case was also chosen for its instrumental importance [35] as an instructive example for highly visited mountain landscapes. Due to the lack of any systematic study on visitor or tourism stakeholder perceptions in this area, the research had to adopt an exploratory approach; i.e., it did not aim to analyze causality between already identified variables; instead, the aim was to describe the case and identify possible points for future management input. The research spanned a period of nearly two and half years—from April 2017 to October 2019—during which the spring-to-autumn season (April to October) was mainly utilized for data gathering (due to the fact that the area is closed during winter and early spring). A combination of data collection techniques—observation of the landscape, content analysis, photography, open-ended interviews with tourism service providers and national park management, and a structured questionnaire survey—was used to collect data, in consistence with standard qualitative data collection procedures [39–42]. A major source of data for understanding anthropogenic change to the landscape properties was a compilation by a group of local conservation scientists who have conducted research on landscape conservation through multiple years. This account, Natural History in the Kamikochi Valley [43] remains, to the knowledge of this

author, the most accurate and substantial account of the changes in the natural landscape of Kamikochi. In addition, a number of scientists who took part in the compilation and the National Park staff were approached for follow up questions and interviews. For the structured questionnaire survey, an initial trial (pilot phase) was conducted between June and October 2018 in order to gauge responses and improve the design of the questionnaire. Subsequently, the questionnaire was refined and formally implemented during June to October 2019. Due to the fact that most hikers were tired or in a hurry, and could not spend more than 2–3 min to fill out responses, and also due to the fact that most Japanese hikers are not accustomed to take part in surveys, the questionnaire had to be simple. It consisted of multiple choice type questions and columns to indicate the gender and age of the respondent. Due to local constraints (not all facilities would agree to implement the survey, and there were insufficient provisions for running the survey and storing data in other locations) a mountain hut was chosen to administer the survey. The facility—Tokusawa-en (Figure 3)—has a long history of nearly a hundred years, and is highly popular among hikers. Larger hotels that are located at the outskirts of the valley were not selected as hikers rarely choose them for lodging, and most of them are located outside the main study site. Besides, the manager and the staff of Tokusawa-en were cooperative and followed the instructions for data gathering accurately, which solved the problem of running the survey in an incorrect manner. A total of 200 questionnaires were distributed out of which a total of 80 completed samples were collected—i.e., the turnover rate was 40%. Open-ended interview data were analyzed through standard qualitative techniques such as coding and identification of key themes [39,44] and descriptive statistics was used for reporting the survey findings.

Figure 3. Tokusawa-en Mountain Hut. Photo by author.

4. Results

In this section, findings are reported in three sub-sections: (i) content analysis from long-term monitoring of the place by conservation scientists, (ii) 7 in-depth interviews and personal observations of the author, and (iii) structured questionnaire survey that yielded 80 valid responses. The sub-sections therefore also conform to the actual chronological sequence of the research project: research and analyses pertaining to (i) and (ii) were conducted during April 2017 to March 2018, and research pertaining to (iii) was conducted between June 2019 and October 2019 and the data were analyzed subsequently.

4.1. Results of Content Analysis (Secondary Data): Characteristics of Active Landscape Formation in Kamikochi Valley

As noted above, a detailed account of the natural environment of the Kamikochi Valley was recently compiled by a group of local conservation scientists who studied the place for nearly three decades [43]. This compilation is especially valuable, as it provides insights from long-term monitoring of the environment—a rarity in environmental research literature in Japan. The principal characteristics of this dynamic landscape as documented in this work and pertinent information from more general literature are summed up below as main results of content analysis:

Kamikochi is a landscape shaped by intense tectonic uplift, Quaternary volcanism, and glaciation. The overall mechanism of uplift and denudation is illustrated by Iwata (2016) [24]. A long rocky ridgeline joining the two peaks of Mt. Yari (3180 m.) and Mt. Oku-Hotaka (3190 m.) forms the main chain of mountains. Although they were formerly thought of as being uplift-induced, these peaks were later ascribed a volcanic origin [25] dating 1.76 million years ago. The peaks are likely to have formed due to a complex combination of explosive caldera volcanism, magma induced uplift, and subsequent erosion related enhancement of relief.

The Azusa River, the main feature of the Kamikochi Valley, is known to have changed course in geological time in response to volcanic deposition and land formation [24,45]. The wide valley of Kamikochi is somewhat counterintuitive as it sits upstream of a narrow gorge-like section of the river; it is conjectured that a significant phase of volcanic activity of the Mt. Yake volcanic group that began 26 Kya might have blocked off the riverflow and formed a large lake (~16 Kya), which subsequently drained away, leaving the cavity open to be filled up with deposition from ridgeline erosion, mass movement, and transport by the river. In addition, lava flow of more recent origin (~4 Kya) blocked off sections of the river donstream from Kamikochi, resulting in the gorge-like landscape formation downstream [45]. The multi-thread channel in the Kamikochi Valley—where the river flows in several streams on a wide gravelly bed—is induced by a complex range of factors such as past volcanism, Quaternary ridge formation, subsequent glacial erosion, as well as vigorous mass movement/denudation in the Holocene.

However, this complex evolution of the landscape in geological time is not adequately perceived at the planning level. The Taisho Pond, which was formed in 1915 when lava flowing out of Mt Yake blocked off the river flow, is artificially kept alive to appease tourist interest by a concrete weir that blocks the natural mechanism of the river to drain the small lake [29]. Small rocky tributaries that are vital conduits of transport in the watershed are blocked off or altered by small-scale weir construction and embankment engineering [34]. In particular, tourism related infrastructure buildup has had the effect of constraining the propensity of the river to flow in a multi-thread channel and limiting its floodplain dynamics, as well as impacting fine-scale heterogeneity of tributary streams. Several hotels and accommodations are currently located within the historical floodplain of the Azusa River [29].

Several species are possibly impacted due to anthropogenic modification of natural regimes, with the Chosenia (Salix arbutifolia) vegetation frequently cited as an indicator case [34,46,47]. Once found widely in Honshu, these riverbed vegetation colonies largely disappeared during the 20th century as rivers were modified in extensive scale all over Japan. Being a pioneer species, S. arbutifolia thrives on periodic disturbances such as flooding and in-channel gravel deposition. Kamikochi currently forms the last large-scale natural habitat for the species in the Honshu Island, but the future of the species is under threat in Kamikochi due to the suppression of natural disturbance regimes of the Azusa River. Iwata and Yamamoto (2016) [34] observed instances of flood intolerant species like Ulmus davidiana and Abies homolepis expanding their ranges in riparian sections that were formerly dominated by S. arbutifolia, but were subsequently subjected to flood controlling mechanisms.

4.2. Results of Interviews and Observations

During the first year of the project, interviews with local tourism service providers, National Park staff, and conservation scientists were conducted in order to understand the main contours of

tourism in the valley and management of its dynamic landscape. These interviews were open ended, and ranged from casual conversations to hour-long discussions. A total of 7 in-depth interviews each spanning nearly an hour were the main sources of relevant information. The information derived is summed up below:

Category I. Service providers (Mountain huts): Typically, interviewees who worked in the mountain huts sought to portray Kamikochi as the perfect escapade for busy urban customers. Key words used by them were: a gentle place which does not require climbing skills or long hiking endurance in order to visit, soothing shade, water, and spectacular views of the North Japan Alps Range, and provision of relaxation. The manager of Tokusawa-en, a man in his 40s, proudly pointed out that his was the oldest accommodation facility in Kamikochi, and the popularity of the hut among hikers also partially stemmed from the fact that the famous novelist Yasushi Inoue mentioned it in his novel 'Hyoheki'—which incidentally became a major cause behind Kamikochi's popularity in postwar Japan, as described before. Accordingly, the hut sought to maintain its identity as a retreat for literary or artistic minded customers—many of its current lodgers are said to be painters and photographers. At the same time, Tokusawa-en seeks to orient itself to the financially better-off customers; a dormitory bed here costs around 120 USD per person per night, and there are exclusive suite style rooms costing up to 500 USD per room per night; yet, there is so much demand among visitors that during most weekends in summer and autumn, the hut operates at its full capacity. The yearly total of lodgers is around 10,000; most lodgers belong to the advanced age group (above 50 years). Nearly half of the lodgers are casual hikers, while the other half are hikers/mountaineers/climbers. Peak demand coincides with summer vacation and autumnal foliage, and a large number of the lodgers belong to tour groups. The manager pointed out that international travelers were more likely to pay the premium price in order to stay in plush rooms. Regarding the natural aspects of the landscape, while he took pride in the surrounding vista, he complained that the forest has become 'overgrown' due to National Park restrictions on logging, and curiously, had the opinion that the agropastoral landscape of early 20th century was more 'natural'. He was also of the opinion that the landscape remains largely the same around the area, although specific aspects such as snowfall, flowering, and foliage timing have recently been undergoing yearly fluctuations.

The Tokusawa-en Mountain Hut also stands out for its large number of female staff (20 of 23 staff are women), and one of the staff pointed out that they consciously sought to deliver an image of the hut as a place for relaxation, tasty cuisine, and the warmth of hospitality. It remains to be pointed out that those aspects are still frequently associated with women in Japanese lodging facilities. The same respondent pointed out that she enjoys the vibe when customers spend time drinking beer and talking amongst themselves, although male customers at times tend to get a little too loud. She took pride that the mountain hut enjoys high popularity among female hikers (nearly 70% of overnight stayers are women). However, she also acknowledged that most hikers are unaware of the fine details of the landscape, and she did not think many are aware of its geology.

In contrast to Tokusawa-en, the Kamonji-goya is a no-frills facility. It is also one of the oldest huts, but lacks provisions of luxury and is usually used by older hikers who know the place well. Its first owner, Kamonji Kamijo, also became the first renowned guide for the Japan Alps, when he escorted the British missionary Walter Weston over a hundred years ago. Weston's travelogues in the area were key for introducing the North Japan Alps to the outside world; he is also often credited for coining the name 'Japan Alps'. At Kamonji-goya, only around 1000 people stay throughout the year, and the owner, a woman in her 70s, pointed out that it is one of the simplest huts in terms of facilities, but it is perhaps closest to what mountain huts looked like in Japan before the rapid economic development in the latter half of the 20th century. As she has been in the area for most of her life, she keenly perceived the changes in the landscape, and pointed out that the riverbed has risen by several meters in the last few years due to in-channel deposition of gravel in the Azusa River. She had also seen as many as 10 tunnels being opened up during her 50 year long association with the place, and made the interesting observation that during postwar development, the focus was on making the destination comfortable

and accessible for urban tourists, which resulted in Kamikochi becoming 'too easy to visit', leading to congestion, pollution of waterways, and alteration of the landscape. One of her other interesting remarks was that most people tend to go to places that are already well-known, and only a few are interested in off-the-beaten track experiences. Thus, even while she was eager to welcome visitors, she held a different view of the landscape, and after witnessing some of the longer term changes (on a human timescale), she did not interpret the place as remaining unchanging or pristine.

Category II: National Park Management: The National Park and visitor center staff, who form the formal management structure of the place, echoed the theme of the beautiful valley. Some key points that came out were visitor behavior, rules, no-littering, appropriate behavior. They sought to highlight problems such as visitor feeding of wild monkeys in the area, which in turn makes the monkeys more docile and dependent on offerings, and increases the chances of encounters with people at the same time. Typically, their vision of the landscape revolved around the concept of a beautiful playground that they consistently sought to keep open to as many people as possible, even though they voiced concern that visitation related problems are driving changes in the local wildlife. As it is obvious, there is some dichotomy in this vision for Kamikochi. In addition, National Park visitor centers also apparently highlight the visual beauty of the place along the lines of eternal and pure, perhaps in order to appeal to visitor image of Kamikochi.

Category III. Conservation scientists: On the other hand, scientists who worked on the compilation of the Natural History in the Kamikochi Valley tended to disagree in clear terms with the observation that the Kamikochi landscape is natural. One of them mentioned the significant impact of river engineering on vegetation species such as S. arbutifolia, which in turn influenced vegetation succession on gravel bars and altered riparian forest composition over the long term. Two of the respondents had also monitored the river morphology and riparian vegetation for well over a decade, and they emphasized the point that natural disturbance regimes are the driving factor for landscape composition and renewal, and it was anthropogenic alteration of such disturbance regimes, based on a static view of the riverscape frozen in time, that was responsible for the loss of spatial heterogeneity. Although they were aware of the potential effect of climate change on vegetation and other biophysical features, they feared that the ongoing homogenization of the riverbed into a single dominant channel (Figure 4) and the loss of fine-scale mosaic in the active riverbed was a more pressing threat.

(**a**)

Figure 4. *Cont.*

(**b**)
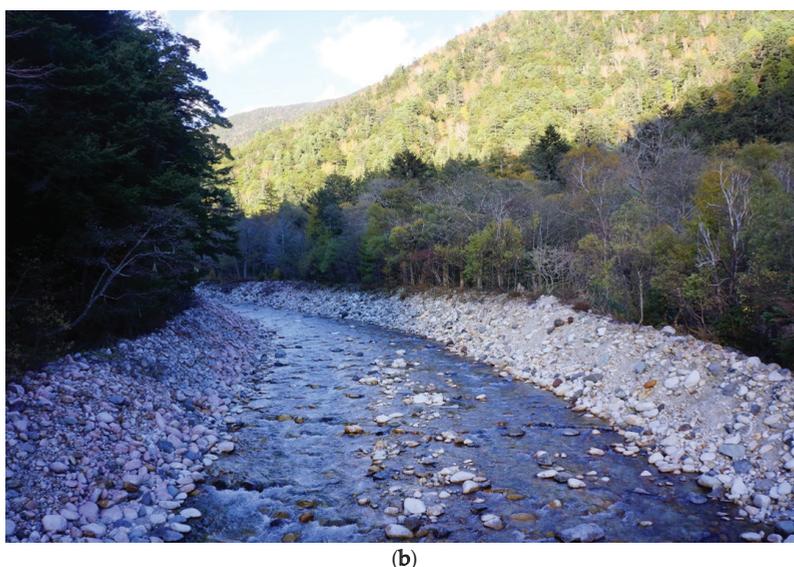
Figure 4. Subtle or clear anthropogenic modifications of the environment are widespread in Kamikochi. (**a**) (above) Tourists enjoying a sunny day on the gravelly bed of the Azusa River in Kamikochi; note the artificial enforcement of the bank in the foreground. (**b**) (below) The relatively straight single thread channel is the result of flow modification and embankment engineering. Photos provided by the author.

Personal observations: During several field trips in the region, it became clear that the landscape is both thoroughly constrained by human design and retains a powerful dynamic potential. Although the Azusa River may appear natural at Kamikochi, it is hardly a natural river, as cobbled embankments stretch all the way to the vicinity of its headwaters. Heavy machinery is present in the area throughout the year, and occasionally earth moving machines can be seen operating inside the river channel. This author witnessed in-channel gravel mining, boulder rearrangement, and construction or expansion of new trails (some of them are necessitated by snowmelt or landslide induced damage to existing trails). Yet whenever the river gets a chance, it reclaims its territory, as frequent bank erosion, hollowing out of soil from under the trails, and rock slides along tributary valleys demonstrate (Figure 5). During the early spring season every year, a temporary trail is opened along a portion of the riverbed, as the original narrow trail on the embankment is vulnerable to sudden rockfall and snowmelt induced mass movement. While there are guided tours in the area, most focus on a narrow view of explaining the biota (especially flowering plants that are visually attractive and popular among visitors) and tour guides typically do not venture into topics such as geology and recent anthropogenic changes in the river morphology. Visitors are also typically content to see Kamikochi as an ideal retreat from the hustle and bustle of urban life, and are seemingly satisfied with the stories of its serenity and beauty. This visitor inclination towards relaxation perhaps reinforces the epitomization of Kamikochi as a serene landscape, and fosters inadequate information about recent anthropogenic turmoil to geomorphological processes in that area, although some younger hikers seemed to be at least partly aware of this problem.

(**a**)

(**b**)

Figure 5. Human modification of the landscape and nature's forces to reclaim their territory working side by side. (**a**) (above) The main trail near Tokusawa area (on the right) and a supplemnatry trail (center) opened up to avoid spring snowmelt and landslides from above. (**b**) (below) Rockfall on the trail upstream: such dynamic landscape properties are essential for active riverbed formation. Photos provided by the author.

4.3. Results of the Questionnaire Survey

The questionnaire survey was administered during the second year of the project. It was aimed at gauging visitor characteristics, preferences, and consciousness about the Kamikochi landscape. Among the 80 valid responses, 43 were by women and 36 were by men, and 1 respondent replied 'other' as gender. Respondents mostly belonged to the advanced age-group: 33.8% were from the 50–60 years

old age-group and 23.8% belonged to the 60–70 years old age group. The results of the questionnaire are described below with graphical explanations:

As seen from the data in Figure 6, most of the respondents were familiar with the Kamikochi landscape, 51.3% replied that they visited the site between 2 to 4 times and 41.3% replied that they visited the place more than 5 times. In contrast, only 7.5% were first time visitors. A majority of the visitors (53.8%) were familiar with the National Park visitor center, with 36.3% replying that they had visited the facility multiple times.
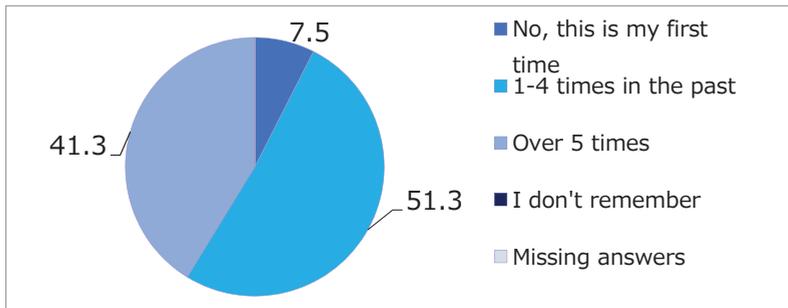
Figure 6. Answers for the question: Do you have previous experience of visiting this place (or surroundings)?

Regarding the type of activity they engaged in, Figure 7 shows that 60% of respondents were either part of a group or a family; and group tour or family travel were dominant objectives. A total of 26.3% respondents were solo hikers/climbers, and only 2.5% identified themselves as nature observers (Figure 7). The overwhelming majority of visitors (98.8%) stayed one night or more, and as many as 40% stayed for over 3 nights. Lodging is not cheap in the mountain hut where the survey was administered, this leads to two conjectures: (i) that most of the visitors are financially well-off and (ii) due to their advanced age, they preferred a slow mode of travel. However, when asked whether they were doing a circuit or traverse of the region, only 12.5% replied in the positive, indicating that most visitors remained within the valley and did not travel widely across the region.
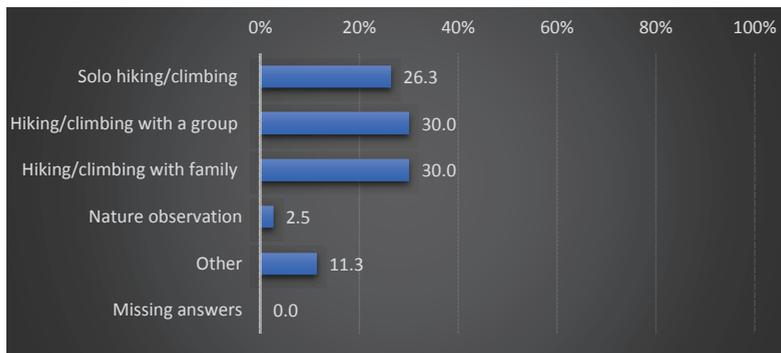
Figure 7. Types of visitors identified from the question: What is your objective for visiting the National Park this time?

When asked what aspects of the landscape they had most interest in, the category 'view from mountains and/or photography' was the overwhelming favorite with 90% response rate, while the category of 'mountain (peak)' was also chosen by 60%. Mountain vegetation came a close third with a 55% response rate. As multiple answers were possible, there is considerable overlap of preferences here,

but when contrasted with the 35% selection of the category 'human aspects/mountain hut culture', it is clear that the biophysical attributes of the landscape enjoy clear popularity among visitors (Figure 8).
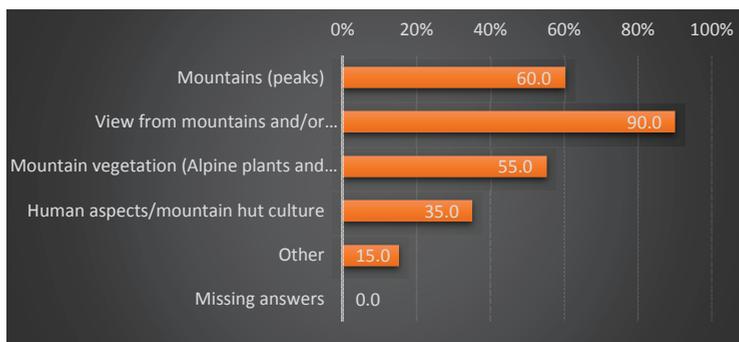
Figure 8. Visitor attractions revealed from the question: What is the most attractive feature for you in this place (and surroundings)? (Multiple answers were possible).

Yet, as Figure 9 depicts, despite their familiarity with the landscape and prior visits to the National Park Visitor Center, a majority of respondents indicated that they did not understand much about the biophysical foundations of the environment such as its geology, geomorphology, and ecology; an additional 12.5% of respondents replied that they had nearly no knowledge about those aspects.
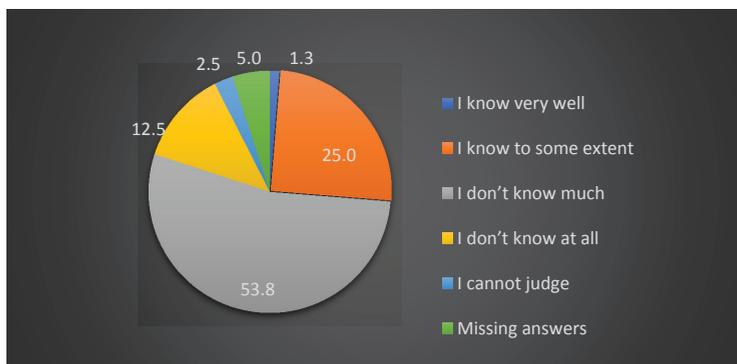
Figure 9. Visitor self appraisal of environmental knowledge from the question: How much do you think you know about the geology, geomorphology, and ecology of North Japan Alps?

When asked if they were aware of 'changes' to the ecosystems of the North Japan Alps, 63.8% answered in the affirmative. However, when asked where they perceived the 'change' to be occurring, 36.3% of the respondents could not provide an answer, while 33.8% identified 'climate', 35% identified 'animals', and 23.8% identified 'plants.' Multiple selections were possible for this question, so there is some overlap among the change aspects identified by the respondents. Interestingly, changes in the river morphology were identified by only 21.3% of visitors, indicating that visitor awareness of extensive human modification of the river course and fluvial properties remains low (Figure 10).
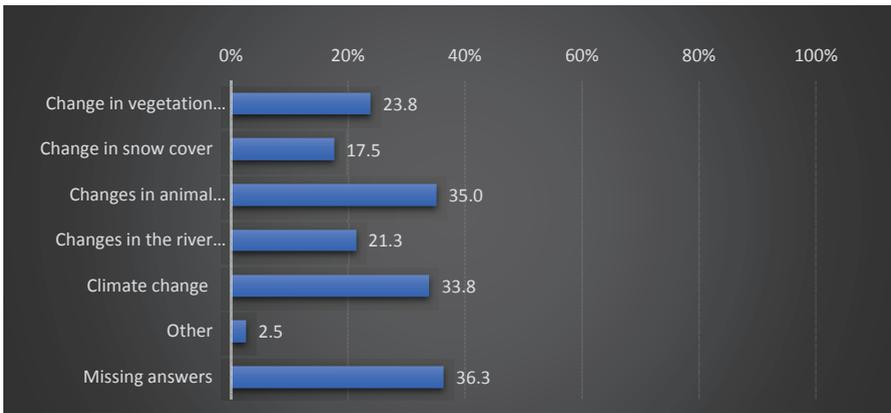
Figure 10. Visitor perceptions of changes in the environment (multiple answers were possible).

When further asked about what factors they saw as being responsible for the changes, only 17.5% identified overuse of natural resources, while 30% chose 'natural hazards' as the cause. Although 45% identified global environmental change as a possible factor (again, multiple answers were possible for this item); the anomaly in the responses is clear (Figure 11). These aspects are further explained in the 'Discussion' section below. Finally, when asked if they would participate in any ecotour program that included explanations on the geological, geomorphological, and ecological aspects of the area, the majority (53.8%) replied in the affirmative, indicating a clear demand for such information among visitors.
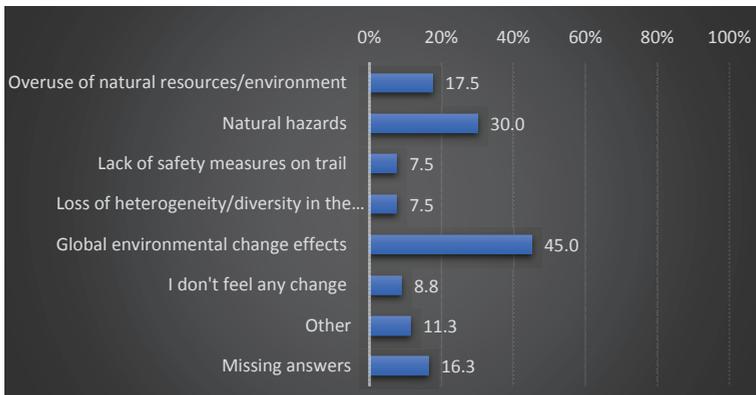
Figure 11. Visitor perceptions of causes behind changes in the environment.

5. Discussion

As the interview and survey data reveal, there is an apparently high degree of appreciation regarding the biophysical aspects of the mountain landscape. However, there are also clear differences between types of stakeholders regarding how those aspects are perceived, interpreted, or valued. While conservation scientists emphasized the dynamic, heterogeneous, and at times unruly landscape characteristics, tourism service providers generally portrayed the place as having a fixed characteristic, which is based on the ideal of a scenic retreat for urbanites. This view of the landscape is also bolstered by the National Park narrative of a beautiful Kamikochi. Tourism service providers were aware of some changes to the environment, but they were mainly sensitive to seasonal or decadal changes,

due to the fact that aspects such as flowering and foliage timings form the bases of visitor demand. They typically did not show high awareness of anthropogenic changes to the geomorphological or biological aspects of the area, or of changes that are not readily visible, although some respondents who were associated with the place for multiple decades did voice their apprehension towards ongoing man-made changes near landscape features such as widespread tunnel and road construction. The National Park management sought to highlight problems such as feeding wild animals, off-trail walking that damaged fragile plants, and littering of trash; but did not exhibit a clear stance on the extensive modification of the hydrological properties of the Azusa River. As identified by Iwata (2016) [21] and Iwata and Yamamoto (2016) [32], the construction of tributary streams for controlling gravel flow into the primary channel, straightening of the main flow, and embankment fortification and road/trail expansion on the embankments all carry the negative impact of homogenizing the active riverscape. In addition, suppression of natural disturbance regimes is causing changes in vegetation such as for the *S. arbutifolia* colony, which also serves as an indicator for the vigor and integrity of the natural disturbance regimes.

Most visitors surveyed in the study were familiar with the place, as they had visited it multiple times, but at the same time their responses indicated that they had very little information about geological and geomorphological aspects of the landscape. They also did not get much information about ongoing human modification of the place, despite visiting National Park information centers multiple times. This suggests that there is an urgent need to provide information on long-term anthropogenic impacts on the landscape, as well as dynamic landscape mechanisms operating over geological time. There is clear solidarity among visitors with the visually attractive parts of the landscape, such as the mountain ridgeline and flowering plants. The majority of respondents identified several changes in the environment of the North Japan Alps in general, but most could not identify specific changes to the place they were in, and their interpretation of major challenges for the landscapes sometimes yielded anomalous answers to claims made by conservation scientists (such as the choice of 'hazards' as a major cause of change), which is probably explained by the lack of information on the part of visitors that was highlighted several times in their own responses. In addition, most visitors apparently did not explore the area widely and remained confined to specific lookouts.

With the backup of personal observations of this author, it can be argued that each of the positions represented by the interviewees is logical, and that the anomalies stem from the type of association the particular individual enjoys with the landscape, the length of that association, and his/her preferred vision of the landscape. Time emerged as a key factor behind respondents' perceptions of the landscape. Respondents below 50 years of age and those with less than 20 years of constant association perceived annual fluctuations keenly but were not always aware of changes over longer timescale. On the other hand, respondents who were associated with the place for longer time were aware of changes dating back further in the past, but only as far as their memory helped them. Visitors typically had a shallower knowledge of the landscape across time, and while they could identify broad-scale problems, they could not point out specific changes. Conservation scientists were the only group that had the grasp of changes operating over the longest timescale—i.e., geological time—and their view of the landscape as constantly oscillating due to episodic volcanism, uplift, glacial and river erosion, and the transportation of materials from the ridge to lowland remains vital for addressing the integrity of this dynamic place. There are indications that this perspective is currently missing from management priorities, and that there is an urgent need to incorporate it into the planning fold.

Extending the insights to the international context, it can be posited that tourism stakeholders, especially visitors, possess a high interest in visually appealing aspects of the environment and can be willing to contribute to conservation interests. As a case study in the Eastern Ore Mountains of Germany demonstrated, availability of nature-based experience and visually attractive landscapes are major pull factors for visitors who generally tend to show a willingness to pay for protecting those aspects [48]. Findings from the Kamikochi Valley positively correlate with the broad patterns of this study. However, it should also be kept in mind that there are differences in stakeholder attitudes and

perceptions depending on their social and cultural backgrounds, as revealed by a comparative study of visitors of different nationalities by Priego et al. (2008) [49], and planning inputs must be formulated upon careful deliberation of such characteristics.

It can also be pointed out that this case study represents a parallel to the US scenario involving the construction of the O'Shaughnessy Dam at Hetch Hetchy Valley in the early 19th century. In the case of Hetch Hetchy, the dam was eventually built and the picturesque valley was inundated by the reservoir, but that episode became instrumental for raising public awareness towards nature conservation and the institutionalization of the US National Park Service in 1916 [50].

In a broader context, dynamic physical processes operating over million year timescales and ecosystem responses to natural disturbance regimes engender heterogeneity and visual beauty of mountain landscapes—yet when packaged for tourism, only certain parts of that dynamic whole is valued and communicated, while the underlying structure of the landscape is subjected to continuous modification. Mountain landscapes that are easily accessible and popular such as Kamikochi are constrained by their developmental pathway that facilitates mass consumption. The resilience of such landscapes has probably declined over time as this case study suggests, and anthropogenic changes to their physical properties and processes make these places more vulnerable to shocks such as climate perturbations. So far, tourism development and landscape conservation have largely progressed on opposing trajectories, and this situation has led to tourism being a part and parcel of the wider human modification of earth processes in mountain environments. However, as the findings of this study also indicate, there is a coalescence on the value of the biophysical landscape among stakeholder types, and if tourism planners can work with conservation scientists under the fold of protected areas such as National Parks, tourism can possibly incentivize conservation of dynamic properties of such landscapes.

Future research: This study provided important management indicators such as the clear demand of geological, geomorphological, and ecological information on the part of visitors, the lack of information about ongoing anthropogenic modification of spatial heterogeneity and natural disturbance regimes, and the relatively simple nature of visitor interaction with the Kamikochi Valley. It will be pertinent to design management and visitor education programs based on these insights and measure their efficacy over time. In addition, further monitoring of environmental change in spatial and temporal dimensions will be needed.

6. Conclusions

This article provided an analysis of sustainable tourism challenges in a dynamic landscape through the case study of Kamikochi Valley of North Japan Alps. As one of the signature mountain destinations in Japan, the area is subjected to intense visitor pressure from spring to autumn. The intensity of visitation results in direct pressure on the landscape and wildlife, as well as in more subtle pressure in the form of ongoing infrastructure buildup and modification of key geomorphic processes. The active riverbed of the Azusa River encapsulates a complex range of processes such as past volcanism, ridge formation in the Quaternary, glacial erosion during recent glacial maxima, as well as Holocene deglaciation and high rates of mass movement/denudation. However, such processes are inadequately perceived in the planning mechanism, as well as by individual tourism service providers and visitors. The expansion of tourism has favored a static and risk averse approach to landscape management, which has resulted in obstruction or modification of key landscape level processes. While visually appealing aspects such as the ridgeline and flowering plants are keenly appreciated for their beauty, the fluctuating and at times unruly nature of the natural landscape itself does not enjoy enough attention from guiding tours or visitor information contents. The visitor survey revealed that while visitors are aware of issues such as climate change, they typically do not have an adequate understanding of geological and geomorphological properties of the place. As the survey also revealed a general demand of such information, it remains an urgent task to provide information on the dynamic landscape and its current vulnerability to visitors. Urgent measures are also required to ensure that the place is managed

with its natural change pathways and heterogeneity in mind. Finally, as mountain landscapes are highly dynamic and their evolution and resilience properties are highly location-specific, the overarching challenge for managing tourism in a sustainable manner remains in understanding, appreciating, and proactively conserving the biophysical mechanisms of such places.

Appendix A

Figure A1. Questionnaire used in the study (Translated version).

References

1. Richins, H.; Johnsen, S.; Hull, J.S. Overview of mountain tourism: Substantive nature, historical context, areas of focus. In *Mountain Tourism: Experience, Communities, Environments, and Sustainable Futures*; Richins, H., Hull, J.S., Eds.; CABI: Wallingford, UK, 2016; pp. 1–12.
2. Parish, R. *Mountain Environments*; Routledge: London, UK, 2002.
3. Janke, J.R.; Price, L.W. Mountain landforms and geomorphic processes. In *Mountain Geography: Physical and Human Dimensions*; Price, M.F., Byers, A.C., Friend, D.A., Kohler, T., Price, L.W., Eds.; University of California Press: Berkeley, CA, USA, 2013; pp. 127–166.
4. Chakraborty, A. Mountains as vulnerable places: A global synthesis of changing mountain systems in the Anthropocene. *Geo J.* **2019**. [CrossRef]

5. Simpson, T. Modern mountains from the enlightenment to the Anthropocene. *Hist. J.* **2018**, *62*, 1–29. [CrossRef]

6. Cosgrove, D.; Della Dora, V. (Eds.) *High Places: Cultural Geographies of Mountains, Ice and Science*; IB Tauris: New York, NY, USA, 2009.

7. Marston, R.A. Land, life, and environmental change in mountains. *Ann. Am. Assoc. Geogr.* **2008**, *98*, 507–520. [CrossRef]

8. Vaccaro, I.; Beltran, O. (Eds.) *Social and Ecological History of the Pyrenees: State, Market, and Landscape*; Left Coast Press: Walnut Creek, CA, USA, 2010.

9. Lozny, L. (Ed.) *Continuity and Change in Cultural Adaptation to Mountain Environments: From Prehistory to Contemporary Threats*; Springer: New York, NY, USA, 2013.

10. Pandit, M.K. *Life in the Himalaya: An Ecosystem at Risk*; Harvard University Press: Cambridge, MA, USA, 2017.

11. Kuščer, K.; Mihalič, T.; Pechlaner, H. Innovation, sustainable tourism and environments in mountain destination development: A comparative analysis of Austria, Slovenia and Switzerland. *J. Sustain. Tour.* **2019**, *25*, 489–504. [CrossRef]

12. Cavallaro, F.; Ciari, F.; Nocera, S.; Prettenthaler, F.; Scuttari, A. The impacts of climate change on tourist mobility in mountain areas. *J. Sustain. Tour.* **2017**, *25*, 1063–1083. [CrossRef]

13. Scott, D.; Jones, B.; Konopek, J. Implications of climate and environmental change for nature-based tourism in the Canadian Rocky Mountains: A case study of Waterton Lakes National Park. *Tour. Manag.* **2007**, *28*, 570–579. [CrossRef]

14. Bonzanigo, L.; Giupponi, C.; Balbi, S. Sustainable tourism planning and climate change adaptation in the Alps: A case study of winter tourism in mountain communities in the Dolomites. *J. Sustain. Tour.* **2016**, *24*, 637–652. [CrossRef]

15. Wang, S.-J.; Zhou, L.-Y. Integrated impacts of climate change on glacier tourism. *Adv. Clim. Chang. Res.* **2019**, *10*, 71–79. [CrossRef]

16. Strom, E.; Kerstein, R. Mountains and muses: Tourism development in Asheville, North Carolina. *Ann. Tour. Res.* **2015**, *52*, 134–147. [CrossRef]

17. *Mountaineering Tourism*; Musa, G.; Higham, J.; Thompson-Carr, A. (Eds.) Routledge: London, UK, 2015.

18. Goudie, A.S.; Viles, H.A. *Geomorphology in the Anthropocene*; Cambridge University Press: Cambridge, UK, 2016.

19. Gartzia, M.; Pérez-Cabello, F.; Bueno, C.G.; Alados, C.L. Physiognomic and physiologic changes in mountain grasslands in response to environmental and anthropogenic factors. *Appl. Geogr.* **2016**, *66*, 1–11. [CrossRef]

20. Slaymaker, O.; Embleton-Hamman, C. Advances in global mountain geomorphology. *Geomorphology* **2018**, *308*, 230–264. [CrossRef]

21. Haukeland, J.V.; Veisten, K.; Grue, B.; Vistad, O.I. Visitors' acceptance of negative ecological impacts in national parks: Comparing the explanatory power of psychographic scales in a Norwegian mountain setting. *J. Sustain. Tour.* **2013**, *21*, 291–313. [CrossRef]

22. Taher, S.H.M.; Jamal, S.A.; Sumarjan, N.; Aminudin, N. Examining the structural relations among hikers' assessment of pull-factors, satisfaction and revisit intentions: The case of mountain tourism in Malaysia. *J. Outdoor Recreat. Tour.* **2015**, *12*, 82–88. [CrossRef]

23. Clivaz, C.; Langenbach, M. Organisation and professional development of mountain guides and leaders in tourist regions: The Swiss case compared with the French experience. *J. Outdoor. Recreat. Tour.* **2020**, *29*. [CrossRef]

24. Iwata, S. Kamikochi no Chikei no naritachi (Landscape characteristics of Kamikochi). In *Natural History in the Kamikochi Valley: Physiography, Dynamics and Conservation of Riparian Forests*; Research Group for Natural History in Kamikochi, Ed.; Tokai University Press: Tokyo, Japan, 2016; pp. 2–18, [In Japanese].

25. Harayama, S. Kita arupusu wo tsukutta daifunka: Yari-Hotaka karudera to wa (The superexplosion behind the Formation of North Japan Alps: Exploring the Yari Hotaka caldera). *Kagaku (Science)* **2014**, *121*, 69–73, [In Japanese].

26. Harayama, S. Kamikochi bonchi no chikei keisei-shi daiyonki Yari-Hotaka –Takidani kakosenryokugan kompurekusu (Geomorphic Development of the Kamikochi Basin and Quaternary Yari-Hotaka Caldera and Takidani Granodiorite Complex). *Chishitsugaku Zasshi (J. Geol. Soc. Jpn)* **2015**, *121*, 373–389, [In Japanese]. [CrossRef]

27. Nagano Prefecture Tourism Statistics, 2014. [In Japanese]. Available online: http://www.pref.nagano.lg.jp/kankoki/sangyo/kanko/toukei/documents/26kankouchi.pdf (accessed on 2 March 2020).

28. Chakraborty, A. Japan's mountain tourism at a crossroads: Insights from the North Japan Alps. *Tour. Plan. Dev.* **2018**, *15*, 82–88. [CrossRef]

29. Shimazu, H. Azusagawa no chikei to mizu no nagare (Geomorphological and hydrological aspects of the Azusa River). In *Natural History in the Kamikochi Valley: Physiography, Dynamics and Conservation of Riparian Forests*; Research Group for Natural History in Kamikochi, Ed.; Tokai University Press: Tokyo, Japan, 2016; pp. 19–37, [In Japanese].

30. Kamikochi Visitor Center. Kamikochi wo manabu (Learning about Kamikochi). [In Japanese]. Available online: https://www.kamikochi-vc.or.jp/learn/history/index.html (accessed on 2 March 2020).

31. Murakushi, N. *Kokuritsu koen seiritsu shi no kenkyu (Research on the establishment of National Parks of Japan)*; Hosei University Press: Tokyo, Japan, 2005; [In Japanese].

32. Jones, T. The most beautiful valley in Japan: Kamikochi, the Japan Alps and National Parks in Japan. *Arcadia* **2016**, *8*. Available online: http://www.environmentandsociety.org/arcadia/most-beautiful-valley-japan-kamikochi-japan-alps-and-national-parks-japan (accessed on 2 March 2020).

33. Shimazu, H. Kankokyaku no kodo kara mita shizen koen riyo no genjo to mondaiten (Current situation and problems of nature park usage from the perspective of tourist mobility). *Bull. Rissho Univ.* **1999**, 29–45, [In Japanese]. Available online: http://repository.ris.ac.jp/dspace/bitstream/11266/1930/1/KJ00000161074.pdf (accessed on 2 March 2020).

34. Iwata, S.; Yamamoto, N. Hakai sareru kamikochi no shizen (Destruction of Kamikochi's natural landscape). In *Natural History in the Kamikochi Valley: Physiography, Dynamics and Conservation of Riparian Forests*; Research Group for Natural History in Kamikochi, Ed.; Tokai University Press: Tokyo, Japan, 2016; pp. 146–167, [In Japanese].

35. Gerring, J. *Case Study Research: Principles and Practices*; Cambridge University Press: Cambridge, UK, 2007.

36. Tight, M. *Understanding Case Study Research: Small-Scale Research with Meaning*; Sage: London, UK, 2017.

37. Schwandt, T.A.; Gates, E.F. Case study methodology. In *The Sage Handbook of Qualitative Research*, 5th ed.; Denzin, N.K., Lincoln, Y.S., Eds.; Sage: Thousand Oaks, CA, USA, 2018; pp. 341–358.

38. Swanborn, P. *Case Study Research: What, Why and How?* Sage: Thousand Oaks, CA, USA, 2010.

39. Patton, M.Q. *Qualitative Research and Evaluation Methods*, 3rd ed.; Sage: Thousand Oaks, CA, USA, 2002.

40. Roulston, K. *Reflective Interviewing: A Guide to Theory and Practice*; Sage: Thousand Oaks, CA, USA, 2010.

41. DeVaus, D. *Surveys in Social Research*, 6th ed.; Routledge: London, UK, 2014.

42. Tracy, S.J. *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact*, 2nd ed.; Wiley-Blackwell: Chichester, UK, 2019.

43. *Natural History in the Kamikochi Valley: Physiography, Dynamics and Conservation of Riparian Forests*; Research Group for Natural History in Kamikochi (Ed.) Tokai University Press: Tokyo, Japan, 2016; pp. 1–187, [In Japanese].

44. Miles, M.B.; Huberman, A.M.; Saldana, J. *Qualitative Data Analysis: A Methods Sourcebook*, 4th ed.; Sage: Thousand Oaks, CA, USA, 2019.

45. Oikawa, T. Yakedake kazan gun no chishitsu—kazan hattatsushi to funka yoshiki no tokucho (Geology of Mt. Yake volcanic group: Chronology of volcanic formations and eruption characteristics). *Chishitsugaku Zasshi (Bull. Geol. Sci.)* **2002**, *108*, 615–632, [In Japanese]. [CrossRef]

46. Ishikawa, S.; Shimazu, H. Kahan rin to kado shokusei no dotai (Dynamic nature of riparian and in-channel vegetation). In *Natural History in the Kamikochi Valley: Physiography, Dynamics and Conservation of Riparian Forests*; Research Group for Natural History in Kamikochi, Ed.; Tokai University Press: Tokyo, Japan, 2016; pp. 75–88, [In Japanese].

47. Ishikawa, S. Yanagi rui no ikinokori senryaku (Survival strategies of willow species). In *Natural History in the Kamikochi Valley: Physiography, Dynamics and Conservation of Riparian Forests*; Research Group for Natural History in Kamikochi, Ed.; Tokai University Press: Tokyo, Japan, 2016; pp. 89–101, [In Japanese].

48. Bastian, O.; Stein, C.; Lupp, G.; Behrens, J.; Renner, C.; Grunewald, K. The appreciation of nature and landscape by tourism service providers and visitors in the Ore Mountains (Germany). *LO* **2015**, *41*, 1–23. [CrossRef]

49. Priego, C.; Breuste, J.; Rojas, J. Perception and value of nature in urban landscapes: A comparative analysis of cities in Germany, Chile and Spain. *LO* **2008**, *7*, 1–22. [CrossRef]

50. Righter, R.W. *The Battle over Hetch Hetchy: America's Most Controversial Dam and the Birth of Modern Environmentalism*; Oxford University Press: Oxford, UK, 2005.

Landscape as Digital Content and a Smart Tourism Resource in the Mining Area of Cartagena-La Unión (Spain)

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Abstract: This research makes a highly relevant contribution to the scientific analysis of the mining landscape using the example of Cartagena-La Unión (Spain). The landscape is interpreted from a twin perspective: as a type of digital content offered to visitors and as a highly valuable scenic tourism resource. The article features an extensive bibliographical review and offers different perspectives on the relationship between landscape, tourism, and smart promotion. The method used is both qualitative and quantitative due to the presentation of statistical data. It describes a purpose-designed form used for analyzing the landscape in question and a synthetic landscape assessment index, as a result of creating and using different indicators. Extensive field work and consultation with several sources provided information about the enclave, how much it appeals to visitors, and their level of satisfaction. The results achieved offer a new scientific vision of what a spectacular cultural landscape, and a point of reference for "mining heritage tourism", can represent.

Keywords: mining heritage; landscape; smart tourist promotion; scenic values

1. Introduction

The idea of smart tourism destinations (STD) emerged in the 1990s when "smart places" began appearing and continued later with the general acceptance of "smart cities" or efficient cities.

In 1996, the European Commission established the European Digital Cities (EDC), which is now regarded as the forerunner of the smart city idea [1]. Shortly after, the European Council held in 2000 devised the Lisbon Strategy, which heralded the start of smart places and the commitment to achieving a more competitive and digital economy [2]. This was complemented by the European Union's Sustainable Development Strategy, defined in the Swedish city of Gothenburg in 2001 and subsequently revised in 2004 [3]. Broadly speaking, the approach taken in Europe is underpinned by ICTs (information and communication technologies) applied to smart growth.

In the late 1990s, certain path-breaking urban experiences began to be analyzed in the United States. A total of 20 cities were selected to start with, along with a set of fundamental variables, mainly economic competitiveness, social cohesion, and environmental sustainability. These urban spaces were then classified as smart places.

However, the term "smart place" was soon replaced by "smart city", in order to delve into the problem of sustainability in urban areas. Smart cities are geographically better defined than their immediate predecessors and have the advantage of coinciding with specific political–administrative limits [4]. Later, the term began to be linked to ICTs, which are acknowledged to play a key role in promoting sustainable development and progress, yet without renouncing the joint participation of private organizations and public bodies and the achievement of a comprehensive urban approach [5].

The idea of smart cities is the forerunner to SDTs [6–8], destinations where territorial and tourist aspects are identified as being smart [9]. STDs are always linked to the destinations' competitiveness and improving tourists' experience, and not so much to governance and inhabitants' quality of life as in the case of smart cities. Another difference has to do with the geographical limits of both concepts, which may or may not coincide. Yet apart from the differences between smart cities and STDs, they can be said to share the smart place idea, either in the form of a place with tourist uses or as a place subject to urban planning and management.

Smart tourist destinations represent the overcoming of mature tourist destinations, with management and promotion approaches based on the potential afforded by information technologies [10]. The changing dynamics triggered by these new challenges are based in particular on technology being made to serve tourists, applying sustainable criteria in destination management and quickly responding to visitors' needs; in other words, a broad range of new possibilities that project the sector's current image of leadership, with strategic and dynamic definitions that will define the most immediate future.

The most advanced countries have already explicitly built this new tourism paradigm into their tourism policies. In Spain, for example, it is enshrined in the Comprehensive National Tourism Plan 2012–2015 and in the Spanish Tourism Horizon 2020 Plan [11]. These plans characterize STDs as being innovative, accessible, and technological places. This guarantees the sustainable development and competitive advantages of tourist areas, as well as visitors' interaction with the environment and the landscape's scenic features. These features are essential for any definition in this respect [12].

Smart tourism brings many advantages to mining and industrial heritage by boosting its value and identification as a cultural resource. Using digital techniques to promote and manage destinations puts resources more within visitors' reach, provides more opportunities for interaction, and builds the tourist image of industrialization-related places [10].

ICTs turn the places visited into smart destinations that steadily become more competitive through the inherent sustainable use of resources. They also make it easier both to integrate visitors into the architectural, environmental, and socioeconomic environment, and to disseminate the scenic values of abandoned mining areas. This technological process, which is complicated and costly at the start-up stage, represents an improvement on traditional tourist models.

Apart from ICTs, the role of data in smart destinations is very important from different points of view. Firstly, because they facilitate a more efficient management of tourist sites. The data offers the necessary information to understand what the strategies should be for a better promotion and management of the destination. Secondly, the data facilitates the connection between visitors, visited spaces, and available resources, as well as the interaction of these three elements with the surrounding territory. The result is the emergence of a new competitive capacity, the projection of the destination in a modern and attractive way, and the promotion of a model that is, in general, more sustainable.

Abandoned mining areas can be portrayed as culturally interesting places. The landscapes that are left after being mined for such long periods of time are unquestionably cultural due to the profound changes to the natural environment, with an intensity and visual impact that varies from time to time. These landscapes are the technical, economic, and social heritage of previous generations. This is how they have come to be regarded, prompting a general agreement in expressing the need to protect and promote them [13].

These landscapes are especially unique because of the diversity of heritage that remains, the heavy environmental impact, and the natural dependence on geological resources; the close ties with the land and material mining and transportation infrastructure; the workers' housing in the form of isolated villages; and the different kinds of scenery generated and the aesthetics associated with ruin and neglect.

The environmental impacts caused are always profound, meaning that any projects involving new tourist uses entail first restoring the natural environment to remove the harmful effects of pollution. Doing so is a large-scale task that calls for enormous technical and economic efforts. The results

achieved, after years of numerous international experiences, are spectacular because they create new spaces for leisure and tourism subject to the strictest sustainability criteria [14–16].

In most cases, new museums and interpretation centers have been opened, with the participation of local public and private institutions or associations interested in the industrialization heritage. The fact that these are done on a local scale means that there is an extensive variety of new proposals for their cultural use, management, and promotion. That is perhaps why mining and industrial heritage recovery projects have ended up being regarded as secondary for more specialized thematic research [17].

Although mining area landscape studies are relatively abundant, many refer to ecological conditions and environmental protection planning after the abandonment of the mines [18,19], and few publications have focused on the scenic conditions left after mining stops, and on how to apply new technologies to promote culture and tourism. Sometimes they refer to their advantages for smart management of destinations and their associated landscapes [20], and other times they address the opportunities for disseminating mining or industrial heritage values in education [21].

One of the most interesting publications is a conceptual approach to smart tourism of industrial heritage, with different digital adaptation models [22]. The main idea argued is that this heritage not only facilitates investment in physically restoring buildings, but also collaborative organization-related actions, the local community's involvement, spreading ICTs, and boosting technological competitiveness. These represent a broad set of measures and advantages that haven given rise to what is known as a "smart industrial tourism business ecosystem" (SITBE).

This research focuses on one of the most significant abandoned mining areas in Europe, with a heritage site linked to an area that was profoundly transformed by mineral mining. The result is an extraordinarily and aesthetically unique landscape, with differently-colored stretches of land, chimneys, furnaces, opencast mines, machine rooms, etc. The extensive restoration work required represents a benchmark in terms of environmental restoration of the landscape for tourist uses. These features, coupled with the initial hypothesis that there has been enough management and promotion to make it a smart tourist destination, fully justify the choice of the area as a case study (Figure 1).
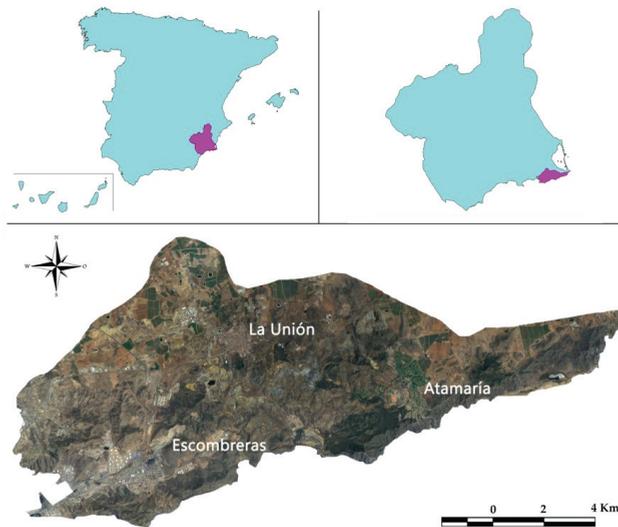
Figure 1. Location of the Cartagena-La Unión mining area. Source: own statistics.

The main objectives of the research are to: (i) characterize La Unión's mining landscape as a result of a long process of human intervention in the area; (ii) determine the scenic and aesthetic variables of

the mining landscape; (iii) identify the extent to which the landscape is present on Internet and its digitization for tourism purposes; and (iv) find out how the mining landscape in the area in question is used for tourism purposes.

2. Methods

In this study, the Cartagena-La Unión mining area was selected on account of its landscape values derived from its centuries-old mining activity. The resulting landscape is spectacular due to its highly colorful nature and ruin-like scenery, that is, scenery based on the string of mining operations carried out during different periods and using different techniques, but all in the same area. The area has recently been turned into a tourist site and place for contemplation, applying ICT digital techniques as the best way of promoting the mining landscape, its aesthetic qualities, and the changes it has undergone.

The method followed throughout the research was basically qualitative, which is deemed most appropriate in a case study. Significant time was spent in November 2019 on the bibliographic review and mapping analysis, consulting public environmental protection documents, conducting the field work, and drawing up a landscape analysis form. The research ended with an analysis of the web presentation and landscape-related digital content. This part gives visitors the chance to find out about the landscape in a different way, visiting it digitally online and letting them interact quickly with existing tourist resources.

The method could also be defined as mixed because a key feature in some phases of the study was to collect quantitative information, such as the surface areas of the different protection areas, or to consult visitor statistics for the last few years.

The landscape analysis form is a fundamental part of the research. It involved pre-selecting a wide range of indicators of significant content in relation to the interests of analysis. The indicators selected to carry out the landscape analysis were taken basically from the existing literature and from the field work during the first phases of the research. The list consists of a total of 22 indicators, distributed in four different groups and referring to built elements, landscape environment and scenic quality, landscape protection and management, and valuation of the mining landscape.

The evaluation method followed in each indicator is the result, firstly, of the field work and the direct observation of the landscape; secondly, of the objective appreciation and subjective valuation of the place and its different natural and cultural elements; and, finally, the direct consultation with local technical managers in the case of the last group of indicators. In this way, there are multiple evaluations with criteria that basically adjust to the characteristics of each indicator and group of indicators.

After the evaluation, each indicator was measured with a scale from 0 to 5 that establishes the different levels of classification (null, 0; very low, 1; low, 2; medium, 3; high, 4; and very high, 5), making it possible to define the landscape reality of the mining area in the form of aesthetic impressions and its numerical valuation as a tourist resource (Table 1). The average of all the indicators was calculated to devise a synthetic landscape valuation index for the study area. In some cases, the existence of buildings, historical elements of interest, some significant landscape aspects, representative observation points and views, scenic routes, natural or artificial landmarks, etc., were numerically accounted for. The indicators that have allowed the quantitative assessment and, therefore, a more objective assessment of the existing resources in the study area, are the following: a.1, a.2, a.5 (group of Built elements).; b.7, b.8, b.11, b.12 (group of Landscape environment and scenic quality). The general criteria of numerical allocation, in these cases, corresponds to the following scale: null (0), no elements; very low (1), one element; low (2), two–three elements; medium (3), four–five elements; high (4), six–seven elements; and very high (5), more than seven elements.

In the other indicators, qualitative criteria linked to the level of environmental, heritage, or landscape protection, presentation of web content in the analyzed tourist centers, or the value of the chromatic variability of the terrain, understood as an aesthetic resource for tourism, were necessarily taken.

Table 1. Landscape analysis form: indicators and groups of indicators.

Groups of Indicators	Indicators
a) Built elements	**a.1.** Existence of historical or cultural elements of interest. **a.2.** Presence of unusual constructed or landscape elements of interest to the tourist. **a.3.** Aesthetic adaptation of the Mining Park's tourism infrastructures to the landscape's unique characteristics. **a.4.** Choice of new building designs in accordance with the landscape's attributes. **a.5.** Landscape integration of the different preserved built elements.
b) Landscape environment and scenic quality	**b.6.** Scenic quality of the mining landscape in the area. **b.7.** Existence of landscape observation points and representative views. **b.8.** Existence of scenic routes between the different preserved elements. **b.9.** Uniqueness of the landscape environment. **b.10.** Valuation of the color variability of the terrain as an aesthetic resource for tourism. **b.11.** Existence of significant visual references: natural landmarks (peaks, mountain ranges, streams, rivers, etc.) **b.12.** Existence of significant visual references: artificial landmarks (shaft towers, waste rocks, chimneys, machine rooms, etc.) **b.13.** Presence of the place's scenic and landscape values in the information offered to visitors.
c) Landscape protection and management	**c.14.** Existence of heritage protection regulations. **c.15.** Existence of environmental protection. **c.16.** Commitment to protect and promote tourism in the mining landscape by the Public Administrations. **c.17.** Level of sustainable and smart management of the mining landscape as a tourist resource. **c.18.** Presentation and explanation of the landscape values on the Mining Park and Interpretation Centre's website. **c.19.** Presence of 3D models that reproduce to the tourist the landscape features of the mining area.
d) Landscape valuation	**d.20.** How visitors to the Mining Park and the Interpretation Centre rate the mining landscape and its scenic characteristics. **d.21.** Valuation of the mining landscape and its scenic features by local population. **d.22.** How managers and technical staff rate the mining landscape and its scenic characteristics as a fundamental tourist resource.

Source: own statistics.

3. Description of the Mining Territory

The area under study is located in the Sierra Minera of Cartagena-La Unión, in the Region of Murcia (south-eastern Spain). This area is highly representative of what continuous mining activities mean, with the presence of mineral deposits and numerous built elements. The La Unión mining district occupies an area of approximately 100 km^2 and, from a historical point of view, is one of the most important in the Iberian Peninsula.

The geological evolution of the area has resulted in extraordinary mineral wealth that has been exploited economically from pre-Roman times until the end of the 20th century. The area's deposits were the first to be mined by the Romans on a large scale and the most important in the 2nd and 1st centuries BC, with both underground and opencast mines.

After the Roman period, mining fell into decline for a long period that lasted until the 15th century, when mining began once more, with numerous pits and galleries in the mountains between the city of Cartagena and Cabo de Palos. Yet, large-scale mining did not expand until the 19th century, when small mines sprung up throughout the Sierra Minera [23]. The area's unique landscape began taking shape and attracting people looking for work, so new settlements started growing.

At the start of the 20th century, the mining industry was hit by a crisis and many of the mainly small mines closed down. The sector's failure to upgrade its technology prevented it from reviving

and mineral production began to decline gradually. A new phase, defined by an increase in large-scale mining, began around 1950 and a large multinational corporation took over all the small, 19th century-type mines, and began opencast mining on large tracts of land, employing modern technology. All this caused a heavy environmental impact and profound damage to the land. According to estimates, more than 360 million tons of earth were moved between 1957 and 1987, of which almost 60 million tons were dumped into the sea as mine tailings. This filled Portmán Bay and covered about 10 km^2 of the nearby continental shelf.

Mining growth began to slow in the 1980s due to the international economic crisis and as the reserves were steadily depleted. The crisis and the serious environmental problems that had built up over decades led to mining finally stopping in 1991.

As a result of these long, drawn-out mining operations, the Sierra Minera has undergone massive changes, with mining remains and construction from different periods overlying one another. The result is an exceptional cultural landscape that reflects the continuous interaction of the different societies with the natural environment. Scattered throughout the territory one finds shaft towers, shafts, chimneys, machine rooms, washing plants, foundries, furnaces, machinery, etc. These reflect a wide range of constructions that are reminders of certain lifestyles, working methods, and technical organization, and an activity that is highly capable of altering the environment (Figure 2).

Figure 2. Specific quarry in the Cartagena-La Unión mining area. Municipality of Cartagena. Author: Carlos J. Pardo Abad.

In 1986, the authorities initiated the formalities to have the area declared a Site of Cultural Interest (hereinafter, SCI), in the Historical Site category [24]. This marked the start of its true protection and the cataloguing of the different elements and deposits. In 2006, the area was awarded definitive protection as an SCI and in 2015 the Regional Government of Murcia published the last proposal, maintaining the same category, but with new borders and reasons for justifying it as a protected area [25].

The protected area is divided into a total of eight sectors, in line with the different mining complexes observed in the area. The total area protected is 1663.06 hectares (Table 2), which represents 17% of the entire Sierra Minera. The percentage is not very high, but the biggest problem is that the sectors into which the protected area is divided are not continuous and some areas in between are not protected, making them far more vulnerable and subject to threats.

At state-wide level, in 2000 the Ministry of Culture and Sport launched the National Industrial Heritage Plan [26]. This plan includes the Cartagena-La Unión mining landscape on account of its unquestionable cultural, geological, and landscape values. In 2007, the area was included in a state inventory of the most important natural and cultural sites; in other words, a tentative list for the final proposal for its inscription as a World Heritage Site by UNESCO [27]. According to the UNESCO

World Heritage Committee's criteria, the area can be categorized as an organically evolving landscape, the result of a long process that has shaped its main morphological characteristics; in short, a relict or fossil landscape that mirrors the mining features of the past (Figure 3).

Table 2. Sectors of the protection zone.

Sector	Denomination	Surface (ha.)	Surface Percentage	Location
Sector I	Cerro de la Parreta de Alumbres	24.43	1.47	Cartagena
Sector II	Cabezo Rajao	74.41	4.47	Cartagena and La Unión
Sector III	Lo Tacón	2.88	0.17	La Unión
Sector IV	Llano del Beal and El Beal	85.22	5.12	Cartagena
Sector V	Camino del 33-Cuesta de Las Lajas	227.76	13.70	La Unión
Sector VI	Rambla del Abenque and Cabezo de la Galera	286.59	17.23	Cartagena and La Unión
Sector VII	Cabezo de Ponce, Peña del Águila and Monte de las Cenizas	957.63	57.59	Cartagena and La Unión
Sector VIII	Lavadero Roberto de Portmán	4.14	0.25	La Unión
Total		1663.06	100	

Source: Historical Heritage Service of the Murcia Region Government and own information.
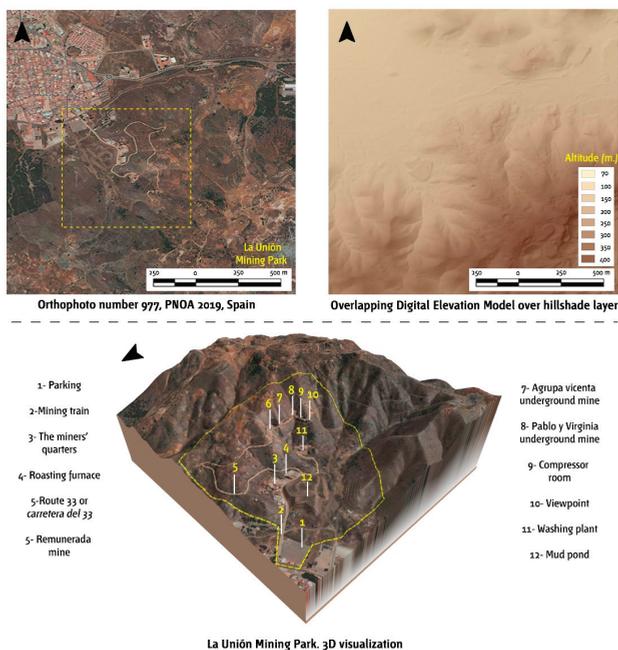
Figure 3. Digital representations of La Unión Mining Park. Source: own statistics.

4. Results

Mining creates unique landscapes with great visual impact, due to the combination of geological and industrial factors and its enormous capacity to transform the land. For centuries, mining marked the land's spatial configuration and constantly and successively modified the landscape. The resulting

landscape is now subject to heritage protection as a reminder that it has been mined throughout history by different peoples and civilizations.

4.1. Scenic Indicators of the Mining Landscape

The results obtained for the various indicators analyzed, as a result of direct observation with field work and consultation with the technical managers of the La Unión Mining Park and the Las Matildes Interpretation Centre [28,29], show that the area is a unique scenic enclave. Some of its features, especially the landscape, are highly important tourist attractions for the Sierra Minera and the nearby towns, as well as for the Murcia Region as a whole. The inherited landscape was taken as the cornerstone for the proposed new use, in which mining-related constructions also played a key role. The existing problems, always present in large scale reconversions, were finally solved because the strengths and opportunities outweighed the weaknesses. Mining heritage tourism was seen as an excellent option and ended up offering an economic and job creation solution in an area heavily hit by unemployment after the mines closed [30].

The set of indicators analyzed presents a synthetic landscape valuation index of 4.4, meaning that it can be classified between high and very high on the established objective landscape analysis scale (scale of 0 to 5). The highest-scoring set of indicators is landscape assessment (4.7), followed by built elements (4.6). The other two set of indicators, landscape protection and management (4.2) and landscape environment and scenic quality (4.1), rank lower.

The highest-scoring indicators are as follows: a.3 (Aesthetic adaptation of the Mining Park's tourism infrastructures to the landscape's unique characteristics); a.4 (Choice of new building designs in accordance with the landscape's attributes); a.5 (Landscape integration of the different preserved built elements); b.6 (Scenic quality of the mining landscape in the area); b.9 (Uniqueness of the landscape environment); b.13 (Presence of the place's scenic and landscape values in the information offered to visitors); c.14 (Existence of heritage protection regulations); c.18 (Presentation and explanation of the landscape values on the Mining Park and Interpretation Centre's website); d.20 (How visitors to the Mining Park and the Interpretation Centre rate the mining landscape and its scenic characteristics); and d.22 (How managers and technical staff rate the mining landscape and its scenic characteristics as a fundamental tourist resource).

The lowest-scoring indicators refer to the assessment of the land's chromatic variability as an aesthetic resource for tourism; the existence of significant natural visual points of references (peaks, mountain ranges, streams, rivers, etc.); and the presence of 3D models or mock-ups that show tourists the landscape's features (Table 3).

This area's characteristics have led to the landscape replacing simple, isolated monuments as eye-catchers. Beyond the recognition of the built heritage, the general awareness of the population and the local authorities succeeded in extending the idea that the industrial landscape was a non-renewable resource that deserved to be protected. The area's extensive mining heritage and its distinctive and impressive landscape are two obvious strengths that have favored its protection and the approval of several major tourism projects. This change of role is what has truly reinvented the area [31–33].

Table 3. Classification levels of the landscape indicators analyzed.

Indicator Groups	Indicators (see Table 1)	Classification Level *
a) Built elements	a.1	4
	a.2	4
	a.3	5
	a.4	5
	a.5	5
	Total	4.6
b) Landscape environment and scenic quality	b.6	5
	b.7	4
	b.8	4
	b.9	5
	b.10	3
	b.11	3
	b.12	4
	b.13	5
	Total	4.1
c) Landscape protection and management	c.14	5
	c.15	4
	c.16	4
	c.17	4
	c.18	5
	c.19	3
	Total	4.2
a) Landscape valuation	d.20	5
	d.21	4
	d.22	5
	Total	4.7
Synthetic index of landscape valuation (SILV)	*a.1 – d.22*	4.4

* Classification levels: 0 Null; 1 Very low; 2 Low; 3 Medium; 4 High; 5 Very high. Source: own information.

4.2. Mining Landscape: Digital Content and Web Presentation

In the Sierra Minera, one can choose from among many hiking routes and itineraries all along the main mines, all with marked environmental and landscape features and great tourist potential. They are scattered throughout the mining area, but most are to be found between the towns of La Union and El Llano del Beal. The routes have a total length of 41 km, and mostly run along public roads and disused cattle tracks.

The mining landscape can be observed in all its magnitude and be considered the main tourist resource, as is the case with other abandoned mining areas. The scattered constructions are milestones that reinforce the aesthetic symbolism of the heavy visually-impacting mining and the labor-intensive jobs of the local communities. The landscape that emerged after changing the land with the almost-never-ending mining of geological resources, is today an extraordinary asset that tells visitors about a centuries-old past that is truly fascinating.

There is plenty of digital information. The Las Matildes Interpretation Centre website features sufficient information about the landscape features of the Sierra Minera and its rich heritage. There is an extensive photo gallery, with pictures grouped according to the protected area's different subdivisions, with the following most notable types of constructions: shaft towers, machine rooms, chimneys, furnaces, powder magazines, washing plants, tunnels, and a mining train (Figure 4).

The digital information about the landscape is backed up with a list of guided tours that can be taken by car, on foot, or on a narrow-gauge train from Cartagena. The website underscores the idea that, from anywhere on the route, visitors will come across spectacular views and aspects of

great scenic value, such as the mounds of richly-colored earth. It also describes some areas of special environmental interest on account of their wealth of flora and fauna.
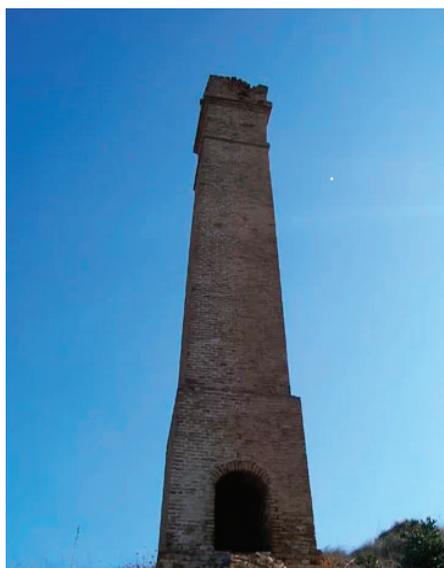
Figure 4. Chimney. Municipality of La Unión. Source: Sierra Minera Foundation [31].

Other digital information that tourists find interesting is the fact that the Las Matildes Interpretation Centre schedules mining and environmental routes every few years, open to the public until the maximum number of people has been reached. It provides information on the planned duration and the specific day, always at weekends to make them easier to visit, although it is also possible to arrange tailor-made itineraries with groups of at least 15 people. These routes are one of the website's main features and come with maps, making it very practical for tourists because they can plan their visits beforehand.

One type of interesting digital content related to the landscape is how the environment has been restored. Visitors can find out about what action has been taken to replant the area with native, low-water demand, and residual soil pollution-resistant species. It also provides information about the architectural restoration of the buildings in the Sierra Minera, which is essential in order to use them as a tourist attraction that complements the landscape and the environment. The comprehensive digital information lets tourists organize their visits in advance and understand the whole territorial and landscape scope of this mining area. Finally, it features a downloadable PDF brochure in Spanish and English, as well as links to Facebook, Twitter, and Instagram, creating further opportunities to publicize the scenic values.

The website of the other major tourist attraction, the La Union Mining Park, also features the landscape as one of the main digital content items. It explains why it is so valuable and spotlights its unique nature, identifying which places tourists should visit in this large territory-museum. The tour begins in a mining train, from which visitors can enjoy spectacular views, and ends with a visit to the Agrupa Vicenta mine, which is the main tourist attraction (Figure 5). The train tour is along a previously established route and with the necessary safety guarantees for the tourist. The tour outside the Mining Park is free and the responsibility of the visitor to take necessary precautions is stressed. Some shafts are dangerous, but a fencing and signaling protection plan has been carried out to prevent accidents.
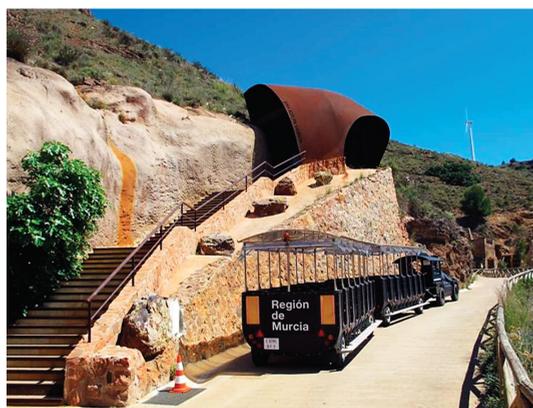
Figure 5. Entrance to the Agrupa Vicenta mine. Municipality of La Unión. Source: Sierra Minera Foundation [34].

There is also a large amount of information about other sites, such as the Pablo y Virginia mine and the Remunerada mineral washing plant. The presence of vantage points with panoramic views, both inside and outside the guided tour itinerary, completes the digital content that guides tourists and helps them to recognize the aesthetic values associated with the landscape.

There is a major section of information about the landscape, with well-written explanatory texts. The deep scars left by open-cast mining, which ended in 1991, left the landscape in a shocking state. Despite the heavy impact, the Mining Park website insists that there are still areas where nature remains almost unchanged, representing another tourist attraction for aesthetic observation.

The graphic information is very varied, and consists of a collection of well-selected pictures, and tourists can even upload their own photographs to the website, encouraging personal participation and interaction with the visited area. The large number of pictures, like the one shown in Figure 6, is not surprising, since the large size of the area that can be visited, which covers more than 50,000 m^2.
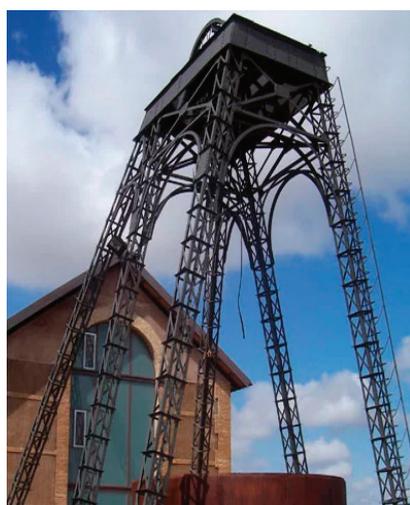
Figure 6. Shaft tower of the mining area. Municipality of Cartagena. Source: Sierra Minera Foundation [34].

Maps are another basic feature, because they show tourists what they can visit and where. The maps show that at the topographically highest part of the circuit, there is a viewpoint, with sweeping views of the whole area. This indicates that the landscape is offered as a first-class scenic attraction. Another scenic attraction with a large amount of information is known as the "Carretera del 33", or "Route 33".

Like the Las Matildes Interpretation Centre, the Mining Park's website features direct links to Facebook, Twitter, and Instagram, ensuring greater digital dissemination of the area's heritage values (Table 4).

Table 4. Main items of landscape and information digitalization.

Item	Las Matildes Interpretation Centre	La Unión Mining Park
1. Environmental, landscape and architectural interpretation	X	X
2. Digital information of built and natural heritage	X	X
3. Digital information on adapted physical accessibility	X	-
4. Presence of news bulletin board	X	X
5. Availability of information leaflet in Spanish	X	X
6. Availability of information leaflet in English	X	-
7. Visit pricing information	X	X
8. Possibility of online sale	-	X
9. Availability of image gallery	X	X
10. Presence of presentation videos	X	X
11. Presence of digital cartography	X	X
12. Connection to social networks	X	X

Source: own statistics.

4.3. Tourist Use of the Mining Landscape

The Sierra Minera in Cartagena-La Unión is a resource of extraordinary economic value for the region and an effective alternative for tourism-based endogenous development. The mines' historical legacy has prompted a highly significant cultural and natural tourism with great potential for disseminating the technical and environmental values attached to mining and the area, as local and regional authorities have acknowledged. As explained earlier, in this research the Sierra Minera is interpreted as a territory-museum with very different elements, saved from oblivion or plunder thanks to their condition as a resource for tourism.

The priority places, in terms of tourist attractions within the study area, are in the La Unión Mining Park. This Park encompasses a wide territory in which one can visit the main tourist elements of the Sierra Minera. The priority objects for tourism are the following: Agrupa Vicenta mine, Pablo and Virginia mine, Remunerada mine, and the so-called Carretera del 33 (Table 5). Outside the Mining Park is the Las Matildes Interpretation Centre and the La Unión Mining Museum, with a much lower number of visitors than that registered by the Mining Park.

The La Union Mining Park was opened in 2010, since when it has become one of the main tourist attractions of the Murcia Region, both due to the size of the Park and the number of visitors. At the same time, it is regarded as one of the best reminders of Spain's mining heritage. The Park is indeed so large that within its boundaries one can find certain spots with the best landscape and aesthetic qualities, and many heritage features regarded to be signs of identity.

Table 5. List of the main tourist resources of the Mining Park.

Name	Description	Level of Tourist Attraction (1)	Valuation According to Some Quantitative Indicators (2)	
Agrupa Vicenta mine	The only underground mine in the complex and the main tourist resource. Dedicated to the extraction of pyrite, it is the first mine to be reconfigured as a museum in the Region of Murcia.	Very high	a.1	5
			a.2	3
			a.4	5
			a.5	4
			b.7	4
			b.11	5
			b.12	3
			Total	4.1
Pablo y Virginia mine	Mine dedicated to the extraction of pyrite, currently presents a partial recovery of some external buildings and part of the access gallery.	High	a.1	3
			a.2	3
			a.4	1
			a.5	4
			b.7	4
			b.11	5
			b.12	1
			Total	3.0
Remunerada mine	Mine dedicated to the extraction of tin. It has a set of highly interesting facilities with mechanical elements for the separation of the mineral.	High	a.1	4
			a.2	4
			a.4	1
			a.5	4
			b.7	4
			b.11	5
			b.12	1
			Total	3.3
Carretera del 33 or Route 33	Legendary route built in 1933. It crosses the Sierra Minera and connects La Unión with Portmán and the Mediterranean Sea. It is the backbone of the entire complex.	Very high	a.1	5
			a.2	4
			a.4	2
			a.5	4
			b.7	5
			b.11	5
			b.12	5
			Total	4.3

(1). According to the technical managers interviewed. (2). According to the criteria established in the methodological section. Source: own information.

The tour through the Mining Park starts at a visitor reception center, which projects a video that helps visitors to grasp the characteristics and significance of this old mining area. The visit continues with a train ride from which to enjoy the area's scenic views, until one reaches the Agrupa Vicenta mine. It is the first and only underground mine in the Murcia Region that has been reconfigured as a museum and fitted out for visits. Here, pyrite was mined from 1869 until the middle of the 20th century. More than 4000 m^2 are open to the public, at a depth of 80 m, making it one of the most spectacular mines in Spain one can visit. Inside it, visitors can walk through enormous chambers and galleries that the miners had to dig out and blast away to empty the vein from inside (Figure 7). Another attraction is the lake inside the mine, with its reddish water, which was turned that color by the pyrite. Halfway down, a small auditorium has been built as a venue for cultural events such as flamenco shows (which have deep-seated cultural roots in this part of Murcia, as traditionally many miners were Andalusian immigrants).

The Pablo and Virginia and Remunerada mines are two other tourist resources within the Mining Park. They are isolated elements without underground galleries and with elements of great interest on the surface. This is the case of the facilities for offices and mining barracks in the Pablo and Virginia mine. Other industrial facilities were used for the separation of the mineral with economic interest (ore) from the remains without any value. This process has been carried out since 1920 in a washing

plant where the concentration of tin extracted from the Remunerada mine and others located in the area was carried out. It is a gravimetric washing plant where the mineral was separated by mechanical means based on the difference in weight between the ore and the remains without economic value. Currently, this place is an important tourist resource and one of the few existing in Spain.

Figure 7. Inside the Agrupa Vicenta mine. Municipality of La Unión. Source: La Unión Mining Park [28].

The so-called Carretera del 33, or Route 33, is a legendary route, which crosses the Sierra Minera and connects the town of La Unión with Portmán and the Mediterranean Sea. It was built in 1933 (hence its name) to improve communications in the area and provide work for the miners who lost their jobs after the mining crisis of the 1920s. Today it is an important backbone and a true open-air museum. The area through which the road runs is sector V of the Site of Cultural Interest declaration, classified as a Historical Site, and is one of the most geologically interesting mining landscapes of the whole region.

In 2005, the first interpretation center was opened to the public in the Las Matildes mine. Despite facing many difficulties at the start, it was the result of a firm strategy to recover and enhance the mining heritage. In addition to the complete renovation of two machine rooms and their shaft towers, preserving the original structure and finishes, the surrounding environment and landscape was also restored, reintroducing native plant species and associations.

The reconfiguration of the mine into a museum and an interpretation center is an example of the success of the recovery initiative undertaken. The center has a wide variety of resources, such as information panels, models, educational games, and 3D audio-visual shows, as well as being an integrated ecotourism and cultural tourism center that offers different tourist options and guided routes through the mountains.

The city of La Unión is home to another tourist attraction: the Mining Museum [35]. It is housed in a modernist-style, one-story building built in 1906, originally intended for use as a school. It currently houses one of the country's most important mining collections. Not only is the building a sign of the town's architectural identity, but it also reflects the economic and social splendor associated with mining from the end of the 19th century to the mid-20th century.

The number of people who have visited these three tourist centers is listed below (Table 6). The figures refer to the last five years (2015 to 2019), making it possible to analyze recent changes in the number of visits. Broadly speaking, numbers are rising, although some years they have dropped slightly, albeit without interrupting the general trend for tourist numbers to increase throughout the period.

Table 6. Recent evolution of the number of visitors.

Tourist Resource	2015	2016	2017	2018	2019	Annual Average Percentage Change	Total Percentage Change
Las Matildes Interpretation Centre	556	949	1304	2280	1943	+42%	+349%
La Unión Mining Park	31,974	35,338	31,192	30,155	n.a.	−1.5%	−5.7%
La Unión Mining Museum	9320	9480	9740	9893	9960	+1.7%	+6.9%

Fuente: Tourist Offices of Cartagena and La Unión, and own statistics.

The level of satisfaction among tourists is quite high. According to the 129 reviews left on TripAdvisor in 2019, after visiting the La Unión Mining Park, tourists rated it as follows: 52% excellent, 34% very good, 8% average, 2% bad, and 4% very bad. This means that most tourists were highly satisfied. A total of 98 opinions were left in Spanish, 25 in English, 2 in French, 2 in Dutch, 1 in Danish, and 1 in Italian. This indicates that most of the visitors were Spanish nationals, and once more underscores the general trend: this kind of tourism is chiefly domestic and supplements other tourist options. Considering the opinions left by foreign visitors, especially in English, international tourism only accounts for 24%, and is closely linked to the cruise ships that dock at the port of Cartagena. This port is one of the main points of entry for foreigners to the Murcia Region. Its proximity to the Sierra Minera increases the potential for visits to mining heritage sites.

The existing tourist resources in the Sierra Minera are complementary to each other because they are located very close in space and benefit from the potential offered by this unique territory. They are part of the same thematic tour, defined by mining and industrial activity. The main resource, undoubtedly, is the Mining Park due to its size and the possibilities of visiting several different places. The Interpretation Centre of Las Matildes and the La Unión Mining Museum are complementary external resources to the Park and register a much lower annual number of visitors.

These three resources are geographically and thematically linked and should incorporate a series of general priorities for a more intense projection of the value of the mining and industrial heritage. The list of priorities, from our point of view, is as follows:

a) Expand tourist facilities and incorporate new rehabilitated elements for the visit.
b) Offer new tourist and leisure activities.
c) Reinforce the promotion of the old mining space and its buildings, not only at the local level but also at the regional and national level.
d) Promote more intensively the image of the territory as a tourist factor and the landscape as a unique aesthetic element.
e) Coordinate tourism management between the three tourist centers.
f) Promote the participation of the local population.
g) Increase the information available on the respective web pages.
h) Incorporate smart tourist measures, with more interactive online information.
i) Reinforce the spread of tourist attractions, and their associated cultural values, through different institutional websites: regional government, municipalities, local groups, etc.

5. Discussion and Conclusions

Some mining areas are an exceptional point of reference in terms of heritage and landscape restoration. The tourism and cultural use opportunities have materialized through new reuse projects, which are ambitious from an environmental viewpoint as they must comply with the strictest sustainability criteria [14]. The restored areas have become a highly visible example of the new cultural

trends, which are far removed from any standardization of tourism products and the densification of demand.

There is a wide variety of intervention projects in developed countries and the number has risen significantly in recent decades. New usage proposals regard the territorial structure of each place as a key geographical aspect of any intervention [13,15,16]. The local population is often involved as a factor for conveying and sharing knowledge and experiences, and digital techniques are used for rational and sustainable resource management [10].

Mining has gone from being regarded exclusively as an extractive activity to the no-less important condition of being activity that shapes cultural landscapes. Tourism has become the cornerstone of this change, coupled with the development of new, more specific tourism trends that generate wealth and regenerate abandoned sites as heritage parks. Many authors defend the idea that this tourism is compatible with the basic principles of sustainability [33,36] and highlight the social, economic, and environmental benefits. Yet they also highlight the difficulties that arise in any intervention, particularly because parties with very different characteristics, and often with conflicting interests, are involved [31,37,38].

Whenever restored mining sites are being analyzed, many more authors now consider inherited heritage as an element that can identify and unite local communities, and argue that this type of intervention can help to boost the rural environment's economy [30,31,39]. Reusing buildings, restoring the area environmentally, using tourism responsibly, and setting up locally-based companies become strategic objectives, and this in turn is linked to the trend of vindicating local issues as a privileged spatial scale for analyzing areas with deep-rooted collective identities.

Now that the mines are closed, the ruinous landscapes and the associated scenic values are what underpin their new use in tourism. Visually transmitted information is significantly powerful and can fascinate the general public far more than any museum with specialized collections and closed compartments. The presence of the territory and the natural environment altered by human action are two decisive factors that attract visitors and elements with great interpretation potential [25,33,40].

As yet, there has not been enough research into why people visit abandoned mining or industrial sites. Some authors point to a wide variety of reasons: aesthetic contemplation of the landscape, proximity to one's place of residence, ties to personal work experiences, etc. [41]. Yet very often there are no specific prior reasons, and visits are not planned in advance for any specific interest and are just a cultural complement for other main tourist activities. This is the case with tourism generated by the Sierra Minera of Cartagena-La Unión, where visits (excluding school trips) basically supplement the sun and beach tourism from the nearby coast and the Mar Menor, as well as tourists from cruise ships that stop over in the port of Cartagena.

The La Unión Mining Park has a well-designed website with extensive information based on text and images. On the contrary, it does not have any smartphone application, which could facilitate information and interpretation of the area and yield many benefits in the field of outreach and education.

The absence of such applications has drawn much attention in a place that is a benchmark for mining heritage in Spain. These smartphone applications represent an exceptional opportunity for interactive communication with tourists, as in the Villuercas-Ibores-Jara Geopark (Spain), with an excellent educational application in multitouch format. Another Spanish example is the Museum of Science and Technology of Catalonia, which occupies an extraordinary factory building. It has several digital apps and tools that encompass an audio guide with the most outstanding objects of the exhibition, a virtual tour with the main spaces of the old factory, and several virtual exhibitions. Outside of Spain, some geoparks have developed applications with GPS and map search games, as well as other educational applications with a large amount of multisensory content. This is the case of Magma Geopark in Norway and Idrija Geopark in Slovenia.

Industrial and mining heritage is a very specific heritage with great capacity to promote territories and resources and strengthen heritage tourism closely associated with the identify of local communities [42,43]. The definition of a new smart and efficient tourism model is only achieved

with the use of new digital technologies. The concept of the Smart Industrial Tourism Business Ecosystem (SITBE), which is interesting in a field that has not yet been investigated, refers to the fact that industrial heritage requires investments in the physical recovery of buildings and also for the creation of new organization structures based on the technological competitiveness and intelligent information [22].

As already mentioned, there are few studies on the possibilities generated by new technologies in the tourist use of industrial and mining heritage. It is necessary that information technologies acquire even more prominence, not to replace current heritage resources or personal experiences during the visit, but to reformulate strategies, increase the active participation of the visitor, achieve more efficient management, and offer more data online for a better understanding of the contents [44].

The digital dialogue between tourists and resources is an essential collaborative approach in industrial heritage and increases opportunities for personal interpretation of a specific and little-known legacy. Furthermore, this dialogue enables the creation of intelligent cultural places and promotes the concept of digital landscape as a geographical projection on the technological platforms of the former mining and industrial territories.

Another advantage of new technologies is to intensify the links of local institutions and companies with heritage destinations. In this case, the Riotinto mining area (Spain) should be highlighted as an example of good collaborative practice between different entities. From the outset, this collaboration provided a boost to employment and projected the tourist image of the place after the closure of the mines [10,33]. In other cases, such as the mining area of the Spanish province of Teruel, collaboration has been less intense and digitization less complete, so the result is a smaller number of annual visitors and an image as a destination with less national and international projection [15,38].

Therefore, the new information technologies are highly important in the old mining and industrial spaces. Their online promotion is a great opportunity to increase their tourist attraction and turn these spaces into cultural reference destinations. Digital technologies have been, for example, a very important support for the mining areas of Almadén (Spain) and Idrija (Slovenia) to achieve their joint inclusion in the UNESCO list of World Heritage Sites [33,45].

Mining and industrial heritage is a heritage of great territorial significance because it configures varied geographical spaces and different scales: national, regional, and local. The regional scale is highly important and has been widely used in the analysis of many studies. An example is the Nord Pas-de-Calais mining basin in France. In the opinion of some authors, the area has been a symbol of large-scale world mining since the second half of the 19th century due to its social, economic, and environmental effects [46].

Another consequence, intangible in this case, is the creation of a collective identity and memory around the mines and their landscapes. Memory is one more element of mining heritage and a main objective of preservation. This promotes the creation of cultural projects based on new technologies and the digitization of content, uniting visitors with the past. In Nord Pas-de-Calais, tourism projects have gone hand-in-hand with urban planning and regional regeneration. With these projects, the area overcame the crisis after the closure of the mines and achieved a model of success and international reference [47].

In 1982, the Lewarde Historical Mining Center was opened to the public and in 2012 the expansion of the Louvre Museum in Lens was opened. This last case is an extraordinary example of regional regeneration based on culture [48]. The success of these two tourism experiences in Nord Pas-de-Calais shows that tourism can be an innovative boost to the economy. It can also be a stimulus for social inclusion, especially in remote communities. This is the case in the mining area of Weipa (Australia), where tourism is interpreted as an opportunity for indigenous employment and corporate image of social responsibility by the companies and entities involved in cultural projects [49].

Since the 1980s, tourism has been interpreted by the European Union as a basic instrument for economic rebalancing and the reduction of differences between the Member States. All types of tourism, including the most alternative (such as the one studied in this article) contribute to this main objective

and to the strengthening of the internal market. In this sense, tourism has become a fundamental community strategy and has been recognized as a key factor in sustainable development at a social, economic, and environmental level. The new technologies applied to tourism and the dissemination of information are also recognized as a fundamental tool to promote the European cultural heritage through tourism, boost social cohesion, and strengthen the European tourism market [50].

The tourism recovery project for the Cartagena-La Unión mining area is linked to the European policy of promoting tourism as an instrument for job creation, the sustainable use of resources, the creation of infrastructure in destinations, or the promotion of competitiveness at the local level.

The study area is a unique case of centuries-old mining of mineral resources and an example of an exceptional cultural landscape. The presence of so many deposits, constructions, and scenic views, in addition to the richly-colored earth and artificial landfills, offers a wide range of opportunities to which no tourist can remain indifferent. The Sierra's heritage interest status has earned it protection as a Site of Cultural Interest, in the Historical Site category. It is an extensive protected area, divided into several sectors in line with the different mining complexes. Together, these sectors represent a territory-museum, and one of the keys to its reuse for tourism is the landscape's scenery. This landscape can be regarded as a true palimpsest on which different mining activities have been placed on top of one another over time.

The Cartagena-La Unión mining area is an example of conservation and protection of the mining heritage. Its associated scenic values have created an important landscape tourism, which some authors dissociate from strictly geological criteria to introduce it into a more general theoretical framework of conservation, promotion, sustainable use, and research on new methodological bases [45,51,52].

In the Sierra Minera de Cartagena-La Unión, it has been crucial to preserve the region's cultural and natural heritage, and many efforts have been made in recent years to achieve this goal. Its geographical scale and its heritage diversity offer many possibilities for education and tourism development in the region.

The mining importance of the area has created significant tourism opportunities. Although the Sierra Minera de Cartagena-La Unión is not part of the list of Spanish geoparks, the tourism developed here can not only be considered as industrial and mining heritage tourism but also as geotourism [53]. Indeed, the area allows the appreciation of the geological, natural, and environmental characteristics, apart from the cultural ones, from a sustainable use of the environment and resources, and it is locally beneficial.

The main objective of this research has been to analyze the landscape. To this end, a form was created, listing a total of 22 indicators distributed in four different groups. Each indicator was assigned a specific level through direct observation, consulting sources, and interviewing technical managers. The indicator level average gave one per group, as well as a general one that we have called "synthetic landscape valuation index". The method applied is direct and simple, and the first of its kind in the field of mining heritage as a tourist resource.

The statistics consulted have shed light on the extent to which the study area is used for tourism, based on the numbers of visitors recorded at the La Unión Mining Park, the Las Matildes Interpretation Centre, and the La Unión Mining Museum. These three tourist centers are points of reference in the Murcia Region and, in mining and industrial heritage tourism terms, in Spain. The annual visitor figures reflect the interest that these abandoned sites arouse. Although the total number of tourists visiting the Sierra Minera is smaller than in other places that attract far more domestic and foreign tourists, such as the Riotinto or Almadén mines, the number has increased and consolidated over time.

Despite the need to make headway in applying innovative digital techniques to facilitate and disseminate tourism and efficient resource management, the area can be regarded as an area for the smart promotion of tourism. The values of historical mining are covered to a sufficient extent on the websites of the La Unión Mining Park and the Las Matildes Interpretation Centre. They also feature a large amount of digital content about the current landscape and its aesthetic characteristics, with interesting information for tourists about the most significant natural and cultural places.

In contrast, there is less information on the digital solutions applied in its management, and more on promotion of the site. The technical managers consider that using new technologies brings greater efficiency, cuts maintenance costs, and takes them further along the road towards being considered smart destinations. This process has progressed more slowly than expected at first, partly because local and regional authorities have not collaborated to a significant extent. The destinations studied have energy-saving techniques (e.g., LED lighting), tourist apps for smartphones, or interpretative panels with QR codes, but further work has to be done in other fields where innovative solutions do not exist yet: free Wi-Fi hotspots or using ICTs to better understand tourist demand and what visitors experience. Decisive efforts must be made over the next few years to ensure that technological innovations that are currently missing are built into tourism management and routines, and that the places to visit are effectively considered as smart tourism destinations in their own right.

References

1. Digital Cities Project of the Community's specific RTD programme in the area of Telematics Applications. In Proceedings of the European Digital Cities: The Challenges of the Future, Copenhagen, Denmark, 8–9 May 1996.
2. European Council. *Lisbon Strategy, Lisbon, Portugal, 23–24 March 2000*; European Council: Brussels, Belgium.
3. European Council. *A European Union Strategy for Sustainable Development, Gothenburg, Sweden, 15–16 June 2001*; European Council: Brussels, Belgium.
4. López de Ávila, A.; Lancis, E.; García, S.; Alcantud, A.; García, B.; Muñoz, N. *Informe Destinos Turísticos Inteligentes: Construyendo El Futuro*; Sociedad Estatal para la Gestión de la Innovación y las Tecnologías Turísticas: Madrid, Spain, 2015.
5. Achaerandio, R.; Bigliani, R.; Gallotti, G.; Maldonado, F.; Curto, J. *Análisis De Las Ciudades Inteligentes En España*; International Data Corporation-España: Madrid, Spain, 2011.
6. Lamsfus, C.; Alzua-Sorzabal, A. Theoretical framework for a tourism internet of things: Smart destinations. *J. Tour. Human Mobil.* **2013**, *2*, 15–21.
7. Buhalis, D.; Amaranggana, A. Smart Tourism Destinations. In *Information and Communication Technologies in Tourism 2014*; Xiang, Z., Tussyadiah, L., Eds.; Springer: Dublin, Ireland, 2014; pp. 553–564.
8. Boes, K.; Buhalis, D.; Inversini, A. Smart tourism destinations: Ecosystems for tourism destination competitiveness. *Int. J. Tour. Cities* **2016**, *2*, 108–124. [CrossRef]
9. Luque, A.M.; Zayas, B.; Caro, J.L. Los destinos turísticos inteligentes en el marco de la inteligencia territorial: Conflictos y oportunidades. *Investig. Turísticas* **2015**, *10*, 1–25. [CrossRef]
10. Pardo, C.J. Application of Digital Techniques in Industrial Heritage Areas and Building Efficient Management Models: Some Case Studies in Spain. *Appl. Sci.* **2019**, *9*, 4420. [CrossRef]
11. Ministerio de Industria, Comercio y Turismo. Available online: https://www.mincotur.gob.es/es-es/Paginas/index.aspx (accessed on 21 March 2020).
12. López de Ávila, A.; García, S. Destinos turísticos inteligentes. *Harv. Deusto Bus. Rev.* **2013**, *224*, 58–67.
13. Tempel, N. Post-Industrial Landscapes. In *Industrial Heritage Re-Tooled. The TICCIH Guide to Industrial Heritage Conservation*; Douet, J., Ed.; Carnegie Publishing Ltd.: Lancaster, UK, 2012; pp. 142–148.

14. Pardo, C.J. Sostenibilidad y turismo en los paisajes culturales de la industrialización. *Arbor. Cienc. Pensam. y Cult.* **2017**, *193*, 400. [CrossRef]

15. Pardo, C.J. Environmental Recovery of Abandoned Mining Areas in Spain: Sustainability and New Landscapes in Some Case Studies. *J. Sustain. Res.* **2019**, *1*, e190003.

16. Landorf, C. A framework for sustainable heritage management: A study of UK industrial heritage sites. *Int. J. Herit. Stud.* **2009**, *15*, 494–510. [CrossRef]

17. Rautenberg, M. Industrial heritage, regeneration of cities and public policies in the 1990s: Elements of a French/British comparison. *Int. J. Herit. Stud.* **2012**, *18*, 513–525. [CrossRef]

18. Wang, S.; Huang, J.; Yu, H.; Ji, C. Recognition of Landscape Key Areas in a Coal Mine Area of a Semi-Arid Steppe in China: A Case Study of Yimin Open-Pit Coal Mine. *Sustainability* **2020**, *12*, 2239. [CrossRef]

19. Brus, J.; Deutscher, J.; Bajer, A.; Kupec, P.; Olišarová, L. Monetary Assessment of Restored Habitats as a Support Tool for Sustainable Landscape Management in Lowland Cultural Landscapes. *Sustainability* **2020**, *12*, 1341. [CrossRef]

20. Álvarez, M.A. La herencia industrial y cultural en el paisaje: Patrimonio industrial, paisaje y territorios inteligentes. *Labor Eng.* **2010**, *4*, 78–100. [CrossRef]

21. De la Peña, F.D.; Hidalgo, C.; Palacios, A.J. Las nuevas tecnologías y la educación en el ámbito del patrimonio cultural. <<Madrid Industrial, Itinerarios>>. Un ejemplo de m-learning aplicado al patrimonio industrial. *Tecnol. Cienc. y Educ.* **2015**, *2*, 51–82.

22. Perfetto, M.C.; Vargas-Sánchez, A.; Presenza, A. Managing a complex adaptive ecosystem: Towards a smart management of industrial heritage tourism. *J. Spat. Organ. Dyn.* **2016**, *4*, 243–264.

23. Martos, P. El paisaje minero de la Sierra de Cartagena-La Unión como paisaje cultural. Del abandono y el expolio a la protección y recuperación de su patrimonio. In *Patrimonio Industrial y Paisaje, Proceedings of the V Congreso sobre Conservación del Patrimonio Industrial y de la Obra Pública en España, El Ferrol, Spain, February 24–28, 2009*; Álvarez, M.A., Ed.; TICCIH España: Gijón, Spain, 2010; pp. 459–466.

24. Servicio de Patrimonio Histórico del Gobierno de la Región de Murcia. Available online: http://www.patrimur.es/ (accessed on 21 March 2020).

25. Palazón, M.D. El paisaje industrial de la minería en la Región de Murcia: Análisis de un referente patrimonial por valorar. *Investig. Geográficas* **2018**, *69*, 159–178.

26. Ministerio de Cultura y Deporte. Available online: http://www.culturaydeporte.gob.es/cultura.html (accessed on 21 March 2020).

27. World Heritage Site. Available online: https://whc.unesco.org/ (accessed on 21 March 2020).

28. Parque Minero de La Unión. Available online: http://www.parqueminerodelaunion.es/es/ (accessed on 21 March 2020).

29. Centro de Interpretación de Las Matildes. Available online: https://www.murciaturistica.es/es/centro_de_interpretacion/mina-de-las-matildes-403/ (accessed on 21 March 2020).

30. Morales, F.J. La Sierra de Cartagena-La Unión (Murcia): Un ejemplo de actividad turística a través del patrimonio minero. *Papeles de Geografía* **2015**, *61*, 77–96. [CrossRef]

31. Cañizares, M.C. Protección y defensa del patrimonio minero en España. *Scr. Nova. Rev. Electrónica de Geogr. y Cienc. Soc.* **2011**, *15*, 361.

32. Pardo, C.J. Indicadores de sostenibilidad turística aplicados al patrimonio industrial y minero: Evaluación de resultados en algunos casos de estudio. *Boletín de la Asoc. de Geógrafos Españoles* **2014**, *65*, 11–36. [CrossRef]

33. Pardo, C.J. The post-industrial landscapes of Riotinto and Almadén, Spain: Scenic value, heritage and sustainable tourism. *J. Herit. Tour.* **2017**, *12*, 331–346. [CrossRef]

34. Fundación Sierra Minera. Available online: https://fundacionsierraminera.org/ (accessed on 21 March 2020).

35. Museo Minero de La Unión. Available online: https://www.ayto-launion.org/turismo/museos/museo-minero/ (accessed on 21 March 2020).

36. Sharpley, R. Tourism and Sustainable Development: Exploring the Theoretical Divide. *J. Sustain. Tour.* **2000**, *8*, 1–19. [CrossRef]

37. Cole, D. Exploring the sustainability of mining heritage tourism. *J. Sustain. Tour.* **2004**, *12*, 480–494. [CrossRef]

38. Valenzuela, M.; Palacios, A.J.; Hidalgo, C. La valorización turística del patrimonio minero en entornos rurales desfavorecidos. Actores y experiencias. *Cuad. de Tur.* **2008**, *22*, 231–260.

39. Benito, P. Territorio, paisaje y herencia industrial: Debates y acciones en el contexto europeo. *Doc. d´Anàlisi Geogràfica* **2012**, *58*, 443–457. [CrossRef]

40. Benito, P.; Alonso, P. Industrial Heritage and Place Identity in Spain: From Monuments to Landscapes. *Geogr. Rev.* **2012**, *102*, 446–464.

41. Prat, J.M.; Díaz, I. La repetición de visitas en el turismo industrial. Aplicación de un modelo de ecuaciones estructurales en el Bages y Berguedà. *Doc. d´Anàlisi Geogràfica* **2014**, *60*, 349–368.

42. Ruiz, E.; Hernández, M. Identity and community. Reflections on the development of mining heritage tourism in Southern Spain. *Tour. Manag.* **2007**, *28*, 677–687. [CrossRef]

43. Cañizares, M.C. Patrimonio, parques mineros y turismo en España. *Cuad. de Tur.* **2011**, *27*, 133–153.

44. Gómez, A.; Server Gómez, M.; Jara, A.J.; Parra Meroño, M.C. Turismo inteligente y patrimonio cultural: Un sector a explorar en el desarrollo de las *Smart cities*. *Int. J. Sci. Manag. Tour.* **2017**, *3*, 389–411.

45. Kavcic, M.; Peljhan, M. Geological Heritage as an Integral Part of Natural Heritage Conservation through its Sustainable Use in the Idrija Region (Slovenia). *Geoheritage* **2010**, *2*, 137–154. [CrossRef]

46. Fontaine, M. Regional Identity and Industrial Heritage. In *Industrial Heritage and Regional Identities*; Wicke, C., Berger, S., Golombek, J., Eds.; Routledge: Oxon, UK; New York, NY, USA, 2018; pp. 109–140.

47. Opania, S. The Study Urban Context, the Development and Promotion of Industrial Tourism: Example of the Nord Pas-de-Calais in France. *J. Civil Eng. Archit.* **2016**, *10*, 279–287.

48. Borina, E.; Paunovic, I. The Case of Louvre-Lens: Regional Regeneration through Cultural Innovation. In Proceedings of the Singidinum International Tourism Conference, Belgrade, Serbia, 25 September 2015; pp. 248–251.

49. Buultjens, J.; Brereton, D.; Memmott, P.; Reser, J.; Thomson, L.; O'rourke, T. The mining sector and indigenous tourism development in Weipa, Queensland. *Tour. Manag.* **2010**, *31*, 597–606. [CrossRef]

50. Estol, J.; Font, X. European tourism policy: Its evolution and structure. *Tour. Manag.* **2016**, *52*, 230–241. [CrossRef]

51. Carcavilla, L.; Durán, J.J.; García-Cortés, Á.; López-Martínez, J. Geological Heritage and Geoconservation in Spain: Past, Present and Future. *Geoheritage* **2009**, *1*, 75. [CrossRef]

52. López-García, J.A.; Oyarzun, R.; Andrés, S.L.; Martínez, J.I.M. Scientific, Educational, and Environmental Consideration Regarding Mine Sites and Geoheritage: A Perspective from SE Spain. *Geoheritage* **2011**, *3*, 267–275. [CrossRef]

53. Gordon, J.E. Geoheritage, Geotourism and the Cultural Landscape: Enhancing the Visitor Experience and Promoting Geoconservation. *Geosciences* **2018**, *8*, 136. [CrossRef]

Improving the Landscape and Tourism in Marginal Areas: The Case of Land Consolidation Associations in the North-West of Italy

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Abstract: Land fragmentation is a factor that limits the development of the agricultural and forestry sector, as well as the ability of operators to reach a profitable economic dimension. This phenomenon also influences the creation of activities and incomes in a negative way in marginal areas. In this context, land consolidation associations (LCA) can be a useful tool in reducing this limitation and promoting better management of the territory by improving the link between the landscape and tourism. This study aims to make a comparison between the different LCAs operating in the north-west of Italy, with a specific focus on differences and similarities amongst LCAs, highlighting each orientation towards the management of the landscape with the purpose of improving tourism development. The research used a survey method; a questionnaire was designed, and a semi-structured interview was conducted with each LCA president. Findings show that land management by LCAs allows the preservation and/or improvement of the landscape and supports the development of agricultural activities such as animal breeding. This kind of landscape-based land management increases the attractiveness of the territory in terms of tourism, stimulating the nature-oriented tourism tools. Therefore, on the one hand, the Piedmontese model supports the landscape and also allows economic and social goals to be reached by tourism solutions, and on the other hand it stimulates the improvement of the environment and the creation of chests of biodiversity.

Keywords: land consolidation association (LCA); landscape; tourism; land fragmentation; north-west of Italy

1. Introduction

The Sustainable Development Goals, identified by the UN, are increasing in importance at the international level and involve various economic and social areas, including land management. Careful management and use of territories, even in marginal and disadvantaged areas, can lead to the achievement of objectives such as the protection of the terrestrial ecosystem, the reduction of activities that can generate climate change and the creation of useful jobs to support the prosperity of rural communities.

In order to achieve these objectives, different tools can be implemented to support and enhance the territory and landscape that are also applicable for tourism purposes. In the field of tourism management, the territory is of primary importance in satisfying three essential conditions in the development phase of a tourism project, i.e., creating the tourist experience by meeting the needs of the demand, implementing a systemic appeal that integrates operators and the territory and monitoring the dynamics between tourist supply, demand and the territory [1–7].

The territory, therefore, is of significant importance for the tourism sector, and its role becomes central from the perspective of a sustainable tourist destination in order to ensure its competitiveness over time. The territory should be managed according to criteria of effectiveness and efficiency, with the involvement of the local community in decision-making processes, even in marginal and disadvantaged rural areas [8,9].

Especially, operators have an economic and social responsibility towards the territory [10]. On the one hand, they must be aware of the quality of the territorial heritage, which is the engine for the development of the territory [5]. On the other hand, they must be able to integrate into the dynamics of the local territorial context, to make their experiential tourism offer more authentic [4,11]. The concept of experience in tourism is constantly evolving, as shown by the models relating to the experience economy and its dimensions [12] and the experience pyramid model [13,14] as well as the dimensions of the tourist experience [15]. At the same time, the concept of territory, understood as geographically, culturally and historically delimited, can be related to an economic offer proposed by one or more operators and perceived by demand as a unitary product consisting of tangible elements (e.g., agro-food products and handicrafts) and intangibles (e.g., culture, history and tradition) and perhaps further characterized by a single image or identity [16,17].

In this context, the landscape is a particular element that can distinguish a territory and its tourist appeal. The landscape is the territory filtered by culture; it is linked to the perception of a territory, determined by the dominant elements and, sometimes, can be confused with the territory. This happens because of the characteristics of its external appearance or because it is an element of social and community value [18–20]. In a rural tourism context, the landscape is often combined with the perception of the transformation of the territory caused by agriculture and its products, as in the case of the International Organization of Vine and Wine (OIV). Indeed, it defines terroir as the set of "specific soil, topography, climate, landscape characteristics and biodiversity features" that allow the unique characterization of wine products [21,22]. In many cases, the landscape and tourism represent a winning combination from an economic and social point of view and form a consolidated link in those territories that are also distinguished by well-structured businesses, such as Langhe and Monferrato in Piedmont, in the north-west of Italy [23]. The positive perception of transformations connotes a landscape worthy of conservation and enhancement.

In addition to these territories particularly suited for food and wine and landscape tourism, there are also some adjacent ones that are subject to high social and economic decline. These places are affected by the phenomena of depopulation and fragmentation of the land, which have fueled a series of limitations for agricultural and agro-pastoral farms, i.e., the reduction of the land surface necessary to produce sufficient income to maintain productive activities [24,25], the abandonment of the territory and the loss of eco-systemic services such as meadows, pastures and forests [26–29]. The territories with these kinds of problems and critical issues have been identified as marginal and are characterized by reduced economic and social development when compared to the neighboring territorial context [30,31]. At the same time, according to other currents of thought, abandonment has resulted in a re-naturalization of the landscape that alternates abandoned land with cultivated land. Spontaneous evolution is positively assessed for the formation of chests of biodiversity that had been lost with monoculture [32]. However, in general terms, the maximization of the value of ecosystems can only be ensured through planning and management processes [33]. Indeed, from the phenomenon of abandonment, diverse situations may arise and not necessarily coinciding with recoveries of biodiversity. For example, abandonment can lead to triggering erosion, runoffs and landslides or difficulties in intervening in the event of fires [34,35].

In the EU, territorial policy is oriented towards sustainable management of natural resources and socio-economic development for rural areas, also highlighting the different variations that agriculture can take on [36–42].

The EU guidelines are applied locally through the tools of rural development programs [43,44] with elements that meet the needs of each territory. A particular tool, aimed at the recovery of

fragmented land located in marginal areas, was regulated in Piedmont (north-west of Italy) in 2016 to reduce depopulation and make abandoned agricultural land productive again. This tool is named the "land consolidation association—LCA" ("Associazione Fondiaria" in Italian). This approach allows functionally small portions of abandoned land owned by different parties to be joined in order to stimulate the development of new entrepreneurial agricultural activities and therefore create employment in marginal areas. In Italy, LCA initiatives are not very widespread, but the Piedmontese regulation stimulated the start of the activities of the associations. Indeed, the Piedmont area is characterized by the largest number of LCAs in Italy, equal to 16. These associations are active and operate in the area to recover the largest possible area of land, giving rise to different types of activities.

Given the importance of land management, these associations seem to be a useful tool to achieve different goals both in an environmental context, i.e., safeguarding of the ecosystem and landscape, and in a socio-economic sense, i.e., the ability to produce income. The purpose of this study is therefore to make a comparison between the different LCAs, with a focus on the objectives and the end use of the consolidated land of each association. Moreover, differences and similarities between the cases examined are analyzed, highlighting a feasible orientation towards the transformation of the landscape with the purpose of tourism development of the territory.

This paper is organized into different sections. The first presents the main references on land fragmentation and related tools to reduce this phenomenon. The second outlines the case study and methodology used in the scope of this research. The third presents main findings obtained by data analysis. The fourth discusses the results and indicates the main issues related to landscape and tourism connection. Lastly, the fifth presents final considerations.

2. Literature Review

The consolidation of a territory is an important measure of management that is applied as a solution to the fragmentation of the territory. This approach allows a reorganization of space, with a new structure owned by the territory in terms of plots and land owners and the supply of adequate infrastructures [45–47]. The most important land consolidation approach is defined as land banking. Jack Damen was the first to define the concept of land banking as structural acquisition and temporary management of land in rural areas by a state agency, with the aim of renting or redistributing land to improve the agricultural structure or reallocating land for purposes with a public interest [48]. This definition underlines the importance of public intervention in the consolidation of fragmented soils [49], and many studies show the results of its implementation [50–54].

In addition to the public institution intervention, a second approach can be carried out. It consists of the initiative by the landowners who can stimulate the process of consolidation of the territory by joining their lands with the aim of operating cooperative agriculture with the common cultivation of land by a group of farmers [55,56]. This approach tends to be efficient if, through the voluntary exchange of land between the landowners, the neighboring lots of each landowner can be grouped.

The main objective seems to be that of the competitiveness of agricultural systems with the improvement of performance, e.g., productivity and related increase in profits. However, in geographical areas such as Europe, this objective can be combined with others that create value and wealth and are not directly related to agricultural production. European rural development policy is closely related to improving land management and the environment [57,58].

The orientation towards wider objectives leads to the involvement of various factors that allow identifying other objectives, such as improving the living conditions of rural populations [59,60], the improvement of sales practices and enhancement of local products [61–64] and the integrated exploitation of human, natural and cultural resources, including landscape heritage [65–68]. In the latter case, the landscape is an integral part of the tourist experience even when it is mainly oriented towards the knowledge of the typical agricultural products of the place, and the combination of the two elements can make the destination a unique area [69]. The link between food, the landscape and other elements, such as culture and environment, can create experiences and influence the tourist

choice [70–73]. Often, the landscape is an essential element in enhancing the food and wine tourism experience [74–78]. In addition, it is also an integral part of the tourist appeal in specific territorial areas such as in the case of UNESCO sites [23,65,79].

At the same time, the landscape can assume a particular value in marginal areas that tend to have a high naturalistic quality, which is perceived as an aspect of high growth potential in tourist terms [80,81]. In marginal areas, the landscape of a territory can be shaped by sustainable development policies through the support of initiatives aimed at the recovery of traditional agricultural activities, the protection of the environment and biodiversity. The result that can be obtained is a landscape as a fundamental vector of tourist attraction, which, in some cases, is the identity image of the territory itself [82]. At the same time, the landscape can be considered a tourist resource hampered by infrastructure limits, e.g., a lack of accommodation facilities and inadequate communication routes, which do not allow the tourism sector to develop [83]. Sometimes, the existence of areas with high quality natural and agricultural landscapes may not be associated with adequate tourism development, as well as areas where high tourism development is not associated with an appreciable quality of the landscape [84]. In some cases, tourism has developed to the point of generating unwanted effects that have led to changes in the landscape and, more generally, in the ecosystem [85].

In conclusion, farms operating in harsh environments, such as marginal areas, are uncovered to the effects of many environmental and climatic limitations that reduce the creation and development of activities. Territorial policies tend to mitigate these limitations by supporting initiatives aimed at revitalizing the productive, social and cultural structure, in order to strengthen and safeguard these territories [28]. Land fragmentation is a factor that limits the development of the agricultural and forestry sector, as well as the ability of individual companies to reach an adequate economic dimension by diversifying and expanding their income-related activities. The LCAs can therefore contribute to the reduction of these limitations and support better management of the territory, also from a tourism point of view.

3. Methodology

The LCA phenomenon was treated as a case study. A comparison was made among the various associations established in the Piedmont area with a focus on their objectives and intended use of the consolidated land of each individual association, highlighting any discrepancies and/or similarities [86–90]. There are 16 LCAs in Piedmont, 15 of which are already active and operating in their areas of competence. All associations were contacted, and the 15 active ones participated in the study (Table 1). The Association of Sestriere declined the invitation to participate as, at the time of the investigation, it had just formed.

As already pointed out, the purpose of this study is the comparison between the associations to verify and understand a possible relationship between the transformation of the landscape and the tourist development of territories. In order to achieve this objective, the analysis was structured in three phases. The first was dedicated to the creation of the questionnaire, on the basis of a careful and complete bibliographic analysis aimed at identifying the specificities of the LCAs and the related opportunities resulting from their activation. The second was dedicated to the application of individual interviews to collect information from different presidents of the LCAs. The third was the analysis and comparison of the information collected in order to consolidate the possible combination of safeguarding the landscape and tourism development within marginal territories.

The questionnaire was designed to allow the interview of the 15 LCA presidents and collect the necessary information to be processed. The contents of the questionnaire considered all the studies carried out on the LCA theme, with particular attention to the analyses dedicated to the relevance of this management tool in the area [91].

Table 1. Operating land consolidation associations.

No.	Association Name	Founded	Municipality	No. Associates	Surface Consolidated (ha)
1	Alpe Sorbella	2017	Rassa	484	235
2	Avolasca	2012	Avolasca	25	-
3	Caldirola	2013	Fabbrica Curone	20	200
4	Carnino	2012	Briga Alta	20	24
5	Cornalin	2014	Lauriano, Tonengo	30	150
6	I Menou	2015	Melle	50	100
7	La Chiara	2016	Usseglio	34	15
8	Macra	2014	Macra	30	350
9	Montemale	2013	Montemale	70	100
10	Paradiso	2018	Mompantero	70	15
11	Ritorno ai prati	2013	Ostana	35	25
12	Stroppo	2016	Stroppo	30	33
13	Thures	2017	Cesana Torinese	32	271
14	Upega	2013	Briga Alta	35	140
15	Valli libere	2018	Rittana	9	20

A first version of the interview was created and assessed by a group of experts to detect any structural weaknesses. The group was composed of four university researchers, experts on land consolidation, ecosystem management and tourism. A final version was then carried out. It was divided into three parts; the first was dedicated to assessing main items as to LCAs that emerged from the literature review, i.e., strengths and opportunities, with a 1–7 point Likert scale (Table 2). The second part was dedicated to open questions on particular issues, i.e., perception of ecosystem improvement and assessment of end use. The third part was dedicated to LCA data (see also Appendix A).

This study used a survey with an individual interview method to improve the knowledge of LCA implementation. This method allows goals to be reached and can more efficiently generate an in-depth analysis on the landscape and tourism topic. In this case, individual interviews are very useful for collecting all observations from presidents of the associations because interviewees sometimes do not like to share their own ideas with others, and this technique is a tool to bypass their hesitancy and diffidence. In this context, the individual interview method was the most useful tool to identify feasible destinations of consolidated land, evidencing the link between the landscape and tourism. This technique was applied to investigate LCA issues by interviewing all presidents of the associations. They can be identified as the main experts on the basis of their knowledge and closeness as to the topic of the study. Therefore, a total of 15 LCA presidents were involved.

This study was structured as a survey, with an individual semi-structured interview per each expert [92]. All presidents replied to the semi-structured interview [93] during the summer of 2018. Each president was contacted to set a date and time for the interview. The study aimed to collect information requested and, sometimes, extra data in line with other authors [94]. The interviews lasted from 60 to 150 min. The interviews were recorded and main topics noted by the interviewers.

Lastly, the collected information was divided up equally between the authors, who analyzed it separately so as not to influence one another [95]. Furthermore, the analysis results were compared and the main points identified.

Table 2. Strengths and opportunities that emerged from the literature review.

Strengths	Definition
Innovative integration of various territorial areas	Union between neighboring territories and communities
Positive environmental impacts	Land management produces a better balance between nature and man
Practicable guidelines	Identification of guidelines for a replicability of land management
Recovery of sustainable cultivation systems	Re-introduction of environmental-friendly cultivation methods
Improvement of the quality of life of the members	The community of the association benefits from the positive externalities generated by the management of the territory
Opportunities	
Increasing the spread of sustainable forms of agriculture on aggregate land	Agricultural activities shared between different agricultural land properties
Public funding opportunities	Interventions in the territory and management of the agricultural area with participation in financing
Interventions in the territory with the tourist destination	Management of the territory for any tourist purposes
Conservation of biodiversity	Safeguarding nature
Active recovery of new agricultural land	Consolidated agricultural land increases and returns to being productive
Multifunctional use of the recovered surfaces	The land can also be used for activities other than cultivation, e.g., coppice, pasture, nature reserve
Increasing the fertility of the soil	Cultivation practices aimed at improving chemical, physical and biological characteristics
Involvement of other owners due to an increase in the UAA (Utilised Agricultural Area)	Virtuous effect for which the unique management of the land leads other owners to confer their own land
Common brand for agro-food production	creation of a sign of quality to differentiate food products made in the territory of associations
Reduction of plant protection by integrated companies	Reduction of the use of synthetic products in agricultural land consolidated

4. Results

The first part of the interview aimed to evaluate items with a positive value that the LCAs have already generated and may be able to generate. With reference to the first group, the items identified with the review concern the estimated strengths (Table 2). Based on the experience gained by the presidents, all the items examined obtained positive results with a median between 6 and 7.

The positive environmental impacts and the innovative integration of several territorial areas obtained the highest averages, respectively 6.47 and 6.33, highlighting an easier understanding of the advantage generated by the interviewees. In fact, these items obtained an evaluation from all the interviewees characterized by a certain homogeneity with rather limited variances. The other items, on the other hand, were characterized by a lower homogeneity in the assigned assessments and in their overall number. These were practical guidelines, resumption of sustainable cultivation

systems and improvement of the quality of life of the members. In the latter cases, there was a lack of implementation of cultivation systems in consolidated soils (3 respondents), an inability to identify viable guidelines (3 respondents) and a lack of any improvements in quality of life (1 respondent) (Table 3).

Table 3. Evaluation of the strengths of the land consolidation associations.

Item	No.	Average	Median	Variance
Innovative integration of various territorial areas	15	6.33	7.00	0.95
Positive environmental impacts	15	6.47	7.00	1.12
Practicable guidelines	12	6.08	7.00	1.90
Recovery of sustainable cultivation systems	12	5.75	6.00	2.20
Improvement of the quality of life of the members	14	5.21	6.00	2.49

The second group of items consists of the opportunities generated by the activity carried out by the LCA, which, according to the literature, would be obtainable (Table 2) but have not yet been verified. Based on the considerations of the respondents, most of these items seem to be considered positively, with a median of 7 for eight out of 10 items.

Respondents seem to perceive the idea of a greater diffusion of sustainable forms of agriculture and interventions aimed at improving the tourist attractiveness of the managed territory and believe that the aggregation may also lead to more funding opportunities. They also consider positively the conservation of biodiversity, the active recovery of new agricultural land, the multifunctional use of consolidated surfaces, the increase soil fertility and the involvement of other owners with an increasing level of misalignment in the assessments. The establishment of a common brand to be dedicated to consolidated soil products does not seem to meet the favor of respondents with a strong divergence between the various assessments. The reduction of pesticides in the productive management of agricultural land deserves a separate discussion: two of the three respondents were unable to assign a value, since in the land-managed areas, the use of synthetic products is reduced to the essentials, and therefore it would be impossible to achieve a further reduction (Table 4).

Table 4. Evaluation of the opportunities generated by the land consolidation associations.

Item	No.	Average	Median	Variance
Increasing the spread of sustainable forms of agriculture on aggregate land	15	6.50	7.00	1.04
Public funding opportunities	15	6.33	7.00	1.10
Interventions in the territory with tourist destination	15	6.33	7.00	1.10
Conservation of biodiversity	15	6.33	7.00	2.10
Active recovery of new agricultural land	15	6.20	7.00	1.89
Multifunctional use of the recovered surfaces	15	6.07	7.00	1.92
Increasing the fertility of the soil	15	6.00	7.00	3.00
Involvement of other owners due to an increase in the UAA	15	5.33	7.00	4.81
Common brand for agro-food production	15	4.33	4.00	4.10
Reduction of plant protection by integrated companies	5	7.00	7.00	-

The second part of the interview was dedicated to the analysis of the potential of the territory according to the natural heritage and its possible intended use, in order to obtain a useful income for the community. All the presidents agreed in supporting the same fundamental motivation for the associations' establishment, i.e., better land management. The shared idea, indeed, consists of

considering the associated management of fragmented land properties and uncultivated or abandoned agricultural land a necessary tool for the protection of the environment and landscape, for the prevention of hydrogeological and fire risks. Based on this principle, all respondents highlighted another opportunity, considered as secondary, which consists of also enhancing the consolidated territory with economic value, i.e., a management oriented towards agricultural activities and/or tourist accommodation.

A total of 14 respondents identify as a priority the development of activities dedicated to the breeding of animals suitable for grazing even in semi-wild states such as horses, cattle and/or sheep. In one case, a semi-wild pig farm was implemented. The majority have farms already operating in the area, and the acquisition of land seems oriented towards increasing the economic value of activities already in progress, for the benefit of all members. In three cases, the intended use of the land was oriented towards animal breeding, but at the time of the interview, there was no presence of a company in operation.

A total of 10 respondents highlighted the importance of managing the territory to preserve and/or improve the landscape by increasing the attractiveness in terms of tourism. Landscape-based land management, indeed, enhances the cleaning of paths and undergrowth, allows farm animals to reclaim nature and, therefore, stimulates tourism activities such as hospitality. In particular, the tourist-oriented proposals are different, i.e., agritourist activities, horseback riding, hiking and more generally outdoor activities, with the possibility of approaching ancient rural activities in a didactic way, such as sheep farming and dairy produce.

The cultivation of fruit and vegetables is an end use shared by seven respondents that seems to be mostly an alternative to breeding and in any case linked to the soil and climatic conditions of the land involved. A further respondent, given the particular environmental conditions of the managed area, highlighted forestry as a tool for producing income. Finally, some respondents underlined the socio-economic value of associated management in addition to generating new jobs, through the creation and/or setting up of farms (4 respondents) and the importance for strengthening social cohesion in the community. Many respondents feel this aspect has a desirable positive effect, but only a total of four respondents highlighted an effective manifestation in their communities (Table 5).

Table 5. End use of territorial associate management by land consolidation associations.

End Use	Land Consolidation Association No.
Breeding	1,2,3,4,5,6,7,8,9,10,12,13,14,15
Grazing land	1,2,3,4,5,6,7,8,9,10,12,13,14,15
Landscape	1,2,3,4,6,7,9,10,12,14
Tourism	1,2,3,4,6,7,9,10,12,14
Agriculture	5,7,8,10,11,13,15
New jobs	1,11,13,15
Social cohesion	4,5,11,13
Forestry (wood)	2

5. Discussion

As already indicated, the rational management of the territory is a fundamental element of achieving the objectives for sustainable development. Even marginal and disadvantaged areas can contribute to the protection of the environment and to the development of activities that are less impactful from an environmental point of view, improving the quality of life of rural populations.

In this context, the land associations can provide the tools for sustainable development of the territory concerned, as well as from a long-term perspective. Sustainable land management immediately takes on environmental, social and even economic value. The care of natural beauty and the return to nature of farm animals allows a coherent management of the territory that also positively affects the tourist flow.

The land associations have as their purpose the planning and implementation of a land management plan capable of identifying its potential and producing technical and economic solutions to enhance agricultural and forestry production and for the conservation of the environment and landscape. This value proposition of the associations convinced the owners of abandoned and/or uncultivated land to join, with the aim of promoting the use and conservation of the production potential and value of the landscape in those areas.

The investigation carried out validated what emerged from the literature [91]. With reference to the strengths identified, the respondents tended to agree upon them. Combining land in a rational and coordinated way generates benefits that the whole community can utilize, such as the cleaning of the territory or the distribution of income or goods generated from consolidated land [50,55,56]. In addition, it can activate virtuous mechanisms of territorial integration for the benefit of an enlarged community that can extend beyond the association's borders. Social cohesion and the benefits generated lead to a noticeable improvement in the quality of life of the members of the community [50,59] by amplifying the possibility of replicating the model in other rural areas. Another positive aspect concerns the environmental benefits that can pass through the reintroduction of "forgotten" cultivation practices of abandoned or uncultivated land and the rapprochement of man with nature. These elements also allow a return to the almost forgotten traditions and to that authenticity as it is understood by the older generations.

In relation to the opportunities that can be generated by the associated management of marginal and uncultivated land, respondents underline the importance of public support in associations through dedicated aid, highlighting the need for at least initial support from the institutions, in line with the requests of the rural world [49,50]. Land associations also have the ability to amplify the multifunctionality of consolidated land, in line with rural policies [36], which allow food production [61] and visibility of the usable aesthetic landscape element, as well as in tourism terms [67]. In particular, interventions aimed at improving the tourist service, such as paths for hikers and/or cycle paths for cyclists, possibly supported by external funding, are hoped for. The combination of landscape elements, food production and structures dedicated to tourism would therefore allow the creation of experiences that recall tradition and authenticity [66,70] and the consequent generation of value on the spot.

Lastly, results show that the presidents of LCAs assign a high value to the naturalistic heritage and landscape according to their destination in tourism terms, in line with other authors [80,81]. The belonging of managed land to marginal areas should not be considered a limit [83] or a threat [85] but, if anything, an opportunity that must necessarily pass through a rational use of the territory, mainly supported by agricultural and pastoral activities.

6. Conclusions and Limitations

The territory offers many useful elements for increasing the number of visitors, tourists and/or customers, which varies according to the type of offer and/or context. The historical–cultural and environmental resources allow the activation of virtuous systems among the elements that compose them. Territory, landscape and tourism lead to the creation of experiences, useful means for increasing and spreading the value of the territory.

In this context, the present study analyzed the potential of the LCA, an important tool for collective management of the territory, in consideration of the relationship between the landscape and tourism. Indeed, LCAs revitalize the agro-forestry–pastoral activities and the relative production, supporting the benefits generated, as well as in the landscape setting. The collective improvement of the elements that make up the territory encourages the flow of potential tourists and stimulates the activation of new, focused services. Furthermore, the LCAs induce the reactivation of ties within the community; this type of initiative works when a participatory process is generated by the whole community, i.e., municipal administrations, landowners, citizens, agro-pastoral farms.

Therefore, an LCA is a tool dedicated to the management of fragmented territories and can be considered an opportunity for rural communities who wish to stimulate and revitalize their ability to produce environmental, economic and social value.

The survey carried out shows that the Piedmontese model can obtain results both in landscape–environmental and in economic-social terms and can be considered a replicable model, provided that some organizational barriers such as the complete bestowal by the individual owners' lands to the area of interest is obtained, through the involvement of all members of the community.

However, Piedmontese land associations are relatively young institutions. Expected results with a social value, such as recreating the social tissue of rural communities or stimulating shared planning and participatory mechanisms, can take a long time to consolidate and to produce advantages with a certain stability.

At the same time, the economic spillovers, as far as ascertained, are still difficult to quantify precisely. Let us consider, for example, the use of consolidated land for tourism or grazing purposes, the revenues of which are determined by a set of elements of which the consolidated land is just one of, or the economic value generated by the formation of "treasure chests" of biodiversity whose economic value is invaluable. In this sense, therefore, this study, while confirming the beneficial effects of the establishment of land associations, highlights the main limitation of the impossibility, at the moment, of being able to measure these effects with certainty from a purely monetary point of view.

To conclude, this study and related findings are able to provide some information to help LCAs and their presidents improve their activities in marginal areas. The collected information has some limitations determined, on the one hand, by the brief period of activity of LCAs with a specific location concentrated in the north-west of Italy that do not allowed a comparison with other areas where similar initiatives are rare. On the other hand, some Piedmontese LCA initiatives have been activated in recent times and, currently, their assessments are partial and limited. However, these results are the basis of lengthy research dedicated to LCAs and their evolution. Future development will focus on the analysis of the socio-economic dimension over a defined period of time.

Appendix A

Main survey questions.
The questionnaire was organized into parts as explained in "Materials and methods".
FIRST PART—STRENGTHS AND OPPORTUNITIES
Respondents were asked to answer, using a seven-point Likert scale, to the statements in the following table. Moreover, respondents could add further indications for each item (the "I do not know" answer included evidencing motivations).

Strengths
Innovative integration of various territorial areas
Positive environmental impacts
Practicable guidelines
Recovery of sustainable cultivation systems
Improvement of the quality of life of the members
Opportunities
Increasing the spread of sustainable forms of agriculture on aggregate land
Public funding opportunities
Interventions in the territory with tourist destination
Conservation of biodiversity
Active recovery of new agricultural land
Multifunctional use of the recovered surfaces
Increasing the fertility of the soil
Involvement of other owners due to an increase in the UAA
Common brand for agro-food production
Reduction of plant protection by integrated companies

SECOND PART—PERCEPTION OF ECOSYSTEM IMPROVEMENT AND ASSESSMENT OF END USE
This part was structured in the following open questions.

- What is the main end use of your land consolidation association, currently?
- In addition to the main end use, are there secondary/complementary uses?
- What benefits are obtained for the territory by land consolidation association activities?
- Can the benefits you identify create additional indirect ones? If so, which ones?

THIRD PART—LAND CONSOLIDATION ASSOCIATION INFORMATION
In this case, the following information was requested.
Association name; year of foundation; location (municipality); number of associates; surface consolidated (ha); web site.

References

1. Paniccia, P.; Valeri, M. Enhancing knowledge in tourist firms: Between maintenance and change. In *Management of Change in Tourism: Creating Opportunities-Overcoming Obstacles*; Erich Schmidt: Berlin, Germany, 2010; pp. 123–136.
2. Paniccia, P.; Minguzzi, A.; Valeri, M. Co-evoluzione tra impresa e destinazione turistica. L'esperienza innovativa dell'albergo diffuso. In *Creatività, Innovazione e Territorio. Ecosistemi del Valore per la Competizione Globale*; Pilotti, L., Ed.; Il Mulino: Bologna, Italy, 2011.
3. Gregori, G.L.; Pencarelli, T.; Splendiani, S.; Temperini, V. Sustainable tourism and value creation for the territory: Towards a holistic model of event impact measurement. *Calitatea* **2013**, *14*, 97.
4. Martini, U.; Buffa, F.; Richins, H.; Hull, J.S. Creating tourist experiences in European alpine areas: Beyond mass tourism. In *Mountain Tourism: Experiences, Communities, Environments and Sustainable Futures*; Thompson Rivers University: Kamloops, BC, Canada, 2016; pp. 36–43.
5. Zhang, R.; Smith, L. Bonding and dissonance: Rethinking the Interrelations among Stakeholders in Heritage Tourism. *Tour. Manag.* **2019**, *74*, 212–223. [CrossRef]

6. Tseng, M.-L.; Lin, C.; Lin, C.-W.R.; Wu, K.-J.; Sriphon, T. Ecotourism development in Thailand: Community participation leads to the value of attractions using linguistic preferences. *J. Clean. Prod.* **2019**, *231*, 1319–1329. [CrossRef]

7. Tiberghien, G. Managing the Planning and Development of Authentic Eco-Cultural Tourism in Kazakhstan. *Tour. Plan. Dev.* **2019**, *16*, 494–513. [CrossRef]

8. Paniccia, P.M.A.; Leoni, L. Co-evolution in tourism: The case of Albergo Diffuso. *Curr. Issues Tour.* **2019**, *22*, 1216–1243. [CrossRef]

9. Duglio, S.; Bonadonna, A.; Letey, M.; Peira, G.; Zavattaro, L.; Lombardi, G. Tourism Development in Inner Mountain Areas—The Local Stakeholders' Point of View through a Mixed Method Approach. *Sustainability* **2019**, *11*, 5997. [CrossRef]

10. Porter, M.E.; Kramer, M.R. The link between competitive advantage and corporate social responsibility. *Harv. Bus. Rev.* **2006**, *84*, 78–92. [PubMed]

11. Paniccia, P.; Basciano, M. *Modelli e Tecniche di Management Applicati All'impresa Turistica*; G. Giappichelli Editore: Torino, Italy, 2014.

12. Pine, B.; Gilmore, J.H. Welcome to the experience economy. *Harv. Bus. Rev.* **1998**, *76*, 97–105. [PubMed]

13. Tarssanen, S.; Kylänen, M. *A Theoretical Model for Producing Experiences. A Touristic Perspective*; Kylänen, M., Ed.; Articles on Experiences 2; Lapland Press University: Rovaniemi, Finland, 2007.

14. Tynan, C.; Mckechnie, S. Experience Marketing: A Review and Reassessment. *J. Mark. Manag.* **2009**, *25*, 501–517. [CrossRef]

15. Quinlan Cutler, S.; Carmichael, B. The dimensions of the tourist experience. In *The Tourism and Leisure Experience: Consumer and Managerial Perspectives*; Morgan, M., Lugosi, P., Ritchie, B., Eds.; Channel View Publications: Bristol, UK, 2010; pp. 3–26.

16. Pencarelli, T.; Forlani, F. Il marketing dei prodotti tipici nella prospettiva dell'economia delle esperienze. In Proceedings of the V Congresso Internazionale Marketing Trends, Venice, Italy, 20–21 January 2006; pp. 1–30.

17. Bonadonna, A.; Peira, G.; Varese, E. The European Optional Quality Term Mountain Product: Hypothetical Application in the Production Chain of a Traditional Dairy Product. *Calitatea* **2015**, *16*, 99–104.

18. Appleton, J. *The Experience of Landscape*; Wiley Chichester: Chichester, UK, 1996.

19. Brunetta, G.; Voghera, A. Evaluating landscape for shared values: Tools, principles, and methods. *Landsc. Res.* **2008**, *33*, 71–87. [CrossRef]

20. Terkenli, T.S.; Kavroudakis, D. A Stakeholders' Analysis of Eastern Mediterranean Landscapes: Contextualities, Commonalities and Concerns. *Land* **2017**, *6*, 90. [CrossRef]

21. Van Leeuwen, C.; Seguin, G. The concept of terroir in viticulture. *J. Wine Res.* **2006**, *17*, 1–10. [CrossRef]

22. Charters, S. Marketing terroir: A conceptual approach. In Proceedings of the 5th International Academy of Wine Business Research Conference, Auckland, New Zealand, 8–10 February 2010.

23. Peira, G.; Beltramo, R.; Pairotti, M.B.; Bonadonna, A. Foodservice in a UNESCO site: The restaurateurs' perception on communication and promotion tools. *Sustainability* **2018**, *10*, 2911. [CrossRef]

24. Colombo, S.; Perujo Villanueva, M. The inefficiency and production costs due to parcel fragmentation in olive orchards. *New Medit* **2017**, *2*, 2–10.

25. UNCEM. L'Associazione Fondiaria per Rivitalizzare L'agricoltura in Montagna. Piemonti—Periodico D'informazione della Delegazione Piemontese UNCEM, 1, 2017. Available online: http://www.regione.piemonte.it/pinforma/economia/739-le-associazioni-fondiarie-contro-labbandono-delle-terre-montane.html (accessed on 22 November 2017).

26. Probo, M.; Cavallero, A.; Lonati, M. *Gestione Associata Delle Superfici Agro-Pastorali del Comune di Pragelato (To)*; Edizioni DISAFA; Università Degli Studi di Torino: Torino, Italy, 2016.

27. Orlandi, S.; Probo, M.; Sitzia, T.; Trentanovi, G.; Garbarino, M.; Lombardi, G.; Lonati, M. Environmental and land use determinants of grassland patch diversity in the western and eastern Alps under agro-pastoral abandonment. *Biodivers. Conserv.* **2016**, *25*, 275–293. [CrossRef]

28. Rey Benayas, J.M.; Martins, A.; Nicolau, J.M.; Schulz, J.J. Abandonment of agricultural land: An overview of drivers and consequences. *Perspect. Agric. Vet. Sci. Nutr. Nat. Resour.* **2007**, *2*, 1–14. [CrossRef]

29. MacDonald, D.; Crabtree, J.R.; Wiesinger, G.; Dax, T.; Stamou, N.; Fleury, P.; Lazpita, J.G.; Gibon, A. Agricultural abandonment in mountain areas of Europe: Environmental consequences and policy response. *J. Environ. Manag.* **2000**, *59*, 47–69. [CrossRef]

30. Renwick, A.; Jansson, T.; Verburg, P.H.; Revoredo-Giha, C.; Britz, W.; Gocht, A.; McCracken, D. Policy reform and agricultural land abandonment in the EU. *Land Use Policy* **2013**, *30*, 446–457. [CrossRef]

31. Hinojosa, L.; Napoléone, C.; Moulery, M.; Lambin, E.F. The "mountain effect" in the abandonment of grasslands: Insights from the French Southern Alps. *Agric. Ecosyst. Environ.* **2016**, *221*, 115–124. [CrossRef]

32. Hunziker, M. The spontaneous reafforestation in abandoned agricultural lands: Perception and aesthetic assessment by locals and tourists. *Landsc. Urban Plan.* **1995**, *31*, 399–410. [CrossRef]

33. Bracchetti, L.; Carotenuto, L.; Catorci, A. Land-cover changes in a remote area of central Apennines (Italy) and management directions. *Landsc. Urban Plan.* **2012**, *104*, 157–170. [CrossRef]

34. Arnaez, J.; Lasanta, T.; Errea, M.P.; Ortigosa, L. Land abandonment, landscape evolution, and soil erosion in a Spanish Mediterranean mountain region: The case of Camero Viejo. *Land Degrad. Dev.* **2011**, *22*, 537–550. [CrossRef]

35. Persichillo, M.G.; Bordoni, M.; Meisina, C. The role of land use changes in the distribution of shallow landslides. *Sci. Total Environ.* **2017**, *574*, 924–937. [CrossRef]

36. Van der Ploeg, J.D.; Roep, D. Multifunctionality and rural development: The actual situation in Europe. *Multifunct. Agric. New Paradig. Eur. Agric. Rural Dev.* **2003**, *3*, 37–54.

37. Beltramo, R.; Duglio, S.; Quarta, M. *SGAP–Sistema di Gestione Ambiental-Paesaggistico*; Aracne Editrice: Ariccia, Italy, 2011.

38. Copus, A.; Courtney, P.; Dax, T.; Meredith, D.; Noguera, J.; Talbot, H. *EDORA–European Development Opportunities for Rural Areas. Final Report, Parts A, B and C*; ESPON: Rue Erasme, Luxembourg, 2011.

39. Vieri, S. Common Agricultural Policy (CAP) and measures for environment protection and conservation: Contrasts, balances and new methods of development for the future. *Int. J. Environ. Health* **2012**, *6*, 48–62. [CrossRef]

40. Beltramo, R.; Duglio, S.; Peira, G.; Gerbino, L. The Environmental Management System: A Vector for the Territorial Development. The Experience of the Town of Giaveno (Italy). In *Towards Quality–Management Systems and Solutions, Polish Society of Commodity Science*; Cracow University of Economics: Kraków, Poland, 2014; pp. 19–30.

41. Hien, H.T.; Franke, C.; Piorr, A.; Lange, A.; Zasada, I. Target groups of rural development policies. *Outlook Agric.* **2014**, *43*, 75–83. [CrossRef]

42. Courtney, P.; Powell, J. Evaluating Innovation in European Rural Development Programmes: Application of the Social Return on Investment (SROI) Method. *Sustainability* **2020**, *12*, 2657. [CrossRef]

43. European Commission. *The Common on Monitoring and Evaluation Framework for the Common Agricultural Policy*; CAP Indicators European Commission: Brussels, Belgium, 2015.

44. Castaño, J.; Blanco, M.; Martinez, P. Reviewing Counterfactual Analyses to Assess Impacts of EU Rural Development Programmes: What Lessons Can Be Learned from the 2007–2013 Ex-Post Evaluations? *Sustainability* **2019**, *11*, 1105. [CrossRef]

45. Van Dijk, T. *Dealing with Land Fragmentation in Central Europe: A Critical Assessment on the Use of Western Instruments*; Eburon: Delft, The Netherlands, 2003; p. 228.

46. Van Dijk, T. Complications for traditional land consolidation in Central Europe. *Geoforum* **2007**, *38*, 505–511. [CrossRef]

47. Hartvigsen, M. Land Consolidation in Central and Eastern European Countries. In Proceedings of the Shaping the Change, XXIII FIG Congress, Munich, Germany, 8–13 October 2006.

48. Damen, J. Land banking in The Netherlands in the context of land consolidation. In Proceedings of the International Workshop: Land Banking/Land Funds as an Instrument for Improved Land Management for CEEC and CIS, Tonder, Denmark, 17–20 March 2004.

49. Yang, B.; Wang, Z.; Yao, X.; Chai, J. Assessing the Performance of Land Consolidation Projects in Different Modes: A Case Study in Jianghan Plain of Hubei Province, China. *Int. J. Environ. Res. Public Health* **2020**, *17*, 1410. [CrossRef] [PubMed]

50. Zhou, Y.; Guo, L.; Liu, Y. Land consolidation boosting poverty alleviation in China: Theory and practice. *Land Use Policy* **2019**, *82*, 339–348. [CrossRef]

51. Van Dijk, T.; Kopeva, D. Land banking and Central Europe: Future relevance, current initiatives, Western European past experience. *Land Use Policy* **2006**, *23*, 286–301. [CrossRef]

52. Milićević, D. Review of existing land funds in European countries. *Geonauka* **2014**, *2*, 31–42. [CrossRef]

53. FAO. *Experiences with Land Consolidation and Land Banking in Central and Eastern Europe after 1989*; Working Paper NO. 26; Food and Agriculture Organization of the United Nations: Rome, Italy, 2015.

54. Marošan, S.; Milićević, D.; Đokić, V.; Šoškić, M. Value Framework for Evaluation of Land Banks/Funds. *Geod. Vestn.* **2014**, *58*, 568–577. [CrossRef]

55. Engindeniz, S.; Yercan, M. An Approach for Turkish Agriculture: Group Farming. *Die Bodenkult.* **2002**, *53*, 227–233.

56. Milovanovic, V.; Smutka, L.; Jusufi, G. Cooperative Farming Potential for Establishing Food Security within Rural Bangladesh. *Acta Univ. Agric. Silvic. Mendel. Brun.* **2016**, *64*, 2067–2074. [CrossRef]

57. Westhoek, H.J.; Van den Berg, M.; Bakkes, J.A. Scenario development to explore the future of Europe's rural areas. *Agr. Ecosyst. Environ.* **2006**, *114*, 7–20. [CrossRef]

58. Galdeano-Gómez, E.; Aznar-Sánchez, J.A.; Pérez-Mesa, J.C. The Complexity of Theories on Rural Development in Europe: An Analysis of the Paradigmatic Case of Almería (South-east Spain). *Sociol. Rural* **2011**, 51. [CrossRef]

59. D'Agostini, L.R.; Fantini, A.C. Quality of Life and Quality of Living Conditions in Rural Areas: Distinctively Perceived and Quantitatively Distinguished. *Soc. Indic. Res.* **2008**, *89*, 487–499. [CrossRef]

60. Chambers, R. *Rural Development, Putting the Last First*; Routledge: London, UK; Taylor & Francis Group: New York, NY, USA, 2013; pp. 1–235.

61. Rey, R. New Challenges and Opportunities for Mountain Agri-Food Economy in South Eastern Europe. A Scenario for Efficient and Sustainable Use of Mountain Product, Based on the Family Farm, in an Innovative, Adapted Cooperative Associative System–Horizon 2040. *Proc. Econ. Financ.* **2015**, *22*, 723–732. [CrossRef]

62. Sidali, K.L.; Kastenholz, E.; Bianchi, R. Food tourism, niche markets and products in rural tourism: Combining the intimacy model and the experience economy as a rural development strategy. *J. Sustain. Tour.* **2015**, *23*, 1179–1197. [CrossRef]

63. Brun, F.; Mosso, A. The development of a Piedmont mountain area through the valorisation of black truffle. *Riv. Econ. Agrar.* **2016**, *71*, 435–442. [CrossRef]

64. Lombardi, G.; Probo, M.; Renna, M.; Astegiano, S.; Bellio, A.; Enri, S.R.; Enri Ravetto, S.; Lussiana, C.; Cornale, P.; Malfatto, V.; et al. The Piedmont Noble Milk as a tool to improve the competitiveness of mountain farms. *J. Nutr. Ecol. Food Res.* **2014**, *2*, 232–236. [CrossRef]

65. Heslinga, J.; Groote, P.; Vanclay, F. Towards Resilient Regions: Policy Recommendations for Stimulating Synergy between Tourism and Landscape. *Land* **2020**, *9*, 44. [CrossRef]

66. Tiberghien, G.; Bremner, H.; Milne, S. Authenticity and disorientation in the tourism experience. *J. Outdoor Recreat. Tour.* **2020**, *30*, 100283. [CrossRef]

67. Zasada, I.; Häfner, K.; Schaller, L.; van Zanten, B.T.; Lefebvre, M.; Malak-Rawlikowska, A.; Nikolov, D.; Rodríguez-Entrena, M.; Manrique, R.; Ungaro, F.; et al. A conceptual model to integrate the regional context in landscape policy, management and contribution to rural development: Literature review and European case study evidence. *Geoforum* **2017**, *82*, 1–12. [CrossRef]

68. Terkenli, T.S. Human activity in landscape seasonality: The case of tourism in Crete. *Landsc. Res.* **2005**, *30*, 221–239. [CrossRef]

69. Wolf, E. *Culinary Tourism: A Tasty Economic Proposition*; International Culinary: Portland, OR, USA, 2002.

70. Zhang, T.; Chen, J.; Hu, B. Authenticity, quality, and loyalty: Local food and sustainable tourism experience. *Sustainability* **2019**, *11*, 3437. [CrossRef]

71. Ellis, A.; Park, E.; Kim, S.; Yeoman, I. What is food tourism? *Tour. Manag.* **2018**, *68*, 250–263. [CrossRef]

72. Garibaldi, R.; Pozzi, A. Creating tourism experiences combining food and culture: An analysis among Italian producers. *Tour. Rev.* **2018**, *73*, 230–241. [CrossRef]

73. Jiménez Beltrán, J.; López-Guzmán, T.; Santa-Cruz, F.G. Gastronomy and Tourism: Profile and Motivation of International Tourism in the City of Córdoba, Spain. *J. Culin. Sci. Technol.* **2016**, *14*, 347–362. [CrossRef]

74. Getz, D.; Brown, G. Critical success factors for wine tourism regions: A demand analysis. *Tour. Manag.* **2006**, *27*, 146–158. [CrossRef]

75. Ben-Nun, L.; Cohen, E. The important dimensions of wine tourism experience from potential visitors' perception. *Tour. Hosp. Res.* **2009**, *9*, 20–31.

76. Brouder, P.; De la Barre, S. Consuming stories: Placing food in the Arctic tourism experience. *J. Herit. Tour.* **2013**, *8*, 213–223.

77. Boksberger, P.; Carlsen, J. Enhancing consumer value in wine tourism. *J. Hosp. Tour. Res.* **2015**, *39*, 132–144.

78. World Tourism Organization. *Second Global Report on Gastronomy Tourism*; UNWTO: Madrid, Spain, 2017.
79. Jansen-Verbeke, M.; McKercher, B. Reflections on the myth of tourism preserving "traditional" agricultural landscapes. *J. Resour. Ecol.* **2013**, *4*, 242–249. [CrossRef]
80. Pavličková, K.; Sepešová, D. It has a small village a chance for the development of the recreation? In Proceedings of the Public Recreation and Landscape Protection-With Nature Hand in Hand? Conference Proceeding, Brno, Czech Republic, 1–3 May 2017; pp. 176–181.
81. Bieliková, H.; Ťažký, J.; Petrovič, F. Dispersed settlement as a factor of geotourism development in Nova Bana region. In Proceedings of the 16th International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, Albena, Bulgaria, 30 June–6 July 2016; Volume 2, pp. 247–254. [CrossRef]
82. Giordano, S. Agrarian landscapes: From marginal areas to cultural landscapes—Paths to sustainable tourism in small villages—The case of Vico Del Gargano in the club of the Borghi più belli d'Italia. *Qual. Quant.* **2019**. [CrossRef]
83. Chlachula, J. Geo-tourism perspectives in East Kazakhstan. Geography, Environment. *Sustainability* **2019**, *12*, 29–43. [CrossRef]
84. Mastronardi, L.; Giaccio, V.; Giannelli, A.; Stanisci, A. Methodological Proposal about the Role of Landscape in the Tourism Development Process in Rural Areas: The Case of Molise Region (Italy). *Eur. Countrys.* **2017**, *9*, 245–262. [CrossRef]
85. Boyd, S.W.; Butler, R.W. Managing ecotourism: An opportunity spectrum approach. *Tour. Manag.* **2012**, 337–351. [CrossRef]
86. Stake, R.E. *The Art of Case Study Research*; Sage: Thousand Oaks, CA, USA, 1995.
87. Yin, R.K. *Case Study Research: Design and Methods*; Sage: Thousand Oaks, CA, USA, 2009.
88. Baxter, P.; Jack, S. Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *Qual. Rep.* **2008**, *13*, 544–556.
89. Vannoni, M. What are case studies good for? Nesting comparative case study research into the lakatosian research program. *Cross-Cult. Res.* **2015**, *49*, 331–357. [CrossRef]
90. Gustafsson, J. Single Case Studies vs. Multiple Case Studies: A Comparative Study. 2017. Available online: https://www.diva-portal.org/smash/get/diva2:1064378/FULLTEXT01.pdf (accessed on 4 April 2020).
91. Beltramo, R.; Rostagno, A.; Bonadonna, A. Land Consolidation Associations and the Management of Territories in Harsh Italian Environments: A Review. *Resources* **2018**, *7*, 19. [CrossRef]
92. Kallio, H.; Pietilä, A.M.; Johnson, M.; Kangasniemi, M. Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *J. Adv. Nurs.* **2016**, *72*, 2954–2965. [CrossRef] [PubMed]
93. Alvesson, M. Methodology for close up studies—Struggling with closeness and closure. *High Educ.* **2003**, *46*, 167–193. [CrossRef]
94. Fideli, R.; Marradi, A. Intervista (Interview). In *Enciclopedia delle Scienze Sociali*; Istituto della Enciclopedia Italiana: Roma, Italy, 1996; pp. 71–82.
95. Atkinson, A.C.; Shaffir, W. Standards for Field Research in Management Accounting. *J. Manag. Account. Res.* **1998**, *10*, 41–68.

Landscape and Tourism: Evolution of Research Topics

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Abstract: Tourism and landscape are broad and complex scientific research fields, as is the synergy between them has given rise to a volume of articles diverse in nature, subject matter and methodology. These difficulties mean that, at present, there is no complete theoretical framework to support this tourism and landscape research, nor complete knowledge of its structure and organization. This motivates the present work, which constitutes the first attempt at mapping this research topic by applying bibliometric techniques using VOSviewer and Science Mapping Analysis Software Tool (SciMAT) software. A total of 3340 articles from journals indexed in Web of Science were analyzed. The results obtained confirm that interest in the study of these concepts has been growing, especially in the last decade. The main contribution of this work lies in the identification of work themes that were basic to the construction of the field but that are currently in decline, such as "cultural heritage" and other themes important to the field that should continue to be dealt with, such as "national parks" or "geotourism". The transversal nature of sustainability that appears in the network of keywords related to currently emerging themes, such as "planning" and "environment", is also highlighted and reinforced.

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1. Introduction

Although the term "landscape" was originally conceived as a geographical concept, it is now a holistic concept that is considered in different disciplines, including sociology, psychology, ethnology, landscape ecology and philosophy of nature [1]. Nevertheless, most concepts of landscape present a clear dichotomy: natural and anthropocentric [2]. The term landscape usually implies the holistic interrelation of human beings with a natural and physical environment [3,4]; this is clear in its systematization, where natural features are considered first, then socio-economic and technical features and, marginally, non-material aspects such as cultural and esthetic features [2].

In this way, many researchers define a landscape as the product of the actions and practices of humans who constantly make and remake the world around them, building a place within it that they can call home [5]. Landscapes can also be defined as the symbolic environment created by a human act of giving meaning to nature and the environment. In such cases, people transform their physical environment according to their cultural context [6]. In short, from all of these definitions, a landscape is the result of the interaction between human beings and nature, which converts the landscape into a diversity of visual, cultural and ecological constructions [7].

There are two closely related dimensions when it comes to seeing a landscape: the "inside" and the "outside". The latter is the perspective of the outsider, who is often the tourist [8]. The interest in seeing the landscape first appeared with the discovery of its esthetic value, which was one of the factors that triggered the development of tourism in the 17th and 18th centuries [9]. Landscape and tourism are, therefore, two closely related terms. The landscape is revealed as a factor of attraction and development for tourism, which in turn generates an impact on the landscape from very different

perspectives [1,10]. The transformation of a "natural" landscape into a tourist landscape implies a fundamental symbolic and physical reordering of the characteristics of the former landscape [11].

Different types of tourism have different levels of impact on the environment, including its characteristics, vegetation, conservation and ecological balance. For example, ecotourism offers a new opportunity to protect nature reserves, but at the same time, ecotourism development can pose a risk to conservation [12] because of the disturbance caused by an excessive number of tourists, pollution and waste [13]. The pressure of excessive tourism may not only damage the natural environment of cities and towns but may also affect the brand image of the destination, which in many cases is associated with picturesque landscapes and a clean, green natural environment [14].

When referring to the idea of the "landscape", it is not only the natural landscape that is included: there are as many different types of landscape as there are of types of tourism. Thus, excess tourism affects the urban landscape as well as the "natural" landscape [15,16], producing effects such as overcrowding, environmental and cultural degradation, resident dissatisfaction [17], housing modification, reductions in urban green spaces and the appearance of modern architectural structures [10]. Beyond the urban landscape, there is also the historical urban landscape, understood as an urban area resulting from the historical stratification of cultural and natural values and attributes that encompass the general urban context and its geographical environment, above a historical site or center [18]; here, tourist development can be both an opportunity for conservation [19] and a danger leading to its degradation, depending on the type of resource and the intensity of its exploitation [20].

When reference is made to the cultural landscape, the cultural features of a place are combined with the natural environment, becoming a focus of tourist attraction due to the high esthetic value [21], although one could speak of different layers of value based on the concept of authenticity [22]. Nevertheless, the landscape which the local residents experience (in which they pursue their daily life and social connections) [23] contrasts with that experienced by the tourist [8,24], who is attracted by the landscapes presented in guides or advertising leaflets, which in their turn reproduce the experience of other travelers and value the destination as a paradise [25]. This leads to generation of possible conflicts between the interests of locals and visitors regarding both the meaning of the place and the management of local resources [24].

Many rural landscapes developed for tourism have undergone economic restructuring and reordering in which local traditions and products become a tourist attraction [26], and the physical and esthetic qualities of the landscape have been changed by negotiation between the views and perceptions of farmers and tourists [8]. However, it should be borne in mind that tourism is a global phenomenon [3] that affects the landscape through the development of infrastructure (transport and services), the establishment of wildlife and heritage conservation areas [27] or the reconfiguration of local practices, with tourism becoming part of the daily life of those who live in such landscapes [21]. Each destination has a social and environmental carrying capacity that must not be exceeded to ensure sustainable development; otherwise development will negatively affect the well-being of the local population, their environment [14] and the character of the landscape, its values and the distinctions that make an area unique and different. Tourism can therefore threaten the distinctive character of its territory [7].

Tourism should help preserve the traditional and physical elements of the landscape while providing socio-economic benefits to its inhabitants [21]. It is therefore of vital importance to carry out adequate tourism planning which takes into account the interests of all of the agents involved in the territory—from the government and businesses to local residents—to guarantee sustainable tourism development [14], as well as effective land use policies to maintain the character of the landscape [7]. Policymakers focused on more sustainable tourism should be guided by principles such as local prosperity, social equity, visitor satisfaction, community well-being and biological diversity, among others [28].

The complexity of the interconnections between landscapes and tourism has given rise to research that contains multiple contrasting interpretations, with focuses that address the interactions between

these two themes. To mention just a few examples, we find work from the point of view of rural tourism, in combination with agriculture and local development [8], gastronomic tourism [29], potential tourism in protected landscape areas [30], tourism in relation to reforestation [31], the relationship between wind farms and tourism [32], nuclear landscape and tourism [33], the management of beaches to guarantee sustainable tourism [34] or the analysis of indigenous culture concerning the promotion of landscape tourism [35]. Furthermore, studies in this field can be approached from a physical, experimental and cultural point of view [36], from the point of view of visual perceptions of the landscape based on photography [37], the anthropogenic point of view [34] or geotourism [3], among others. This field also contains a multiplicity of territories under analysis, from islands [38–40], forests [41,42] or mountains [43,44] to cities [45,46], valleys [47,48] and lakes [49,50].

Both the multidisciplinary nature and the multiple and complex interrelations between these two themes, landscape and tourism, have prevented dynamism and progress in the research into the tourist landscape in general [3]. Indeed, Terkenli stated that: *"So far, however, this body of work lacks an adequate organizational framework of analysis"* [51] (p. 346). Given the increase in the number of works published on this subject in recent years, the need to analyze this discipline through bibliometric techniques is justified. Two fundamental objectives were pursued through this analysis: to determine the evolution of the field, identifying variables such as main authors, journals or most cited works, and to clarify the main research topics in the field, as well as their evolution and importance. To achieve these objectives, the first bibliometric review of this subject ("landscape and tourism") was carried out based on the information collected on the Web of Science (WoS) database using VOSviewer [52] and SciMAT [53] software.

2. Materials and Methods

The methodology applied in this research was bibliometric analysis—that is, a quantitative analysis of scientific production through its literature, which allowed us to follow the evolution of a scientific discipline (here, landscape and tourism) in depth [54,55]. This study combined two types of bibliometric analysis [56]: performance analysis, using productivity and impact indicators that reveal the number of articles and citations, main journals and authors [57], and science mapping or conceptual analysis, through which the main research topics, their structure, evolution and trends were obtained. The bibliometric search was carried out in one of the main databases containing scientific production with the greatest impact [58]: the Web of Science (WoS) Core Collection [59].

On 1 September 2020, a total of 3806 articles were extracted from this database using the search terms "landscape" AND "touris *" (these terms could appear in the title, abstract and/or keywords). This resulting set of articles was filtered manually, eliminating one article with a publication date of 2021, which did not correspond to our period of study. We also eliminated 10 "proceedings" and a total of 455 articles that did not have author keywords. To obtain thematic groups, only the original keywords defined by the authors in their articles were used as the unit of analysis [60]. With this last filter applied, publications from 1980 to 1991 were eliminated, as they did not contain keywords from the authors. It is important to highlight this fact because, although our analysis begins in 1992, the first article published in WoS on the subject dates from 1980. We obtained a final data set consisting of 3340 articles published in 1338 different journals between 1992 and 1 September 2020, containing a total of 17946 keywords of authors.

For the analysis, we used VOSviewer software, which allows the visualization of distance-based bibliometric networks, working with different analysis units, including authors, organizations, countries, keywords or cited references, and units of measurement, such as co-authorship, co-occurrence, citation, bibliographic linkage or co-citation [61,62]. We also used the Science Mapping Analysis Software Tool (SciMAT) [63], which allows the elaboration of science maps using different measures of data normalization (association strength, equivalence index, inclusion index, Jaccard's index and Salton's cosine) and based on the h-index, g-index, hg-index and q2-index, among others [56,64].

For this study, the co-occurrence of the keywords proposed by the authors in the different articles was analyzed. VOSviewer software makes it possible to remove duplicate keywords from the database extracted from the WoS through thesaurus files and then build the co-occurrence network of keywords [56]. One of the main advantages of this software is the construction of graphic maps of the relationships among the data [65]. In these graphic representations, the nodes represent the variable analyzed (keywords in our case), and the thickness of the lines that connect them indicates the intensity of the co-occurrence. The keywords are grouped into clusters differentiated by color [66].

One of the most helpful aspects of SciMAT is the representation of the topics analyzed in four categories (motor, highly developed and isolated, emerging or declining, and basic and transversal clusters) depending on Callon's centrality and density indicators. Centrality can be interpreted as the external cohesion of the network, because it measures the degree of a system's interaction with other networks, while density can be understood as the internal cohesion of the network, because it measures the inner strength of the network [30,63].

3. Results and Discussion

3.1. Evolution of Scientific Production: Performance Analysis

To determine the evolution of the subject of study, some of the main bibliometric characteristics defining it were analyzed, including number of articles published, number of authors, citations, journals and countries. As shown in Table 1, 85% of the production in this field has been published in the last decade. The increase in the number of publications (ApY) has evolved in parallel with the increase in the number of authors who publish on this subject (AupY), with 2019 standing out with 1174 authors. This is also mirrored in the evolution of the number of journals (JpY) that have published at least one article on landscape and tourism in a given year (which has increased from 1 in 1992 to a maximum of 246 in 2019) and the number of countries (CopY) that have published at least one article on the subject. This indicates that the scientific community throughout the world has shown a progressive interest in the subject of landscape and tourism, which is reflected in publications in an increasing number of journals.

As for the evolution of the average number of citations per article ($\sum Cpy/\sum Apy$), the highest figures appear in publications at the end of the 1990 s and the beginning of the 21st century, although this indicator presents more fluctuation than the previous ones.

Table 1. Evolution of the main characteristics of the published articles related to landscape and tourism (1992–1 September 2020).

Year	ApY	AupY	CpY	$\sum CpY/\sum ApY$	JpY	CopY
1992	2	4	14	7.0	1	7
1993	4	6	93	17.8	3	6
1994	3	5	71	19.8	3	3
1995	7	14	535	44.6	5	7
1996	6	13	129	38.3	6	10
1997	5	8	401	46.0	5	6
1998	4	7	127	44.2	4	6
1999	12	22	583	45.4	11	14
2000	11	24	565	46.6	9	13
2001	13	23	594	46.4	12	17
2002	9	18	236	44.1	9	10
2003	24	55	1028	43.8	23	21
2004	18	33	356	40.1	16	18
2005	37	68	1005	37.0	30	22
2006	51	108	1204	33.7	42	29

Table 1. *Cont*.

Year	ApY	AupY	CpY	∑CpY/∑ApY	JpY	CopY
2007	76	190	1979	31.6	65	35
2008	112	288	2608	29.3	77	38
2009	106	236	1779	26.6	82	44
2010	161	395	2840	24.4	117	45
2011	158	410	2184	22.4	107	49
2012	180	400	2316	20.7	137	53
2013	189	468	2174	19.2	138	57
2014	221	533	1918	17.6	165	54
2015	259	693	2091	16.1	182	57
2016	267	708	1671	14.7	192	63
2017	338	935	1580	13.2	212	69
2018	380	1137	1628	12.0	235	73
2019	406	1174	632	10.6	246	77
2020 (Until Spt.1)	281	924	117	9.7	167	71
Total	3340	8899	32,458		2301	

ApY: number of articles published per year; AupY: number of authors per year; CpY: number of citations per year; ∑Cpy/∑Apy: average number of citations per article (citation total since 1992/total of articles since 1992); JpY: number of journals that published at least one article in a specific year; CopY: number of countries that published at least one article in a specific year. Source: prepared by the authors based on Capobianco-Uriarte et al. [67].

More precisely, the number of articles published on landscape and tourism shows a clear upward trend since 1992, highlighting years such as 2002 and 2016 in which the growth in publications was even more striking (Figure 1).
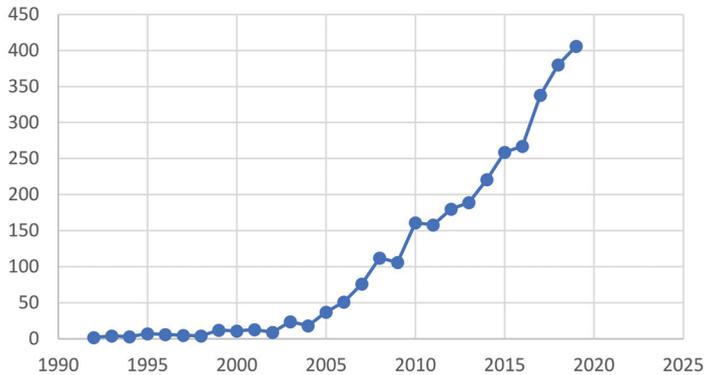
Figure 1. Number of articles published per year (ApY). Source: prepared by the authors based on Web of Science (WoS) data.

From 2006 onwards, articles about research supported by some kind of subsidy from public or private bodies began to be published and both the number of articles benefiting from this type of funding and the number of funding organizations has been progressively increasing year after year. We then considered ordinary least square (OLS) regression models with fixed effects to analyze the possible influence of the subsidies received and the funding organizations on the level of scientific production. Two regressions were carried out to explain this relationship due to the severe multicollinearity between the variables. The contrasts carried out were corrected for heteroscedasticity using the White procedure and do not show any symptoms of autocorrelation. The results are presented in Table 2.

Table 2. Fixed effect ordinary least square (OLS) regression models—panel data.

Estimates	Model 1		Model 2	
	Coefficient	t-Statistic	Coefficient	t-Statistic
Constant	19.01842	3.708894	12.14329	3.295575
Aids received	2.488003	2.880295	–	–
Funding organizations	–	–	7.430096	5.358815
R2	0.593656		0.766223	
R2 adjusted	0.590153		0.764208	
D–W	1.652098		2.221049	
F Test	169.4724		380.1996	
No. observations	58		58	

Dependent variable: number of articles published (years). Source: prepared by the authors based on WoS data.

All of the estimators calculated for the explanatory variables of scientific production, as predicted by scientific theory in this field, show positive signs and are also highly significant, with a confidence level of 99%. Based on the results obtained in the estimates made, and with due caution, it can be stated that research grants and funding organizations appear to have been key elements in the level of scientific production in the countries over the period analyzed, with China, the United States and Spain, respectively, standing out as the countries which have received the largest number of grants for publication in this field since 1992.

In the following tables, greater detail is given about the variables analyzed in Table 1: number of citations, journals and authors and journals. Table 3 breaks down the citation structure of the field under study. There appears to be a high concentration of works with no or a low percentage of citations. Specifically, more than 60% of the literature on landscape and tourism has four or fewer citations. This may be because the work is not considered important enough to be cited, or because studies are too recent [68]. Reinforcing this second explanation, 31.6% of works with four or fewer citations were published in 2019 and 2020.

Table 3. General citation structure in landscape and tourism.

Number of Citations	Number of Articles	% Articles
>300	3	0.09%
300–200	3	0.09%
150–199	8	0.24%
149–100	25	0.75%
99–75	34	1.02%
74–50	68	2.04%
49–25	201	6.02%
24–10	450	13.47%
9–5	487	14.58%
4–1	1041	31.17%
No citations	1020	30.54%
Total articles	3340	100.00%

Source: prepared by the authors based on WoS data.

In contrast, the three most important works in the field, according to the number of citations received [57], have more than 300 citations (Table 4). *Annals of Tourism Research* is the journal with the most cited article, followed by *Ecological Economics* and *Tourism*. It should be noted that these three journals do not coincide with the three most productive journals in the field (Table 5).

Table 4. Most cited papers (1992–1 September 2020).

Authors	Title	Source	Year	Citations in WoS	Citations per Year
MacKay, K.J.	Pictorial element of destination in image formation	ATR	1997	343	14.29
Raymond, C.M.; Bryan, B.A.M., Darla, H.; Cast, A.; Strathearn, S.; Grandgirard, A.; Kalivas, T.	Mapping community values for natural capital and ecosystem services	EE	2009	335	27.92
Stone, P.R.	A dark tourism spectrum: Towards a typology of death and macabre related tourist sites, attractions and exhibitions	T	2006	305	20.33

Abbreviations: ATR: Annals of Tourism Research; EE: Ecological Economics; T: Tourism. Source: prepared by the authors based on WoS data.

The three journals that published the most papers on tourism and landscape, by volume of published articles, are listed in Table 5. Although *Sustainability* does not specialize in the field of landscape and tourism, but is an interdisciplinary journal that treats sustainability from various perspectives including economic, social, cultural and environmental, it has the highest number of published articles, with 122. There is a large gap in terms of publications with the second journal, *Land Use* Policy (with 65 articles), but more than double the number of citations, 1235. The third journal, *Tourism Geographies*, is an international journal on tourism space, place and environment. This difference in productivity between journals can be explained, in part, by their publication volume. In *Sustainability*, for example, the number of articles per issue has increased progressively since 2009, where in Vol. 1, issue 1, 8 articles were published, while 404 have been published in 2020 (Vol. 12, issue 16). In addition, from 2019 onwards, this journal publishes two issues per month, instead of one as in previous years. In contrast, *Land Use Policy* publishes ten issues a year and *Tourism Geographies* only five, with a volume of articles per issue far lower than the 404 published in *Sustainability*.

Although papers on the topic have been published in 1338 different journals, more than 68% of the published papers are concentrated in just 30 journals.

Table 5. Most productive journals for landscape and tourism (1992–1 September 2020).

Journal	N° of Items	N° of Citations	Average Citations
Sustainability	122	500	4.1
Land Use Policy	65	1235	19
Tourism Geographies	51	667	13.1

Source: prepared by the authors based on WoS data.

A total of 7419 different authors have published articles related to landscape and tourism during the study period, according to data obtained from the WoS. However, more than 87% of the authors produced only a single article, indicating a low concentration in this field, and only four authors have published ten or more articles, positioning themselves as reference authors with greater specialization in the subject (Table 6).

Table 6. The most productive authors in landscape and tourism (1992–1 September 2020).

Author	N° of Articles
Zhang, J.	13
Verburg, P.H.	11
Hall, C.M.	10
Jeong, J.S.	10

Source: prepared by the authors based on WoS data.

3.2. Conceptual Analysis: VOSViewer and SciMAT

The analysis of the keywords used in the articles shows us both the most relevant topics and the main research trends in the area [69]. Figure 2 was constructed using VOSviewer, which makes it possible to visually demonstrate the differences in scientific production [70]—in our case, between the keywords used by the authors. Figure 2 illustrates the most frequently used keywords in the different papers, and these keywords indicate the most studied topics. Due to the high number of keywords used by the authors, only keywords that occurred a minimum of 20 times have been used. Using this criterion, a total of 40 items were found, grouped into five clusters (differentiated by color) with a total of 349 links between them. The most frequently recurring keywords are represented in larger nodes. The shorter the distance between the different nodes, the stronger the relationship between the keywords [52].
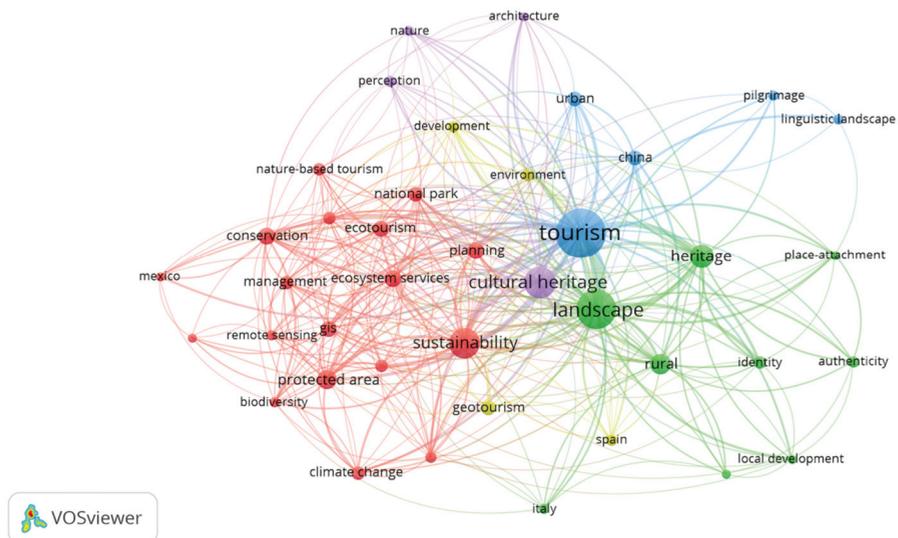
Figure 2. Co-occurrence network of keywords (2092—1 September 2020). Source: prepared by the authors using VOSviewer and based on WoS data.

As expected, "landscape" (with 365 occurrences and 38 links to other keywords) and "tourism" (569 occurrences and 37 links) are the keywords that recurred the most, which means that they are at the center of the network. However, Figure 2 also highlights the importance of "cultural heritage" and "sustainability", both present in more than 200 documents and with more than 30 links to other keywords. These four words, therefore, constitute the nucleus of four of the five clusters identified. Cluster 1 (sustainability) is the most numerous, consisting of 18 items such as national park, land use, conservation, biodiversity or protected area. Cluster 2 (landscape) is made up of nine items including identity, rural, authenticity, local development and place-attachment. Cluster 3 (tourism) is made up of five items, such as urban or linguistic landscape. Finally, clusters 4 and 5 are made up of four items each, such as development, environment and geotourism in the first, and architecture, perception and nature, in the second. It should be noted that in four of the five clusters a node has appeared relating to the country in which the different analyses are carried out, with Mexico belonging to cluster 1, Italy to cluster 2, China to cluster 3 and Spain to cluster 4.

From this first approach to the main keywords used in this research topic throughout the period analyzed, a much more detailed analysis can be made, subdividing the period of study in different stages. As previously mentioned, despite the positive trend of growth in the publication of publications

on landscape and tourism, changes in productivity can be observed both in 2002 and 2016 (Figure 1), which allows us to identify three stages of research [57].

The first period (1992–2002), which we can call the "initial stage", contains a total of 76 articles published (almost seven articles per year). The year 2001 stands out with 13 articles published. A second "developmental stage" (2003–2016), in which more than 132 articles were published per year, witnessed a total of 1859 publications. In this stage, the year 2010 and after showed above average productivity. Finally, there has been an "expansionary stage" (2017–1 September 2020) with more than 351 articles per year and a total of 1405 published. This last stage of barely four years represents 51% of the total production of literature in the field to date. Figure 3 shows the bibliometric map of the evolution of the research topics during the three time periods. The inclusion index has been used to detect the links between the different themes (represented by circles) and to define the thematic areas (lines). The size of the circle corresponds to the number of documents in each theme.
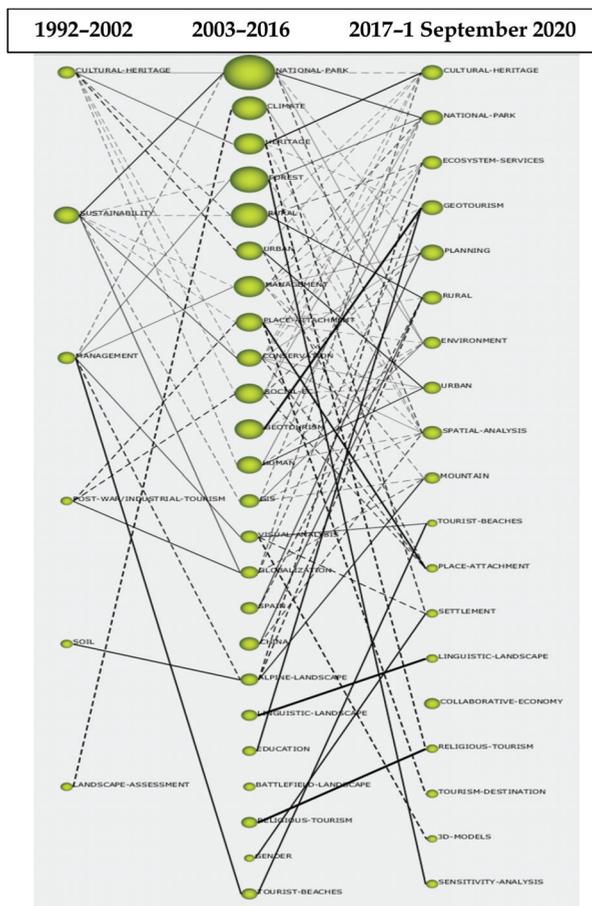
Figure 3. Thematic development (1992–1 September 2020). Source: prepared by the authors on the basis of SciMAT data.

In the first column of Figure 3, six research topics can be identified in the first period, 1992–2002. It can therefore be said that the subject studied began to be considered based on analyses focusing on "cultural heritage", "sustainability", "management", "post-war/industrial tourism", "soil" and

"landscape assessment". The "cultural heritage" cluster includes terms related to "cultural landscape", "cultural tourism" and "cultural ecosystem services". The cluster "sustainability", is a wide and transversal concept, but as a cluster is basically made up of two main components: sustainable tourism and sustainable development. "Management" is also a broad term encompassing coastal, tourism, landscape and territorial management, as well as waste management. The cluster of "post-war/industrial tourism" includes work centered on postwar tourism and post-industrial landscapes, referring to the Cold War, the Vietnam War, the First World War and the phenomenon of post-colonialism. Finally, under the term "soil" there are keywords fundamentally related to soil erosion, as well as the relationship of the soil with flora and fauna. The last group, "landscape assessment", is the most homogeneous, as it is made up mainly of the keyword which gives the group its name, as well as other, similar keywords that refer to landscape assessment.

However, during the second period, 2003–2016, a greater diversity of 24 total themes related to the previous ones appeared. Of these 24, only "management" from the previous period was conserved, with other important themes such as "national park", "climate", "forest" and "rural" appearing. A distinction can be made between themes with strong connections to those from period one (continuous lines)—such as "national park", "heritage", "forest", "management", "conservation", "visual analysis", "globalization", "alpine landscape" and "tourist beaches"—and other themes that have a weaker connection (dotted lines) sharing keywords with the previous period but not indicating the main research topic, such as "climate", "rural", "urban", "place attachment", "geotourism", "human" and "GIS" (this corresponds to the acronym for the geographical information system, a computer system for capturing, storing, checking, and displaying data related to positions on Earth's surface). The groups "urban" and "rural" refer, fundamentally, to the type of tourism and the development of these territories, and the term "human" encompasses all types of impact that human activity has on a territory (e.g., footprint, pressure, transhumance).

Finally, in the third and final period, 2017–1 September 2020, there is a small decrease in the number of research topics, to 19, with eight of the topics from the previous period remaining (national park, rural, urban, place attachment, geotourism, linguistic landscape, religious tourism and tourist beaches), with "management" (present in the first two stages) disappearing, while "cultural heritage" reappears from the first stage. In addition, ten new themes emerge for this period: "ecosystem services", "planning", "environment", "spatial analysis", "mountain", "settlement", "collaborative economy", "tourism destination", "3D models" and "sensitive analysis".

It is necessary to clarify that the "heritage" group (which appears in the second stage) is created to differentiate it from the "cultural heritage" group (first and third stages), a group with a complete identity and explicit reference to culture, while "heritage" includes a diversity of themes related to the subject, such as preservation, interpretation, modernization and policies. Nevertheless, Figure 3 illustrates the strong interrelationship of these two groups, which are united through continuous lines. The different themes identified in Figure 3 for each period are represented in a strategic diagram, in which the size of the circle is proportional to the number of documents linked to each research theme. The h-index for each theme is provided next to each one (Figure 4).

For the first decade (1992–2002), three fundamental themes stand out in this field, with the greatest number of documents published and the highest h-index: "sustainability", "cultural heritage" and "management". The first theme is the most central, but it can be said that all three are highly developed and essential in the construction of the research area. Although "sustainability" will not appear again in the following periods of the field's evolution, it is a transdisciplinary concept [71,72] which, as can be seen in its network of keywords (Figure 5), is related to 11 other keywords: "ecotourism", "recreation", "planning", "conservation", "agriculture", "destination", "islands", "land use", "resources", "environment" and "globalization". Although "sustainability" does not appear in the conceptual maps of the following stages, most of these keywords do, so it cannot be said that sustainability is not being addressed after 2003, but rather that it is being worked on in a less direct and more transversal way in conjunction with various other themes.
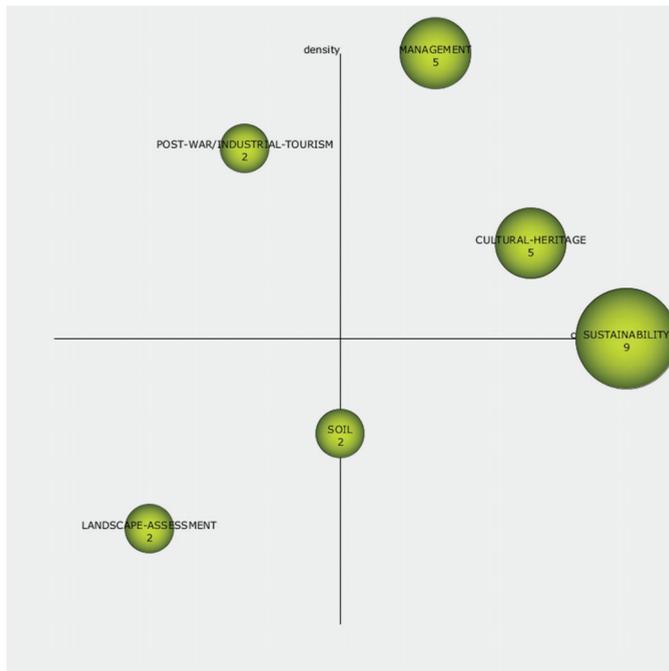
(**a**)
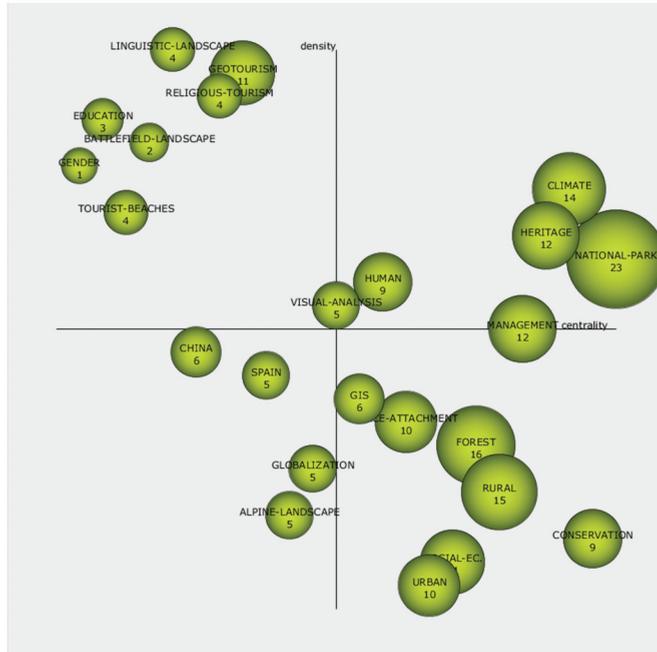
(**b**)

Figure 4. *Cont.*
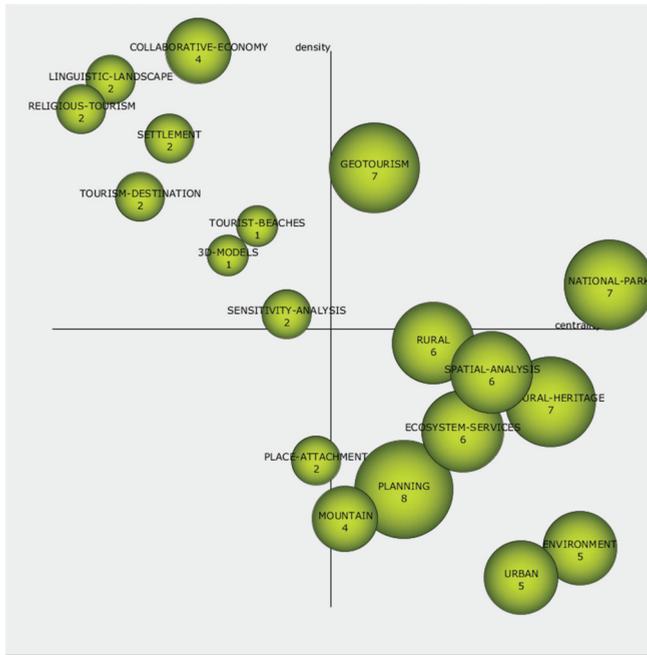
(c)

Figure 4. (**a**) Strategic diagram for the period 1992–2002. (**b**) Strategic diagram for the period 2003–2016. (**c**) Strategic diagram for the period 2017–1 September 2020. Source: prepared by the authors on the basis of SciMAT data.
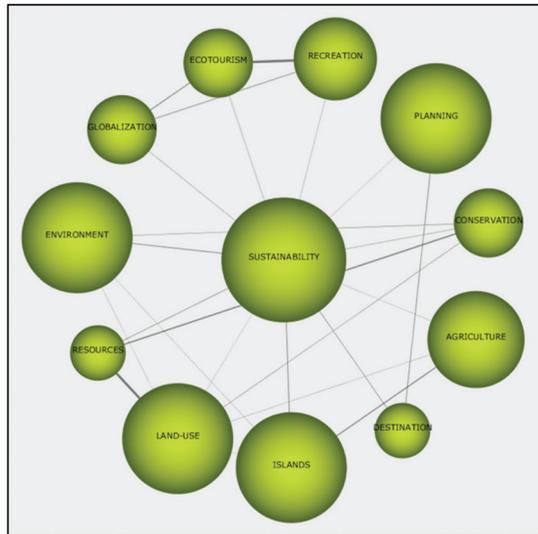
Figure 5. Thematic network of the main cluster 1992–2002. Source: prepared by the authors on the basis of SciMAT data.

In the second period (2002–2016), "management" continues to appear at least partially as the driving theme with greater relevance to the subject than in the previous period (centrality), but a lower degree of subject development (density); instead of "cultural heritage", another driving theme closely related to it appears, but much broader: "heritage". "National park", "climate", "human" and "visual analysis" can also be included as driving themes in the second period. This is also the period in which the greatest number of essential themes concern the countryside as an area and in which various emerging themes also arise (lower right quadrant) such as "rural", "urban" or "forest", as well as general and transversal themes, such as "globalization" or analysis of territories in "Spain" and "China".

In the last period (2017–1 September 2020), "geotourism" appears to have gained great moment, after first appearing as a specialized theme at the periphery of the research area in the previous period, in this third stage it becomes, together with "national park" (maintaining its position from the previous period), of key importance. It is possible that "geotourism" will evolve in the same manner as "national park", becoming a subject of interest over the long term and serving to motivate a large part of the future research in this field, but it is also possible that it could evolve like other driving themes from the two previous periods, gradually allowing the interest of researchers to shift from this theme to others that will become new driving forces. In this period, other new themes also appear which are very attractive, although not as developed as the driving theme. These new themes include "ecosystem services", "planning" (in which spatial, landscape and tourism planning are dealt with) and "environment" (a very broad theme that covers education, perception, protection, impacts, policies, etc.). Other highly topical and innovative subjects such as "collaborative economy", "3D models" or "sensitive analysis" also appear, but these are quite specialized and therefore present internal and external connections with other weaker keywords. "Cultural heritage" is no longer the driving force it was in the first period, and is now located finally in the lower right quadrant, which indicates it can be interpreted as a theme in decline.

Many of the emerging themes from the previous period remain in the same quadrant, although with slight changes that bring them closer to potentially becoming driving themes for future stages, as is the case with "rural" and "spatial analysis". There is also continuity of some of the second stage themes in the same upper left quadrant during this third period, as in the case of "religious tourism", "tourist beaches," and "linguistic landscape". Although a priori they are not very relevant to the field, the fact that they are present in both stages suggests that they are mature, although not innovative, themes which have been recurrent throughout the discipline for a group of researchers (this assumption is reinforced by the fact that "linguistic landscape" is shown in Figure 2, which analyses the whole period). It is therefore likely that these issues will continue to appear in the same quadrant in future research.

Finally, it should be noted that a considerable number of articles deal with issues that are not included in the different strategic diagrams. These include research focused on territorial development (especially at a local level), human impact (e.g., ecological footprint, conservation and impact at a social level) and waste (solid, liquid) management and planning. That these issues do not appear in the strategic diagrams may be because these are subjects whose development has not been the focus in a specific period (of the three analyzed), but they are subjects in which the researchers show a continuous interest throughout the whole period of study, with the articles concentrating on them being scattered throughout.

4. Conclusions and Limitations

The research presented in this paper has made it possible to clarify the evolution and bibliometric structure of the field of landscape and tourism, which is highly complex due to the multiplicity of themes, approaches and the interdisciplinary nature of the field. Through this analysis, the two objectives pursued in this work have been achieved, and the main contributions can be summarized as follows:

First, the subject of landscape and tourism has been analyzed by a large number of authors, but there are few groups that specialize specifically in this field (87% of the authors have only published one article on this subject). It may be that this high dispersion has, in turn, been favored by the increase in grants and funding bodies for the works presented, which has led to an increase in the volume of publications on this subject over the last decade. An additional factor that reinforces this conclusion is that the journal with the greatest number of publications on the subject, *Sustainability*, is not a specialized journal on this particular subject, but the high number of publications is rather explained by the volume of articles the journal published annually.

Second, in terms of conceptual analysis, this increase in the number of publications in the last decade has been reflected in the increase in research topics dealing with landscape and tourism. The field has been opening up since 1992, with works focusing on various aspects, among which the themes of "heritage" (in a broad sense, but, above all, "cultural heritage") and "national park" stand out as the driving forces. These themes have been the center of interest in the work and made the field more dynamic and developed. Possible emerging lines of study that can be configured as motors for the future are the "rural" and "spatial analysis" clusters.

This study constitutes a first bibliometric approach to the field of landscape and tourism studies, so this analysis is not exempt from certain limitations. There are geographical and language limitations that must be kept in mind, as this paper analyzed only the scholarly production indexed in the WoS. For future research, it is recommended that these results be compared with those from other databases such as Scopus or Google Scholar [66] and in languages other than English [68]. On the other hand, when carrying out a conceptual analysis of keywords provided by the authors, 455 articles belonging mainly to the early years of the discipline (from 1980 onwards) have not been analyzed. It would be appropriate for future research to carry out a concept mapping by authors or journals to include these articles. Finally, limitations intrinsic to the tool used, SciMAT, where the different grouping algorithms and similarity measures are selected at the discretion of the researcher [68]. In this sense, the authors have carried out an exhaustive review of the articles analyzed using a double peer review to try to minimize this limitation.

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References

1. Palang, J.; Printsmann, A.; Sooväli, H. (Eds.) Seasonality and Landscapes. In *Seasonal Landscapes*; Springer: Tallinn, Estonia, 2007; pp. 1–16.
2. Wolski, J. The landscape of abandoned villages in the Western Bieszczady: The problem of definition and classification. *Geogr. Pol.* **2016**, *3*, 371–387. [CrossRef]
3. Stoffelen, A.; Vanneste, D. An integrative geotourism approach: Bridging conflicts in tourism landscape research. *Tour. Geogr.* **2015**, *17*, 544–560. [CrossRef]
4. Stenseke, M. Integrated landscape management and the complicating issue of temporality. *Landsc. Res.* **2016**, *41*, 199–211. [CrossRef]
5. Wylie, J. Landscape, performance and dwelling: A Glastonbury case study. In *Country Visions*; Cloke, P., Ed.; Pearson Education Ltd.: Harlow, UK, 2003; pp. 136–157.
6. Greider, T.; Garkovich, L. Landscapes: The social construction of nature and the environment. *Rural Sociol.* **1994**, *59*, 1–24. [CrossRef]
7. Atik, M.; Isikli, R.C.; Ortacesme, V.; Yildirim, E. Definition of landscape character areas and types in Side region, Antalya-Turkey with regard to land use planning. *Land Use Policy* **2015**, *44*, 90–100. [CrossRef]

8. Daugstad, K. Negotiating landscape in rural tourism. *Ann. Tour. Res.* **2008**, *35*, 402–426. [CrossRef]

9. Bender, O.; Schumacher, K.P.; Stein, D. Landscape, Seasonality, and Tourism: A Survey with Examples from Central Europe. In *Seasonal Landscapes*; Palang, J., Sooväli, H., Printsmann, A., Eds.; Springer: Tallinn, Estonia, 2007; pp. 181–213.

10. Albert., Y.P.; Morales, J.I.M.; Andreu, M.N.L. Impacts of 'home stays' on the protected urban landscape and the social environment (Vinales, Cuba). *J. Tour. Cult. Chang.* **2020**. [CrossRef]

11. Salazar, N.B. Tourism imaginaries: A conceptual approach. *Ann. Tour. Res.* **2012**, *39*, 863–882. [CrossRef]

12. Zhang, J.T.; Xiang, C.L.; Li, M. Integrative ecological sensitivity (IES) applied to assessment of eco-tourism impact on forest vegetation landscape: A case from the Baihua Mountain Reserve of Beijing, China. *Ecol. Indic.* **2012**, *18*, 365–370. [CrossRef]

13. Zawilinska, B. Residents' attitudes towards a national park under conditions of suburbanisation and tourism pressure: A case study of Ojcow National Park (Poland). *Eur. Countrys.* **2020**, *1*, 119–137. [CrossRef]

14. Insch, A. The challenges of over-tourism facing New Zealand: Risks and responses. *J. Dest. Mark. Manag.* **2020**, *15*, 100378. [CrossRef]

15. Lalana, J.L. Historic urban landscape: Fashions, paradigms and omissions. *Ciudades* **2011**, *14*, 15–38. Available online: https://iuu.uva.es/journal/issues-list/ciudades-14/ (accessed on 15 September 2020).

16. Zoido, F. Paisaje urbano. Aportaciones para la definición de un marco teórico, conceptual ymetodológico. In *Ciudades y Paisajes Urbanos en el Siglo XXI*; Delgado, C., Juaristi, J., Tomé, S., Eds.; Ediciones de Librería Estudio: Santander, Spain, 2012; pp. 13–92.

17. Seraphin, H.; Sheeran, P.; Pilato, M. Over-tourism and the fall of Venice as a destination. *J. Dest. Mark. Manag.* **2018**, *9*, 374–376. [CrossRef]

18. UNESCO, WHC. Recommendation on the historic urban landscape. In *Proceedings of the Records of the General Conference 36th Session, 2011*; UNESCO: Paris, France, 2011; Volume 25.

19. Zárate, M.A. Paisajes culturales urbanos, oportunidad para la conservación del patrimonio y el turismo sostenible. *Estud. Geogr.* **2016**, *77*, 693–728. [CrossRef]

20. Gómez-Mendoza, J. Del patrimonio-paisaje a los paisajes. *Doc. D'Anàlisi Geogr.* **2013**, *59*, 5–20. [CrossRef]

21. Prince, S. Dwelling and tourism: Embracing the non- representational in the tourist landscape. *Landsc. Res.* **2019**, *44*, 731–742. [CrossRef]

22. Nezhad, S.F.; Eshrati, P.; Eshrati, D. A definition of authenticity concept in conservation of cultural landscapes. *Archnet-IJAR* **2015**, *9*, 93–107. [CrossRef]

23. Ingold, T. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*, 2nd ed.; Routledge: London, UK, 2011.

24. Cunningham, P. Exploring the cultural landscape of the Obeikei in Ogasawara, Japan. *J. Tour. Cult. Chang.* **2009**, *7*, 221–234. [CrossRef]

25. Nelson, V. The landscape reputation: Tourism and identity in the Caribbean. *Tijdschr. Voor Econ. Soc. Geogr.* **2010**, *102*, 176–187. [CrossRef]

26. Everett, S. Production places or consumption spaces? The place-making agency of food tourism in Ireland and Scotland. *Tour. Geogr.* **2012**, *14*, 535–554. [CrossRef]

27. Gibson, C. Geographies of tourism: Critical research on capitalism and local livelihoods. *Prog. Hum. Geogr.* **2009**, *33*, 527–534. [CrossRef]

28. Maksin, M.; Milijić, S. Strategic planning for sustainable spatial, landscape and tourism development in Serbia. *Spatium* **2010**, *23*, 30–37. [CrossRef]

29. Sidali, K.L.; Kastenholz, E.; Bianchi, R. Food tourism, niche markets and products in rural tourism: Combining the intimacy model and the experience economy as a rural development strategy. *J. Sustain. Tour.* **2015**, *23*, 1179–1197. [CrossRef]

30. Mikulec, J.; Antoušková, M. Landscape and tourism potential in the protected landscape areas. *Agric. Econ.* **2011**, *57*, 272–278. [CrossRef]

31. Hunziker, M. The spontaneous reafforestation in abandoned agricultural lands: Perception and aesthetic assessment by locals and tourists. *Landsc. Urban Plan.* **1995**, *31*, 399–410. [CrossRef]

32. Rannveig, A.D.S. Wind farms in the Icelandic highlands: Attitudes of local residents and tourism service providers. *Land Use Policy* **2019**, *88*, 104173. [CrossRef]

33. Rush-Cooper, N. Nuclear landscape: Tourism, embodiment and exposure in the Chernobyl Zone. *Cult. Geogr.* **2019**, *29*, 217–235. [CrossRef]

34. Samanta, C.; Camboim, G.; Portz, L.C.; Souza, J.R. Beach landscape management as a sustainable tourism resource in Fernando de Noronha Island (Brazil). *Mar. Pollut. Bull.* **2020**, *150*, 110621. [CrossRef]

35. Grimwood, B.S.R.; Muldoon, M.L.; Stevens, Z.M. Settler colonialism, Indigenous cultures, and the promotional landscape of tourism in Ontario, Canada's 'near North'. *J. Herit. Tour.* **2019**, *14*, 233–248. [CrossRef]

36. Pitkänen, K. Second-home landscape: The meaning(s) of landscape for second-home tourism in Finnish Lakeland. *Tour. Geogr.* **2008**, *10*, 169–192. [CrossRef]

37. Jacobsen, J.K.S. Use of landscape perception methods in tourism studies: A review of photo-based research approaches. *Tour. Geogr.* **2007**, *9*, 234–253. [CrossRef]

38. Sun, M.; Zhang, X.; Ryan, C. Perceiving tourist destination landscapes through Chinese eyes: The case of South Island, New Zealand. *Tour. Manag.* **2015**, *46*, 582–595. [CrossRef]

39. Yang, J.; Ge, Y.; Ge, Q.; Xi, J.; Li, X. Determinants of island tourism development: The example of Dachangshan Island. *Tour. Manag.* **2016**, *55*, 261–271. [CrossRef]

40. Heslinga, J.; Groote, P.; Vanclay, F. Understanding the historical institutional context by using content analysis of local policy and planning documents: Assessing the interactions between tourism and landscape on the Island of Terschelling in the Wadden Sea Region. *Tour. Manag.* **2018**, *66*, 180–190. [CrossRef]

41. Chen, B.; Nakama, Y.; Zhang, Y. Traditional village forest landscapes: Tourists' attitudes and preferences for conservation. *Tour. Manag.* **2017**, *59*, 652–662. [CrossRef]

42. Liu, Y.; Hu, M.; Zhao, B. Audio–visual interactive evaluation of the forest landscape based on eye-tracking experiments. *Urban For. Urban Green.* **2019**, *46*, 126476. [CrossRef]

43. Wang, Z.; Li, M.; Zhang, X.; Song, L. Modeling the scenic beauty of autumnal tree color at the landscape scale: A case study of Purple Mountain, Nanjing, China. *Urban For. Urban Green.* **2020**, *47*, 126526. [CrossRef]

44. Smadych, I. Analysis of the touristic potential of mountainous areas in Ivano-Frankivsk region to create the development conditions for recreation in the Carpathian region of Ukraine. *Urbe Rev. Bras. Gest. Urbana* **2019**, *11*. [CrossRef]

45. Hernández, S.; Gines, C.; Yazmina, M. The landscape as a city tourism resource. A methodological for assessing the role of spatial planning in Las Palmas de Gran Canaria as study case. *Vegueta* **2014**, *14*, 303–337.

46. González, S. Heritage in the aesthetic experience of daily life: An empirical study based on 60 squares in the city of Madrid. *Urbano* **2017**, *20*, 78–91. [CrossRef]

47. Medianero, F.J. GIS and archaeological heritage in valleys of the Turon and Guadalteba (Middle Guadalhorce). Its application in historical research, landscape and territorial tourism development. *Virtual Archaeol. Rev.* **2010**, *1*, 147–151. [CrossRef]

48. Fornal-Pieniak, B. Landscape values of the Biala river valley in Tarnów and directions for tourism. *Acta Sci. Pol. Form. Circumiectus* **2012**, *11*, 39–48.

49. Asur, F. An evaluation of visual landscape quality of coastal settlements: A case study of coastal areas in the Van Lake Basin (Turkey). *Appl. Ecol. Environ. Res.* **2019**, *17*, 1849–1864. [CrossRef]

50. He, P.; Wang, B.Z. The preliminary study on landscape culture orientation and exploitation of the south Dongting Lake Wetland. *Chin. Geogr. Sci.* **2002**, *12*, 254–261. [CrossRef]

51. Terkenli, T.S. Tourism and Landscape. In *A Companion to Tourism*; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; Blackwell Publishing Ltd.: Malden, MA, USA, 2004; Volume 3, pp. 339–348.

52. Van, N.J.; Waltman, L. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics* **2010**, *84*, 523–538. [CrossRef]

53. Cobo, M.J.; López-Herrera, A.G.; Herrera-Viedma, E.; Herrera, F. SciMAT: A new science mapping analysis software tool. *J. Am. Soc. Inf. Sci. Technol.* **2012**, *63*, 1609–1630. [CrossRef]

54. Rousseau, R. Indicadores bibliométricos y econométricos en la evaluación de instituciones científicas. *ACIMED* **2001**, *9*, 23–29.

55. Camps, D. Limitaciones de los indicadores bibliométricos en la evaluación de la actividad científica biomédica. *Colomb. Med.* **2008**, *39*, 74–79.

56. Gutiérrez-Salcedo, M.; Martínez, M.A.; Moral-Munoz, J.A.; Herrera-Viedma, E.; Cobo, M.J. Some bibliometric procedures for analyzing and evaluating research fields. *Appl. Intell.* **2018**, *48*, 1275–1287. [CrossRef]

57. Aparicio, G.; Iturralde, T.; Maseda, A. Conceptual structure and perspectives on entrepreneurship education research: A bibliometric review. *Eur. Res. Manag. Bus. Econ.* **2019**, *25*, 105–113. [CrossRef]

58. Herrera, J.; Heras-Rosas, C. Corporate social responsibility and human resource management: Towards sustainable business organizations. *Sustainability* **2020**, *12*, 841. [CrossRef]

59. WOS Database Available from the Spanish Foundation for Science and Technology. FEYCT. Available online: https://www.recursoscientificos.fecyt.es/ (accessed on 1 September 2020).

60. Garrigos-Simon, F.; Narangajavana-Kaosiri, Y.; Lengua-Lengua, I. tourism and sustainability: A bibliometric and visualization analysis. *Sustainability* **2018**, *10*, 1976. [CrossRef]

61. Waltman, L.; Van, N.J.; Noyons, E.C.M. A unified approach to mapping and clustering of bibliometric networks. *J. Informetr.* **2010**, *4*, 629–635. [CrossRef]

62. Van, N.; Waltman, L. Visualizing bibliometric networks. In *Measuring Scholarly Impact: Methods and Practice*; Ding, Y., Rousseau, R., Wolfram, D., Eds.; Springer International Publishing: Cham, Switzerland, 2014; pp. 285–320.

63. Cobo, M.J. SciMAT: Herramienta Software Para el Análisis de la Evolución del Conocimiento Científico. Propuesta de una Metodología de Evaluación. Ph.D. Thesis, Editorial de la Universidad de Granada, Granada, Spain, 2012.

64. Montero-Díaz, J.; Cobo, M.J.; Gutiérrez-Salcedo, M.; Segado-Boj, F.; Herrera-Viedma, E. A science mapping analysis of 'Communication' WoS subject category (1980–2013). *Comunicar* **2018**, *55*, 81–91. [CrossRef]

65. Ji, L.; Liu, C.; Huang, L.; Huang, G. The evolution of Resources Conservation and Recycling over the past 30 years: A bibliometric overview. *Resour. Conserv. Recycl.* **2018**, *134*, 34–43. [CrossRef]

66. Van Eck, N.J.; Waltman, L. VOSviewer Manual Manual for VOSviewer Version 1.6.11, Software Documentation. 2019. Available online: https://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.11.pdf (accessed on 18 October 2020).

67. Capobianco-Uriarte, M.; Casado Belmonte, P.; Marín Carrillo, G.M.; Terán Yépez, E. A Bibliometric analysis of international competitiveness (1983–2017). *Sustainability* **2019**, *11*, 1877. [CrossRef]

68. Niñerola, A.; Sánchez-Rebull, M.V.; Hernández-Lara, A.B. Tourism research on sustainability: A bibliometric analysis. *Sustainability* **2019**, *11*, 1377. [CrossRef]

69. Medina-Mijangos, R.; Seguí-Amórtegui, L. Research trends in the economic analysis of municipal solid waste management systems: A bibliometric analysis from 1980 to 2019. *Sustainability* **2020**, *12*, 8509. [CrossRef]

70. Hoppen, N.H.F.; De Souza Vanz, S.A. Neurosciences in Brazil: A bibliometric study of main characteristics, collaboration and citations. *Scientometrics* **2016**, *109*, 121–141. [CrossRef]

71. Barros, S.; Laques, A.E. Sustainability impact assessment—An overview with a holistic and transdisciplinary perspective towards agricultural research. *Environ. Manag. Sustain. Dev.* **2017**, *6*, 211–239. [CrossRef]

72. Zamora-Polo, F.; Sánchez-Martín, J. Teaching for a better world. Sustainability and sustainable development goals in the construction of a change-maker university. *Sustainability* **2019**, *11*, 4224. [CrossRef]

A Landscape Study of Sichuan University (Wangjiang Campus) from the Perspective of Campus Tourism

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Abstract: University campus tourism is an important component and extension of urban tourism. The campus landscapes at universities act as major reflections of the interaction between regional natural and humanistic environments and initiate a strong visual perception or sensory feelings of the campus, which play a positive guiding role in campus tourism resource development. In order to better understand the role of landscapes in campus tourism, the Wangjiang Campus of Sichuan University was selected as the study area. Campus landscapes under the comprehensive influence of natural and humanistic environments were studied based on three different multi-level (scale) perspectives including: (i) point scale, (ii) line scale and (iii) plane scale, as well as different research themes comprising: (i) landscapes of buildings and vegetation, (ii) color landscapes, (iii) landscapes of campus space utilization, and (iv) thermal landscapes. The results show that the Wangjiang Campus landscapes have strong environmental natural landscape components linked with strong humanistic landscapes, which may provide lively, positive and relaxed visual feelings to tourists in the form of affirmative landscape services. The formation and development of the campus landscapes are affected by the geographic environments and campus culture, and it is conducive to the formation of unique campus genius loci. Nowadays, the landscapes of Wangjiang Campus have become a distinctive visiting card of campus tourism. This study would be helpful in better understating of the campus landscapes using new perspectives, as well as could be used as references for the development of university-campus-tourism.

Keywords: campus tourism; multi-scale perspectives; color landscapes; Wangjiang Campus; thermal landscapes; landscape services

1. Introduction

In recent years, the university campus tourism is getting more and more attention because of its unique beauty and characteristics [1,2]. Massachusetts Institute of Technology (MIT) has allowed tourists to create their own tours, and there are also tours guided by students from Monday to Friday. Stanford University, Harvard University and many well-known universities also have similar arrangements as MIT [3]. Campus tourism not only brings tourists a different tourism experience, but also expands the influence of universities. Nowadays, the development of campus tourism has

become a hot focus subject for current tourism researchers. Focusing on campus tourism, the driving force [4,5], image design [6,7], campus planning [8,9] and campus environmental development [10,11] have been studied by many researchers. Xu [12] elaborated the concept and characteristics of campus tourism, analyzed the advantages and constraints of the development of campus tourism, and discussed the relevant development strategies and steps. Zhao [3] took the "campus tour" of Tsinghua University in the summer of 2017 as a case to rethink the publicity of university campuses from the aspects of public awareness, public mechanism and public space level, and discussed the improvement strategies of "campus tour". Through research on tourism at Chinese universities, Li [13] summarized the current situation and problems, and put forward some relevant suggestions.

The word "landscape" is first found in the Hebrew Bible, *the Old Testament*, and it originally meant natural scenery, ground morphology and landscape pictures, and was also used to imply the observer's feeling and understanding of the environment [14]. At present, landscape research has penetrated into geography [15,16], ecology [17], tourism science [18,19] and many other disciplines. Interestingly, although landscape research has been applied in different disciplines, its specific concepts and meanings have become greatly different. For tourism study, tourism landscapes refer to the general term of visible objects that could attract tourists and be used for tourism development and utilization. Therefore, tourism landscapes do not consider the attribute characteristics of the objects but define objects by whether they could be used for tourism. Generally, these tourism objects could be natural or humanistic, also could be material or intangible, and they may also be derived from the research objects of ecology, geology, geography, society and other disciplines. These different objects converge together to form the tourism resources of a region [20]. Campus landscapes as an important component of the campus, are important parts of campus tourism, and could affect tourists' travel decisions and experience through the visual and sense experience [21,22]. Good campus landscapes could provide a good travel experience to tourists, also act as an important window to spread the local culture of universities [23,24]. With the rapid development of higher education, more and more new campus of colleges and universities are being constructed. Many new campuses are facing the problem of homogenization which neglects the design of campus characteristic landscapes. New campuses often lack cultural accumulation and proper designs. Maybe, learning from other campus landscape design experience is a good solution to improve the campus characteristics. This study selected the Wangjiang Campus of Sichuan University as the study area, which has a nearly one hundred year history and comprises abundant landscape resources [25,26], in order to analyze the characteristics of campus landscapes from new different perspectives, and summarizes the experience of landscape construction. We hope that our study could provide useful references for campus landscape design.

2. Theoretical Framework

The word "campus", originating from Latin, refers to the locus with spatial extensibility and academic atmosphere [27]. According to Norberg-Schulz's phenomenological theory, a locus is generally composed of architecture, flowers, grass, trees, sky, doors and windows, pillars, day and night, seasons and people. Apart from the differences in the categories of the above elements, their shape, texture, color and other elements jointly determine the characteristics of the local environment, which is the essence of a locus [28], known as the genius loci. The campus is a special locus for education, which could contain characteristic natural and cultural landscapes. These landscapes are the main material carriers of the genius loci, reflecting the unique cultural connotation of the campus. With the development of society, great changes have taken place in university campuses. The university campus is no longer a closed academic monastery, but a more open "university city", "academic village" or "tourist attraction" [29]. Connell [30] pointed out that it has become very common to use campus facilities and environment to hold conferences, social activities and tourism activities. A large campus is like a small city, but it is also an organic whole formed by people's will more consciously than a city. Its genius loci could bring tourists a sense of identity and belonging [21].

As important parts of the city, the university campus landscapes could be considered as miniature urban landscapes, and they have some same characteristics in function and morphology [31]. The university campus is the laboratory of urban design, and is often regarded as the epitome of the city [32]. American urban planning expert Lynch ever stated the meaning of urban images in his book *"The Image of the City"* by using cognitive psychology and Gestalt psychology, aiming at doing the research of the loss of urban personality caused by disorder planning of urban morphology [33]. It was believed that beautiful and safe landscapes could leave an impression in the minds of the visitors and could help and guide people to identify the genius loci of a city. The paths, edges, domains, nodes and landmarks were summarized by him as five kinds of elements of urban landscapes. Among the five kinds of elements mentioned above, the paths are the most important elements and the main organization forms of city images. Their own forms, node links, borders, and signs along the paths could strengthen the images of the paths. The edges can strengthen the intention of different domains. The nodes are the key connection points, the intersection of roads, and the nodes of each domain. Domain elements can contain other elements. The core status can be determined and strengthened by setting up landmarks in an appropriate position. In fact, the five kinds of landscape elements proposed by Lynch are a typical "Point—Line—Plane" pattern structure (Figure 1).
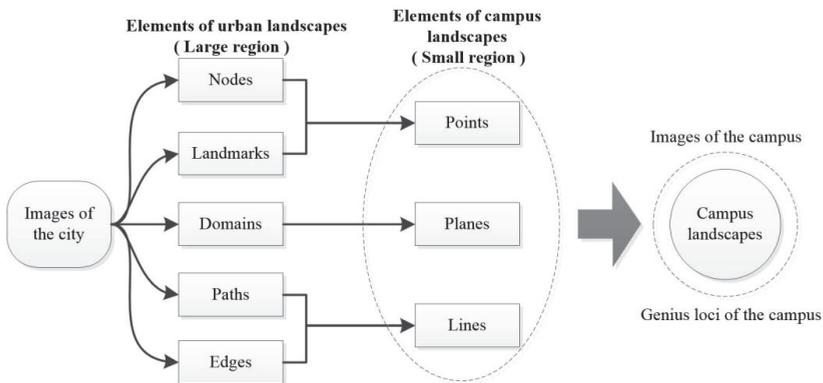
Figure 1. Theoretical framework of campus landscape analysis. This framework is derived from the theory of city images, but has been simplified by considering the characteristics of smaller research areas such as campuses. On this basis, the campus landscapes could be analyzed in order to support the exploration of campus images and campus genius loci.

As compared with a city, the area of university campus is relatively smaller, and the five elements of city images are more orderly in this unique locus [34]. In campus landscape system, nodes and landmarks are often regarded as point elements, such as independent buildings and structures; paths and edges are regarded as line elements; and domains refer to plane elements of different functional divisions [35]. The orderly combination of the three elements, point—line—plane, in the campus locus makes the campus recognizable and appreciable. The analysis on them is helpful to the exploration of campus images and genius loci. This paper would draw lessons from Lynch's analysis method and research theory on the formation of city images. Taking the Wangjiang Campus of Sichuan University as the specific research area, field survey, photo taking, interviews and other works were carried out in order to observe, record and analyze the campus landscape elements of Sichuan University from three levels (also known as scales), point—line—plane, so as to explore the unique characteristics of campus landscapes under the scope of campus images and genius loci, also to facilitate the development of campus tourism (Figure 1).

3. Materials

3.1. Study Area

Sichuan University was established in 1896 when Mr. Chuanlin Lu (the then Sichuan governor) set up Sichuan Chinese-Western School under the special mandate of the Guangxu Emperor [36]. Now, Sichuan University has three campuses, separately named Wangjiang Campus, Huaxi Campus and Jiang 'an Campus [37]. Wangjiang Campus is the main campus of Sichuan University. In 1935, Mr. Hongjuan Ren, as the principal of National Sichuan University, in consideration of the school's broken buildings, decided to employ domestic architectural design master Mr. Tingbao Yang to create a new plan and design close to the Jinjiang River, in order to build a new campus [38]. The reserved Chemical Building, Mathematical Building, and History Museum in Wangjiang Campus of Sichuan University were all built at that time. In 1994, Sichuan University combined with the adjoining Chengdu University of Science and Technology, and the two campuses were merged together [37], forming today's Wangjiang Campus of Sichuan University (Figure 2) [39]. The former Chengdu University of Science and Technology has many characteristic buildings, which have become important parts of the Wangjiang Campus of Sichuan University.
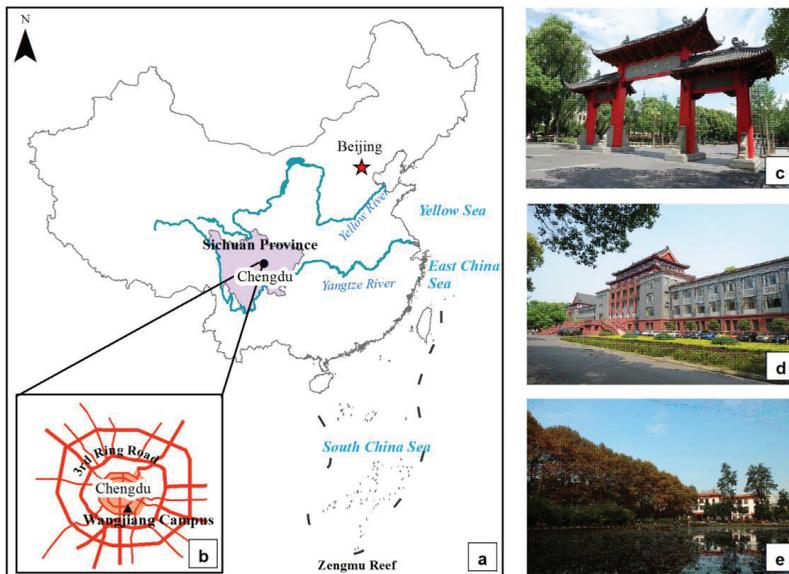
Figure 2. Location of Wangjiang Campus of Sichuan University and some typical buildings. (**a**) Chengdu's position in China; (**b**) Road network of Chengdu and location of Wangjiang Campus in Chengdu; (**c**) School gate of Wangjiang Campus, Sichuan University; (**d**) Administration Building of Sichuan University; (**e**) Tinghe Pool and History Museum of Sichuan University.

Wangjiang Campus is located in the subtropical region of China, affected by subtropical monsoon climate. The winter is comparatively warm here, and the average temperature of the coldest month is above 0 °C. The summer is hot, with the hottest month average temperature above 22 °C. For the subtropical monsoon climate, the seasonal variation of temperature is significant, and the four different seasons are distinct. Annual precipitation of the subtropical monsoon climate is generally 800–1500 mm with no obvious dry season [40,41]. Suitable natural environments could provide favorable conditions for the development of natural landscapes. On the other hand, after nearly 100-years development, the campus has accumulated rich historical and cultural heritages (Figure 2). Ranking among the

top ten most beautiful campuses in China [42], Wangjiang Campus has become a suitable object for studying the campus landscapes.

3.2. Data Collection

3.2.1. Field Investigation

Google Earth is a useful software package that can generate a 3D representation of the Earth. The data source of Google Earth comes from satellite images, aerial photography, and GIS data [43,44]. It allows non-commercial personal use of images, and has gained favors of many scientific researchers [45]. In order to study the landscapes of the Wangjiang Campus, we downloaded the high-resolution remote sensing image of 2018 from Google Earth. The source of this image was from the satellite of DigitalGlobe which is an American commercial vendor of space imagery and geospatial content [46]. Based to the field investigation and the high-resolution remote sensing image data, the extent of the Wangjiang Campus, with an area of 1.44 km^2, was outlined (Figure 3). Through the comparison among different roads, nine representative campus roads were selected as the main investigating objects of landscape-photo collection. Their details are listed in Table 1, which lists the name, length and surrounding buildings of each road.
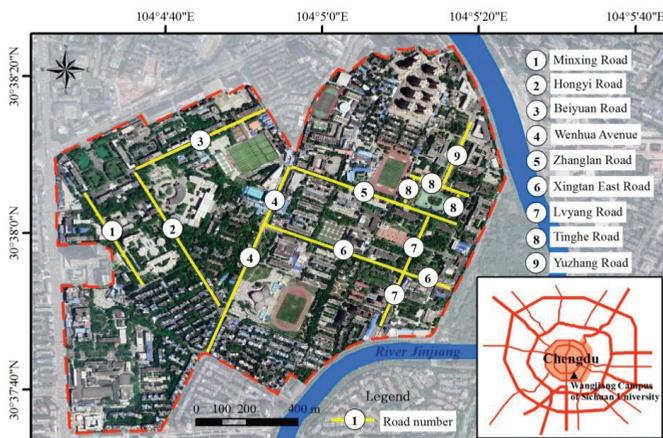
Figure 3. Wangjiang Campus remote sensing image of Sichuan University in 2018. The nine selected roads have been marked in yellow.

Table 1. Road information.

Road Number	Road Name	Road Length (m)	Surrounding Buildings
①	Minxing Road	415	Administration Building Yifu Technology Building Overseas Training Department Building Nanotechnology Building Minxing Building Hongjuan Building Shuanghe Ponds North Gate

Table 1. *Cont.*

Road Number	Road Name	Road Length (m)	Surrounding Buildings
②	Hongyi Road	598	Administration Building Engineering Library Comprehensive Teaching Building Faculty Residential Area Shuanghe Ponds North Gate
③	Beiyuan Road	492	West No.3 Teaching Building West No.5 Teaching Building Beiyuan Student Dormitory Area Boiler Room Volleyball Court Beiyuan Canteen Shuanghe Ponds North Gate
④	Wenhua Avenue	589	Wenhua Activity Center Student No.1 Canteen School Hospital Faculty Residential Area Wangjiang Gymnasium Bamboo Forest Canteen
⑤	Zhanglan Road	605	Student Dormitory Affiliated Experimental Primary School Chengyi Building Yiwen Building Zhiwen Building Kindergarten Playground Physics Building Tinghe Pond Zhili Building
⑥	Xingtan East Road	678	Student Dormitory Basketball Court Apartment for Young Teachers Huiwen Building Faculty Residential Area Ruiwen Building Cuiwen Building Mingli Building Dali Building
⑦	Lvyang Road	460	Zhiwen Building Physics Building Tennis Court Ruiwen Building Cuiwen Building Mingli Building Faculty Residential Area Swimming Pool
⑧	Tinghe Road	414	Bell Pavilion School History Exhibition Hall Chemical Building Zhili Building Zhiwen Building Physics Building Tinghe Pond
⑨	Yuzhang Road	262	School History Exhibition Hall Chemical Building Arts and Science Library Hongwen Building University for the aged Museum East Gate

Investigation of landscape photos of Wangjiang Campus was made using the digital camera with GPS function. 924 photos from the perspective of tourists (taking pictures by imagining oneself as a tourist), including panoramic photos, were obtained in March 2018. March belongs to the early spring of southern China. At such a time, the branches and leaves of trees are not too dense, and they do not block the buildings too much, which makes March become the best time to take photos. In the shooting process, the left and right sides of the road were photographed in the same shooting position. Compared with ordinary cameras, one of the advantages of the digital camera used in this investigation is that it has GPS positioning function. As a result, the longitude and latitude information of the location could be retained in the photo attributes. This kind of photos are also known as geotagged photos [47]. Using the "GeoTagged Photos to Points" tool of ArcGIS, the geotagged photos were converted to point features, and could be added as attachments to the features (Figure 4). The method above is helpful to manage and query the photo data. Using this way, we can look up the distribution of photos. In addition, we also carried out some simple interviews in addition to the collection of photo data through field investigation. As for the contents of the interviews, they are mainly based on the phenomena presented by the research results. Through the interviews, the research results could be explained and demonstrated to some extent.
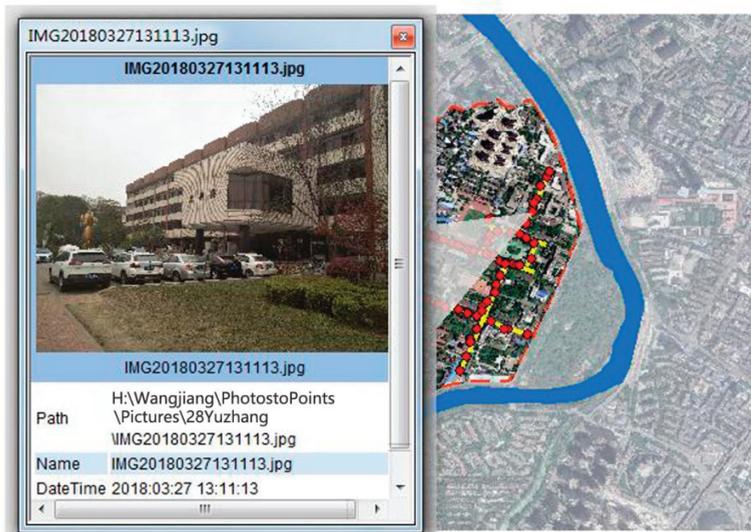
Figure 4. Some investigating photographs of Yuzhang Road.

3.2.2. Remote Sensing Images

In addition to getting the high-resolution remote sensing image from Google Earth, we also used the Landsat 8 images. Landsat 8 is an American Earth observation satellite launched on February 11, 2013, carrying two main equipments: Operational Land Imager (OLI) and Thermal Infrared Sensor (TIRS) [48]. The OLI consists of 8 bands with a spatial resolution of 30 m and a 15-m panchromatic band, while the Landsat 8 TIRS could collect heat loss information of the Earth using two bands (Table 2). TIRS could be used to get thermal infrared remote sensing images that could be used to recognize surface features and retrieve surface parameters such as temperature, humidity and thermal inertia [49]. After comprehensive comparison of image data source quality, the remote sensing image of 5 June 2018 was downloaded from USGS website (https://glovis.usgs.gov/app?fullscreen=0) to retrieve the surface temperature. June has belonged to the summer of Sichuan Province, and the differences of surface temperatures in various areas of the campus were obvious.

Table 2. TIRS parameter.

Band Name	Central Wavelength (μm)	Minimum Band Boundary (μm)	Maximum Band Boundary (μm)	Spatial Resolution (m)
Band 10 TIRS 1	10.9	10.6	11.2	100
Band 11 TIRS 2	12.0	11.5	12.5	100

4. Methods and Technical Route

4.1. Campus Landscape Research Based on Nvivo Qualitative Analysis

NVivo is a qualitative data analysis (QDA) computer software package produced by QSR International (Melbourne, Vic, Australia), and it is now used by academic researchers across a diverse range of fields including anthropology, sociology, psychology, communication, forensics, tourism, criminology and marketing [50]. It supports multiple formats of data such as audio files, videos, digital photos, word files, PDF, spreadsheets, rich text, plain text, web and social media data [51]. It could help users organize and analyze non-numerical or unstructured data in order to classify, sort and arrange information; make joint analysis; and examine relationships. The researcher can test theories, identify trends and cross-examine information [52]. In this paper, the NVivo software was used to manage the collected photo data taken on Wangjiang Campus, Sichuan University in a unified way, and realize the systematic classification of the photo data, so as to analyze the vegetation and architectural landscapes corresponding to the point-scale landscape analysis [53].

4.2. Campus Color Landscape Analysis Based on Colorimpact

ColorImpact is a color scheme design tool for Windows platform, and it is easy to use and has many advanced functions [54]. For example, it can analyze advanced color schemes, build beautiful color schemes and export them. Now, ColorImpact is available for download as shareware, and could be used freely for 14 days after installation without any cost or obligation (https://www.tigercolor.com/Download/). In view of this, the relevant analysis of color landscapes of Wangjiang Campus was mainly carried out by using the ColorImpact color analysis software, and the colors of the collected photos were quantified, extracted and stored in different ways. Because color could affect people's psychology and physiology, different colors could make tourists have different feelings and affect their travel experience. Now, people are paying more and more attention to the choice of landscape plant colors and the creation of urban color landscapes [55]. Applying the perspective of color landscapes to study the characteristics of Wangjiang Campus is a practical and innovative perspective.

4.3. Landscape Pattern Index Analysis

Landscape pattern index reflects the structural characteristics of land use types [56]. Shannon's Diversity Index (*SHDI*) is a measurement index based on information theory, and it is widely used in ecology. *SHDI* is equal to the negative sum of the products of the each-patch-type area ratio and the natural logarithm of its value at the landscape level:

$$SHDI = -\sum_{I=1}^{S} P_I ln P_I \tag{1}$$

where *s* is the amount of patches, and *Pi* is area ratio of each patch type. *SHDI* = 0 indicates that the whole landscape is composed of only one patch, and the increase of *SHDI* indicates that the patch types increase, or the patch types distribute equally in the whole landscape. In a landscape system, the richer the land use is, the higher the degree of fragmentation is, as a result, the more uncertain the information content is, the higher the *SDHI* value is.

Shannon's Evenness Index (*SHEI*) equals the ratio of Shannon Diversity Index to the maximum possible diversity under a given landscape abundance (all patch types are equally distributed). *SHEI* = 0

indicates that the landscape is composed of only one kind of patches without diversity; *SHEI* = 1 indicates that the patches are distributed evenly and have the greatest diversity:

$$SHEI = \frac{SHDI}{SHDI_{max}} \tag{2}$$

where *SHDI* is the Shannon's Diversity Index, and *SHDI_{max}* is maximum possible diversity under a given landscape abundance (all patch types are equally distributed).

In this paper, we would use *SHDI* and *SHEI* to do the analysis of campus-space-utilization landscape patter. The definition of "campus-space-utilization" inherits the concept of land use, but there are some differences. It is further subdivided according to the utilization of campus space, such as dividing educational buildings into study space, dividing grassy areas into green space, dividing canteens into service space, sports fields into sport space and dormitories into living space. This classification work needs the support of high-resolution remote sensing image interpretation and field investigation.

4.4. Land Surface Temperature Retrieval Using Landsat 8 TIRS Data Based on Atmospheric Correction Method

Currently, there are mainly three kinds of surface temperature retrieval algorithms: atmospheric correction method [57], mono-window algorithm [58] and split-window algorithm [59]. In this study, Landsat 8 TIRS is used to retrieve surface temperature based on atmospheric correction method using the ENVI software. The basic principle of this method is to estimate the influence of the atmosphere on the surface thermal radiation firstly, then subtract this part of the atmospheric influence from the total amount of thermal radiation observed by the satellite sensors, so as to obtain the surface thermal radiation intensity, and then convert this thermal radiation intensity into the corresponding surface temperature.

4.5. Technical Route

The methods used in this paper were described above. In order to make the structure of the article more clearly, the technical route was prepared as shown in Figure 5. In this study, the field survey photo data was used for analysis of point-based and line-based landscapes. Remote sensing images including high resolution image and TIRS data were used for the analysis of plane-based landscapes. By the combination of three different views of the analysis, the Wangjiang Campus landscapes could be understood better.
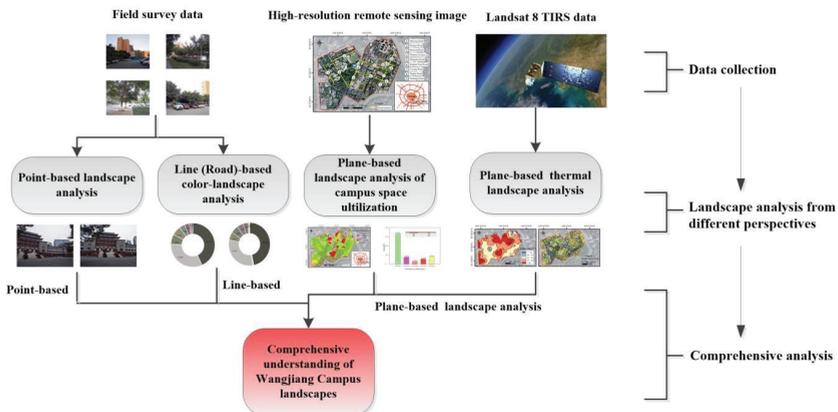
Figure 5. Technical route of this study.

5. Results

5.1. "Point" Views: Campus Landscapes

5.1.1. Architectural Landscapes

Architecture landscapes are not only important components of urban landscape images, but also the main body of campus landscapes by integrating with natural landscapes. In particular, the characteristic buildings of the campus can best reflect the characteristics of genius loci. The traditional buildings in western Sichuan are one of the traditional architectural schools, and they focus on the harmony of nature and environment. Housing materials are adapted to local conditions, materials and designs. The main building materials are wood, lime, black bricks and grey tiles. These local materials are not only economical, but also in good harmony with the environment, with a strong local flavor. It presents a texture beauty as well as the natural beauty. In order to adapt to the hot and humid climate, the traditional residential buildings generally have sloping roofs and thin eaves. The architectural color of folk houses in western Sichuan is simple and elegant. The vegetation in the western Sichuan plain is evergreen throughout the year, while the architectural color of the dwellings is very simple and mostly possesses the cold tones.

Through comparison, it could be found that the architectures of Wangjiang Campus not only include traditional buildings with local traditional residence characteristics (Figure 6a–c), but also have many modern buildings (Figure 6d–f). Generally, traditional architectures with the local architectural features mentioned above are important carriers of campus culture and genius loci. Modern architectures as another component of campus architectures of Wangjiang Campus are relatively lack of cultural connotation and characteristics. However, with the passage of time, they would be gradually given different cultural significances.

(**a**) Administration Building.   (**b**) Physics Teaching Building   (**c**) School History Museum

(**d**) Graduate School   (**e**) Liberal Arts Building   (**f**) University Science Park
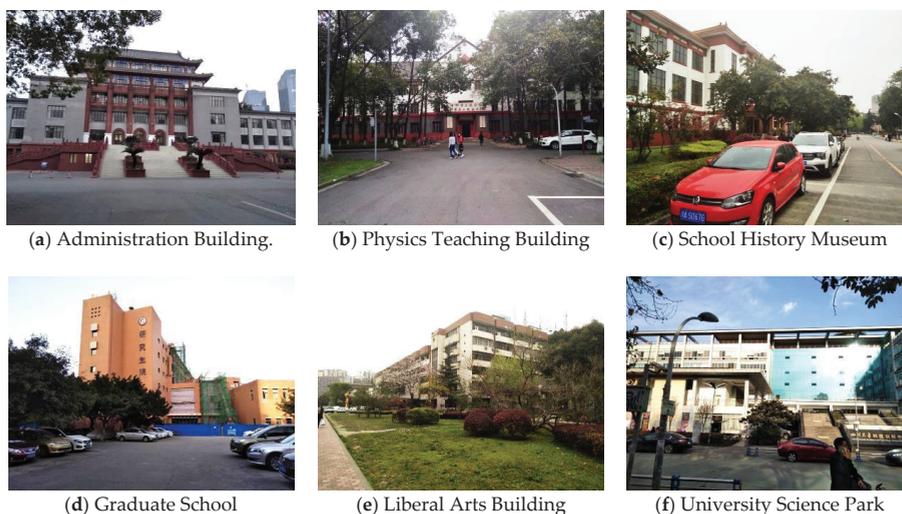
Figure 6. Campus architectures of Wangjiang Campus. (**a**–**c**) Campus architecture inheriting the characteristics of traditional residential buildings; (**d**–**f**) Modern architecture built in different ages.

Different kinds of buildings could leave different impressions which could also be transformed into the tourist's viewpoint on the university to a certain extent. In view of this, we printed photos of different buildings in the campus and asked 100 visitors to point out the most impressive buildings. This work could be seen as a simple interview, not as a questionnaire. The results are shown in Figure 7. It could be found that the buildings which impress tourists include both traditional and

modern buildings. Among them, the traditional buildings occupy the majority among the selected top buildings. Especially, the vermilion school gate impresses tourists most deeply and has become an important landmark of Wangjiang Campus. As a tourist said in an interview, "The vermilion gate of Sichuan University is really impressive. It can help people to feel the university culture and arouse people's yearning for higher education. In this year, our whole family specially takes our child here to visit, hoping that he could be admitted to Sichuan University next year. We specially come here to take photos and encourage our kid." The following buildings are also very characteristic buildings, including the majestic Administrative Building, the cleverly designed Wangjiang Gymnasium, and the traditional Ruiwen Building. Characteristic buildings are the focus of tourists' attention in the process of sightseeing, which may lead tourists to the first impression of the school. These traditional buildings in Wangjiang Campus of Sichuan University give the tourists a chance to feel the profound historical and cultural heritage of Sichuan University.
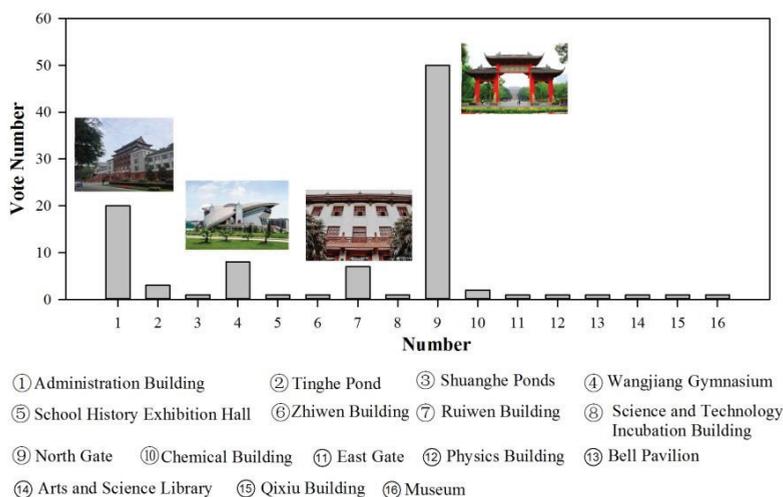
Figure 7. Vote statistics for different buildings.

5.1.2. Vegetation Landscapes

Wangjiang Campus has rich vegetation resources. According to the survey, there are 301 species of garden plants in the whole campus, including 69 species of arbors, 101 species of shrubs, 115 species of lawns and ground covers, four species of bamboos, nine species of lianas and three species of aquatic plants [25]. The suitable climate is an important reason for the formation of the rich vegetation resources in Wangjiang Campus. Various vegetation types have become an important embellishment of the campus landscapes, and they beautify the campus landscapes and attract visitors to stop and watch [39]. Based on the investigation, it could be found that the vegetation in Wangjiang Campus includes both local vegetation (Figure 8a–d) and exotic vegetation (Figure 8e–f). Especially, evergreen broad-leaf-forest species such as banyans and camphor trees could be still full of green and vitality in the bleak winter, and it would be more conducive to the improvement of campus landscapes.

(**a**) Banyan

(**b**) *Ginkgo biloba*

(**c**) *Malus spectabilis*

(**d**) Camphor tree

(**e**) *Platanus acerifolia*

(**f**) *Prunus cerasifera*

Figure 8. Campus Vegetation of Wangjiang Campus, Sichuan University.

5.2. "Line" Views: Campus Color Landscapes

Urban color landscapes refer to the color combination of visual objects in the external spaces of urban buildings. According to the different color sources, the color landscapes could be divided into two categories: artificial and natural. Roads, advertisements, signs, buildings, green spaces and rivers are all the carriers of color landscapes [60]. As important elements of urban landscapes, color landscapes may have an important impact on the quality of urban human settlements. Western countries have carried out research on urban color planning earlier, and have formed a relatively mature research system, which could provide powerful guidance and reference for the development of urban color landscapes [61,62]. Some application cases of urban color planning could provide a good reference for the development of urban color theory. For example, London takes khaki as its main color, and beige is the main color for Paris, while Beijing takes compound grey as the main color. Many large and medium-sized cities have achieved initial results in exploring the mode of color planning, design and management [63]. It is of positive significance to expand the research and application of urban color planning.

As important parts of urban landscapes, campus color landscapes also deserve attention. Through the analysis of photographs and color rings of nine main roads in Wangjiang Campus, it could be found that green as a natural base color occupies a large proportion. Especially for Lvyang Road (Figure 9g), vegetation has an important impact on the landscapes of the road. In addition, the grey mainly from walls and roads also plays an important role along Lvyang Road. Comparatively, the color distribution of Wenhua Avenue is relatively uniform (Figure 9d). From the perspective of environmental psychology and color psychology, different color combinations give people different experiences. For example, red could make people feel warm; green could make people feel relaxed, stable and peaceful; blue could make people calm; and black could make people feel solemn and depressed [64]. Therefore, the visual experience of these nine roads is obviously different. For students and staffs in the teaching buildings, a large proportion of green landscapes (Figure 9f,g) can not only effectively alleviate the fatigue and tension after teaching and learning, but also attract a large number of tourists and nearby residents to take a walk and sightseeing here.
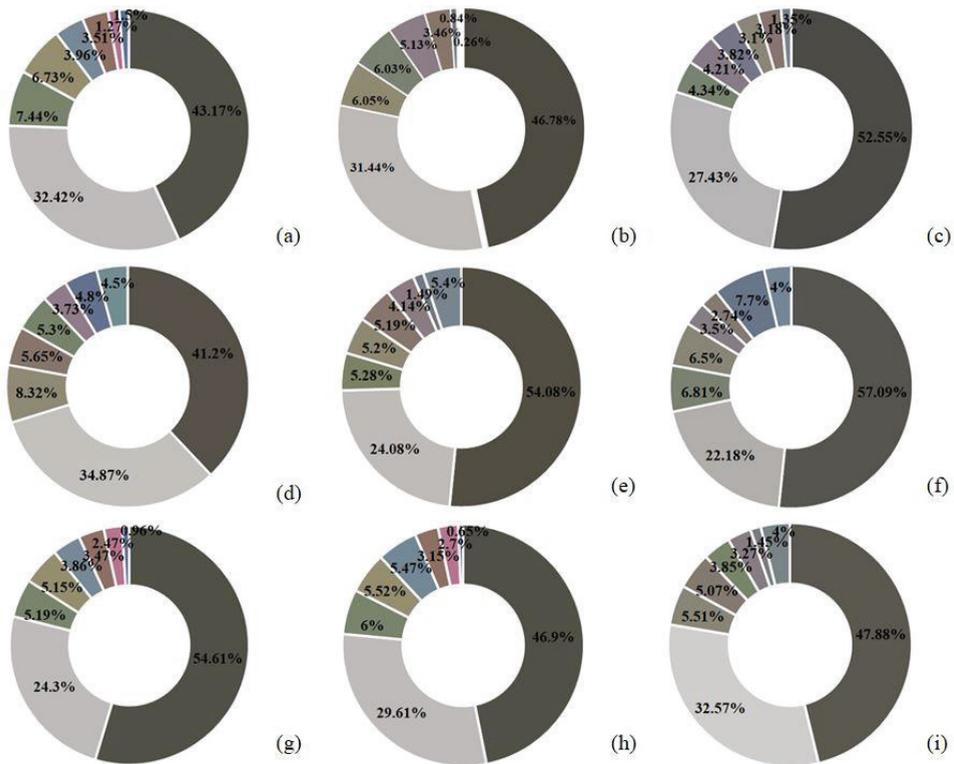
Figure 9. Landscape color rings along different roads. (**a**) Color ring of Minxing Road; (**b**) Color ring of Hongyi Road; (**c**) Color ring of Beiyuan Road; (**d**) Color ring of Wenhua Avenue; (**e**) Color ring of Zhanglan Road; (**f**) Color ring of Xingtan East Road; (**g**) Color ring of Lvyang Road; (**h**) Color ring of Tinghe Road; (**i**) Color ring of Yuzhang Road.

5.3. "Plane" Views: Utilization of Campus Spaces and its Thermal Landscapes

5.3.1. Utilization of Campus Spaces

Land use involves the management of natural environment. For example, we can transform wilderness into dwelling environment and semi-natural habitats such as cultivated lands. Different land uses create different landscapes. For most university campuses, land use types are relatively single, mainly including construction lands and vegetation lands. However, considering different functions, the different architecture landscapes could give people different experiences and feelings. Therefore, we divided campus space into five categories: (i) green space, (ii) living space, (iii) service space, (iv) sport space and (v) study space (Figure 10) based on manual interpretation and field investigation. Green space occupies a large proportion according to the area statistics of different campus spaces (Figure 11). There is a little area difference between living space and study space. The areas of sport space and service space are smaller than other spaces.

We introduced the landscape pattern index analysis methods to analyze the landscape characteristics of campus space utilization. Based on the calculation results of SHDI (1.2306) and SHEI (0.7646), it can be found that Wangjiang Campus has rich and diverse campus-space-utilization landscapes, and the distribution of various landscapes is relatively uniform (Figure 11).
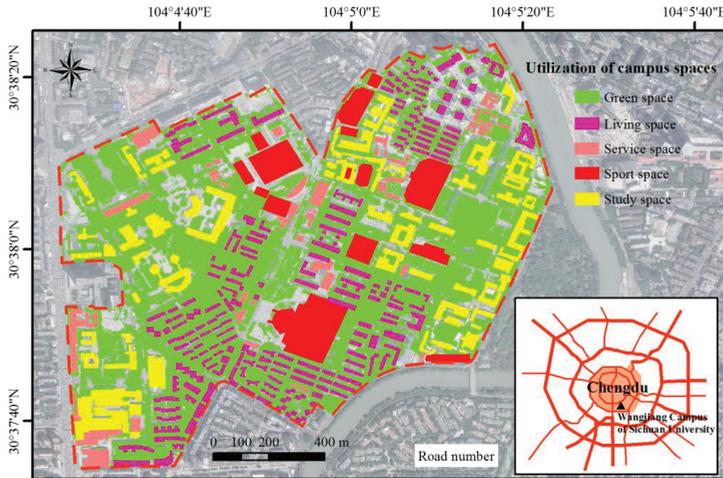
Figure 10. Utilization of campus spaces.
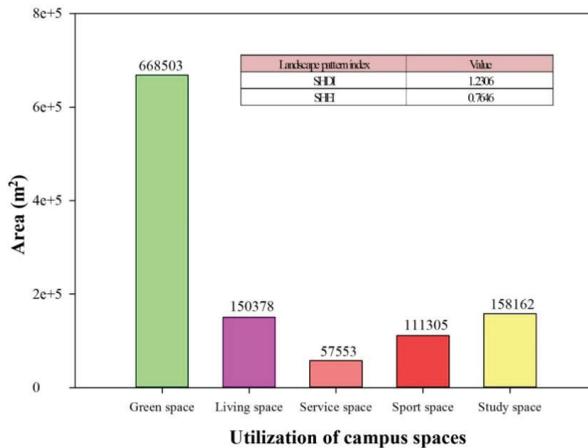
Figure 11. Area statistics of campus-space-utilization landscapes and landscape pattern index analysis.

5.3.2. Thermal Landscapes

People often attach importance to the study of visual landscapes in landscape research. However, the role of landscapes in campus tourism should consider not only the visual impact, but also the impact of the external environment on tourists. In addition to buildings, roads, trees and other physical landscapes, thermal landscapes as invisible virtual landscapes also have an important impact on people's emotions and travel decisions [65]. However, thermal landscapes are often ignored in the traditional landscape analysis [66]. Thermal landscapes refer to the landscapes that could be experienced through the cold and hot feelings of human skins. Different thermal landscape environment would produce different stimulation to sensory organs, which determines the complexity of campus landscape environment [67]. Based on Landsat 8 TIRS data, the surface temperature of the campus was calculated and the thermal landscape characteristics of the campus were obtained (Figure 12). It could be found that there are different high and low temperature zones in the whole campus. The low temperature areas are mainly distributed in the areas with abundant vegetation or around water channels and reservoirs. Relatively speaking, the dense building areas, especially the sport spaces, become the high

temperature area. Therefore, it is suggested that during the summer season, the travelers should try to avoid the high temperature area in order to minimize the chances of bad experience and feelings.
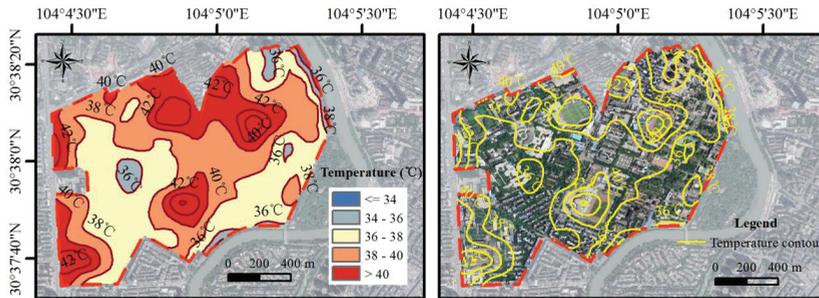
Figure 12. Thermal landscapes.

5.4. Optimal Path Planning of Campus Tourism

Architecture and vegetation landscapes may give people different visual experience. Color landscape may bring unique color visual impact to tourists. Different land use could bring different experience to tourists, and thermal landscape could affect tourists' comfort while visiting [67]. As the visitor said in an interview, "We like to come to the administrative building. We usually bring our grandson here when we are free on weekends. The red and white traditional buildings here are quite distinctive. Especially, the square and lotus in front of the building are very beautiful." Considering the above landscape characteristics of different scales, an optimal path planning of campus tourism could be made. We could find that North Gate of Sichuan University is absolutely attractive to tourists, and it is also the landmark landscape of the school. Most tourists would choose to visit the school from here. Administrative Building, Wangjiang Gymnasium and School History Exhibition Hall are representative architectural landscapes far away from the dioceses and are also the areas with strong openness to tourists. Considering these factors, the route is selected to enter the campus from North Gate of Sichuan University, passing through Administration Building, Wangjiang Gymnasium, Ruiwen Building, School History Exhibition Hall, Hongwen Building and other important buildings, so as to enjoy the natural and cultural landscape of the campus (Figure 13). After the tour, visitors can leave from the east gate of the campus.
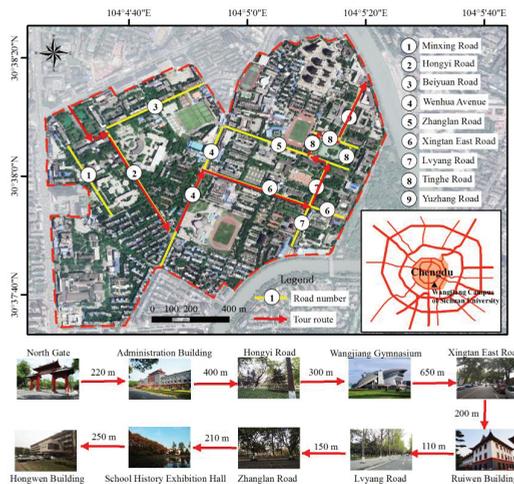
Figure 13. Optimal path planning of campus tourism.

6. Discussion

The campus landscapes in universities are the result of the interactions between the regional natural and humanistic environments. They could generate a strong visual perception or sensory feelings for campuses and play a positive guiding role in campus tourism resource development. Nowadays, more and more scholars are paying more and more attention to the study of campus landscapes [68–70]. We draw lessons from the characteristics of scale study (point-line-plane), and also introduce the method of scale study in the study of campus landscapes. Only by dividing it into different scales, can we reveal the landscape characteristics better. Qualitative analysis is the most commonly used method for the analysis of vegetation and buildings on point-scale [71]. For the line-scale color landscape analysis, many scholars have tried to use photos to achieve color landscape analysis [60,72,73]. Nowadays, the remote sensing images have been widely applied to the study of campus landscapes. For example, Gao [74] used remote sensing images to study the color landscapes of the campus of Northwest University. With the help of remote sensing images, the landscape pattern index of land use based on the utilization of campus spaces on the plane-scale could reveal the land use characteristic. The diversity and uniformity of campus functional areas could meet the relevant requirements of school planning and design, and also meet the learning and living needs of teachers and students [75,76]. Generally, many scholars only consider the temperature factor when they study the urban heat island effect [77]. We put forward the concept of thermal landscape. With the help of remote sensing technology, the thermal distribution is shown, which provides a new idea for landscape research, also could be used as an expansion and an extension of related research.

In a sense, the genius loci are the spatialization of people's memory of loci. Through unique colors, morphological structures and internal functions, people could get senses of identity, pride and belonging in the loci [78]. For the campus of Sichuan University, the genius loci of Wangjiang Campus are a complex with certain recognition based on specific natural and humanistic backgrounds. In the modern society where the campuses have become tourism products, the power spirit contained in them have been gradually dispelled. The spirits of equality and democratization in modern society have broken the physical and psychological boundaries with these majestic loci. Tourists can not only enter these loci, but also gaze and experience the aesthetic objects [79]. From the perspective of tourism experience, the campus landscapes composed of different-scale elements are the material carriers to attract tourists. The colors, atmospheres and images of campus genius loci are the fundamental to stimulate tourists' psychology.

Campus tourism is a new type of tourism activity by taking colleges and universities as its tourism destination. It is also a part of modern urban tourism and cultural tourism [80]. By the end of 2019, at least 15 colleges or universities in China had been approved as national 3A or above scenic spots. The total number of tourists visiting colleges or universities across the country during holidays exceeds 10 million [81]. The number of tourists is growing at a rate of more than 20% every year [81]. The rise of university tourism is closely related to the development of landscape planning discipline. For many universities in the world, the unique campus landscapes are the representative of art, a part of the local people's life, and an important basis for the development of university-campus-tourism [82]. The university-campus-tourism has brought great social impact and could promote the rise of various industries in the city [83]. At the same time, the rise of university landscape design and university tourism symbolizes that landscape enjoying is no longer a privilege enjoyed by a few people, and has become a part of people's life [84].

The number of Chinese universities ranks third in the world. As a feature of the development and utilization of university resources, university campus tourism has become the expectation of the society for colleges and universities, and it is also a problem needed to be solved in the fields of landscape architecture and urban planning. At present, in the process of carrying out university tourism activities, many colleges and universities are afraid that university tourism activities may affect the normal teaching order, so they deliberately inhibit the development of university tourism [85]. For most colleges and universities, the campus landscape environment construction has not been given

enough attention in the past. Due to the lack of tourism planning, the quality of tourism environment in colleges and universities has declined seriously. Although the university tourism characteristic landscapes have an important significance to promote the university tourism culture establishment, in fact, most of Chinese colleges and universities with the potential tourism resources have not carried out good university-campus-tourism construction activities, and the theoretical research and practical activities about university-campus-tourism characteristic landscapes are merely at the initial stages. Based on this reality, this study takes the Wangjiang Campus of Sichuan University as a specific case to analyze the landscapes of campus tourism from three levels of "Point-line-plane", which is not only a bold attempt, but also be hoped to provide references for the scientific design of campus tourism landscapes and the rational utilization of landscape resources.

7. Conclusions

In this study, Wangjiang Campus of Sichuan University were selected as the research area. The campus landscapes under the comprehensive influence of natural and humanistic factors were studied based on three different perspectives, also known as three scales, point-line-plane. Building and vegetation landscapes, color landscapes, landscapes of campus space utilization and thermal landscapes were chosen as the research objects. The following conclusions are drawn:

(1) Wangjiang Campus landscapes take natural landscapes as base and are attached with strong humanistic landscapes, which could bring tourists a lively, positive and relaxed feeling as positive landscape services. In particular, the interaction between traditional buildings and local vegetation has a greater attraction for tourists.

(2) The formation and development of the campus landscapes are affected by the geographic environment and campus cultural heritage. Some landmark buildings have strong characteristics and could play a prominent role in the image of tourist destination.

(3) High vegetation coverage is a major feature of Wangjiang Campus, and it plays a leading role in tourists' color perception. Color landscapes along different roads have obvious color differences which may bring different experience to tourists. In the future tourism development, it is proposed to consider the role of color landscapes.

(4) Wangjiang Campus has rich and diverse campus-spaces-utilization landscapes, and the distribution of various landscapes is relatively uniform. The diversity and uniform distribution of different spaces not only facilitates the life of teachers and students but also reduces the monotony of campus travel, which is conducive to attract tourist's attention.

(5) The thermal landscapes of the campus show that there are several high temperature areas in summer, so it is suggested to avoid these areas when planning the campus tourism route in order to minimize the discomfort of body feelings.

(6) Comprehensive consideration of the characteristics of different campus landscapes at different scales is conducive to the design and planning of more reasonable campus tourism routes, which could help tourists have a better experience in campus tourism.

(7) The campus landscapes of the Wangjiang Campus of Sichuan University have become a distinctive visiting card of campus tourism. The outcomes of this study would help people better understand the importance of landscapes to campus tourism and could act as references for the development of university campus tourism at other locations.

References

1. Lu, H. A review of ethnic-college tourism in China. *Guizhou Ethn. Stud.* **2008**, *28*, 118–128.
2. Magolda, P.M. The campus tour: Ritual and community in higher education. *Anthropol. Educ. Q.* **2000**, *31*, 24–46. [CrossRef]
3. Zhao, J. Summer tourist season and the publicity of a university campus: The case of Tsinghua University. *Urban Des.* **2017**, 70–77. [CrossRef]
4. Li, Z.X. *A Study on the Development of Tourism in Universities—Take the Universities in Wuhan for Example*; Central China Normal University: Wuhan, China, 2009.
5. Chickering, A.W.; O'Connor, J. The university: A driving force for collaboration: Learning center. *About Campus* **1996**, *1*, 16–21. [CrossRef]
6. Han, P. On the humanization in the image design of the campus landscape. *J. Qingdao Tech. Coll.* **2011**, *24*, 69–72.
7. Johnson, C. Approaches to contemporary campus landscape design. *Plan. High. Educ.* **1994**, *22*, 1–7.
8. Yahres, M.V. What should stay put? Campus landscape planning for the long term. *Facil. Manag.* **2000**, *16*, 35–38.
9. Zhang, W.; Li, C. The application of landscape ecology in campus landscape planning. *Adv. Mater. Res.* **2013**, *610–613*, 3832–3836. [CrossRef]
10. Fan, L. Research on development tendency of college campus environmental landscape design in China. *J. Landsc. Res.* **2012**, *40*, 9380–9447.
11. Zheng, Z.Q.; Wen, L.X.; Zeng, D. Research and development of the campus landscape plant systems—A case study of Guangzhou University. In Proceedings of the 2nd International Conference on Information Science and Engineering, Hangzhou, China, 4–6 December 2010; pp. 5987–5993.
12. Xu, L. On campus tourism—A new subject on the exploitation of culture tourism resources. *J. Guilin Inst. Tour.* **2000**, *11*, 35–37.
13. Li, M. Research in campus tourism: Actuality, problems and advice—A literature review of 10 years research in campus tourism in China. *Resour. Dev. Mark.* **2007**, *23*, 574–576.
14. Farina, A. Principles and methods in landscape ecology. *Austral Ecol.* **2006**, *33*, 361–362.
15. Mitchell. Cultural landscapes: The dialectical landscape—Recent landscape research in human geography. *Prog. Hum. Geogr.* **2002**, *26*, 381–389. [CrossRef]
16. Cosgrove, D. The myth and the stones of venice: An historical geography of a symbolic landscape. *J. Hist. Geogr.* **1982**, *8*, 145–169. [CrossRef]
17. Palmer, G.C. Principles and methods in landscape ecology: Towards a science of landscape. *Austral Ecol.* **2010**, *33*, 361–362. [CrossRef]
18. Daugstad, K. Negotiating landscape in rural tourism. *Ann. Tour. Res.* **2008**, *35*, 402–426. [CrossRef]
19. Mcgregor, J.A. The victoria falls 1900–1940: Landscape, tourism and the geographical imagination. *J. South Afr. Stud.* **2003**, *29*, 717–737. [CrossRef]
20. Terkenli, T.S. Tourism and landscape. In *A Companion to Tourism*; Blackwell Publishing Ltd.: Hoboken, NJ, USA, 2004; pp. 337–348.
21. Dober, R.P. *Campus Landscape: Functions, Forms, Features*; John Wiley & Sons: Hoboken, NJ, USA, 2000.
22. Bardekjian, A.; Classens, M.; Sandberg, L.A. Reading the urban landscape: The case of a campus tour at York University, Toronto, Ontario, Canada. *J. Environ. Stud. Sci.* **2012**, *2*, 249–256. [CrossRef]
23. Toth, E. Teaching contested university histories through campus tours. *Transform. J. Incl. Scholarsh. Pedagog.* **2017**, *27*, 104–112.
24. Zhao, K.; Ren, J. Thoughts and suggestions on campus landscape construction under the background of campus tourism—Taking Tsinghua University as an example. *J. Anhui Agric. Sci.* **2017**, *45*, 177–180.
25. Yang, J.; Bai, J. Building an ecological campus with green plants—An analysis of the deployment of landscape plants in Wangjiang Campus of Sichuan University. *J. Chin. Urban For.* **2010**, *8*, 25–27.
26. Qi, Q. Discussion on the landscape design of garden-style campus. *North. Hortic.* **2011**, 121–124.

27. Liu, Q. *Research on Green Space Design of Campuses Based on Place-Making Theory*; Harbin Institute of Technology: Harbin, China, 2014.

28. Norberg-Schulz, C. Genius loci: Towards a phenomenology of architecture (1979). *Hist. Cities Issues Urban Conserv.* **2019**, *8*, 31.

29. Press, L. Tomorrow's campus. *Commun. ACM* **1994**, *37*, 13–17. [CrossRef]

30. Connell, J. A study of tourism on university campus sites. *Tour. Manag.* **1996**, *17*, 541–544. [CrossRef]

31. Lu, M.; Yang, P.; Li, D.; Wang, S. The university campus landscape planning concept design:Taking the new campus of Shandong Jianzhu University as an example. *J. Shandong Jianzhu Univ.* **2013**, *28*, 197–203.

32. Hu, X.; Wu, W.; Hong, J.; Wang, Z. Aggregation and decentralization: The new trend of modern comprehensive university campus development. *Archit. J.* **2002**, 18–19.

33. Lynch, K. Reconsidering the image of the city. In *Cities of the Mind*; Springer: Boston, MA, USA, 1984; pp. 151–161.

34. Chen, S.; Chen, K.; Xu, M. Campus landscape and cultural integration—Guilin institute of tourism new campus landscape design idea. *Chin. Agric. Sci. Bull.* **2010**, *26*, 244–248.

35. Pan, L. *The Study in City-Wide Green Space System Planning about Points, Lines and Faces*; Nanjing Forestry University: Nanjing, China, 2006.

36. Cui, X. *Research on the Plant Landscaping of Old University Campus in Chengdu—Take Sichuan University and Southwestern University of Finance and Economics for Example*; Southwest Jiaotong University: Chengdu, China, 2008.

37. SCU. About SCU. Available online: http://en.scu.edu.cn/About_SCU.htm (accessed on 5 May 2019).

38. Wang, D. State in the higher education under the republican reign: Nationalization of Sichuan University (1925—1939). *Soc. Sci. China* **2004**, *3*, 180–193.

39. Bai, J. Investigation and analysis of campus greening of Sichuan University in Chengdu. *J. Sichuan For. Sci. Technol.* **2011**, *32*, 60–69.

40. Qian, T.; Zhao, P.; Zhang, F.; Bao, X. Rainy-season precipitation over the Sichuan basin and adjacent regions in southwestern China. *Mon. Weather Rev.* **2015**, *143*, 383–394. [CrossRef]

41. Guo, X.M.; Chen, J.; Zhao, T.L.; Zheng, X.B. Climate characteristics of haze and its impacting factors from 1961 to 2010 in Sichuan basin. *J. Meteorol. Environ.* **2014**, *30*, 100–107.

42. CHINDIA. Top 10 Most Beautiful Universities in China. Available online: http://www.sohu.com/a/165512564_556622 (accessed on 18 August 2019).

43. Patterson, T.C. Google earth as a (not just) geography education tool. *J. Geogr.* **2007**, *106*, 145–152. [CrossRef]

44. Potere, D. Horizontal positional accuracy of google earth's high-resolution imagery archive. *Sensors* **2008**, *8*, 7973–7981. [CrossRef] [PubMed]

45. Kaimaris, D.; Georgoula, O.; Patias, P.; Stylianidis, E. Comparative analysis on the archaeological content of imagery from Google Earth. *J. Cult. Herit.* **2011**, *12*, 263–269. [CrossRef]

46. Kruse, F.A.; Baugh, W.M.; Perry, S.L. Validation of digitalglobe worldview-3 earth imaging satellite shortwave infrared bands for mineral mapping. *J. Appl. Remote Sens.* **2015**, *9*, 096044. [CrossRef]

47. Hu, Y.; Gao, S.; Janowicz, K.; Yu, B.; Li, W.; Prasad, S. Extracting and understanding urban areas of interest using geotagged photos. *Comput. Environ. Urban Syst.* **2015**, *54*, 240–254. [CrossRef]

48. Vermote, E.; Justice, C.; Claverie, M.; Franch, B. Preliminary analysis of the performance of the Landsat 8/OLI land surface reflectance product. *Remote Sens. Environ.* **2016**, *185*, 46–56. [CrossRef]

49. Rozenstein, O.; Qin, Z.; Derimian, Y.; Karnieli, A. Derivation of land surface temperature for Landsat-8 TIRS using a split window algorithm. *Sensors* **2014**, *14*, 5768–5780. [CrossRef]

50. Leech, N.L.; Onwuegbuzie, A.J. Beyond constant comparison qualitative data analysis: Using nvivo. *Sch. Psychol. Q.* **2011**, *26*, 70. [CrossRef]

51. Bergin, M. Nvivo 8 and consistency in data analysis: Reflecting on the use of a qualitative data analysis program. *Nurse Res.* **2011**, *18*, 6–12. [CrossRef] [PubMed]

52. Hilal, A.H.; Alabri, S.S. Using NVivo for data analysis in qualitative research. *Int. Interdiscip. J. Educ.* **2013**, *2*, 181–186.

53. Yan, H.; Zhenbin, Z.; Yujie, C.; Chen, Z. The visual representation of tourism destinations in the internet era:Multiple constructions and circulations. *Tourism Tribune* **2015**, *30*, 91–101.

54. TIGERcolor. Colorimpact 4—Color Scheme Designer. Available online: http://www.tigercolor.com/ (accessed on 7 May 2019).

55. Ma, B.; Hauer, R.J.; Xu, C. Effects of design proportion and distribution of color in urban and suburban green space planning to visual aesthetics quality. *Forests* **2020**, *11*, 278. [CrossRef]

56. Gao, C.; Cheng, L. Tourism-driven rural spatial restructuring in the metropolitan fringe: An empirical observation. *Land Use Policy* **2020**, *95*, 104609. [CrossRef]

57. Ou, S.C.; Chen, Y.; Liou, K.N.; Cosh, M.; Brutsaert, W. Satellite remote sensing of land surface temperatures: Application of the atmospheric correction method and split-window technique to data of arm-sgp site. *Int. J. Remote Sens.* **2002**, *23*, 5177–5192. [CrossRef]

58. Jimenez-Munoz, J.C.; Cristobal, J.; Sobrino, J.A.; Soria, G.; Ninyerola, M.; Pons, X.; Pons, X. Revision of the single-channel algorithm for land surface temperature retrieval from Landsat thermal-infrared data. *IEEE Trans. Geosci. Remote Sens.* **2008**, *47*, 339–349. [CrossRef]

59. Wan, Z.; Dozier, J. A generalized split-window algorithm for retrieving land-surface temperature from space. *IEEE Trans. Geosci. Remote Sens.* **1996**, *34*, 892–905.

60. Gao, C.; Liu, K.; Cheng, D.; Liu, B. Feature-oriented urban color plan of small towns: Taking a case of Ningshan County, Shaanxi Province. *Urban Stud.* **2016**, *23*, 1–5.

61. Li, M.; Xu, J.; Zhang, X. Spatial-sensitivity analysis for urban color planning: Study of Luoyang City, China. *J. Urban Plan. Dev.* **2017**, *143*, 05016014. [CrossRef]

62. Wu, C. *The Variation and Inheriting of Architectural Environment Color in Tianjin City*; Tianjin University: Tianjin, China, 2011.

63. Bao, X.; Qiu, H. Foreign experience on urban colour construction and the enlightenment of Shanghai. *Shanghai Urban Plan. Rev.* **2018**, 115–118. [CrossRef]

64. Birren, F. *Color Psychology and Color Therapy: A Factual Study of the Influence of Color on Human Life*; Pickle Partners Publishing: Auckland, New Zealand, 2016.

65. Ye, H.; Wang, Y.; Qian, F. A preliminary conception of thermalscape. *Chin. Landsc. Archit.* **2019**, *35*, 72–76.

66. Tong, G.; Lin, J.; Chen, H.; Gu, Z.; Tang, P.; Zhang, J. Characteristic change of urban heat island in Changzhou City based on multi-temporal remote sensing data. *Res. Soil Water Conserv.* **2017**, *24*, 207–212.

67. Yahia, M.W.; Johansson, E. Landscape interventions in improving thermal comfort in the hot dry city of damascus, syria—The example of residential spaces with detached buildings. *Landsc. Urban Plan.* **2014**, *125*, 1–16. [CrossRef]

68. Saksa, K.A.; Ilvento, T.W.; Barton, S.S. Interpretation of sustainable landscapes affects student perception of sustainable landscape features. *Horttechnology* **2012**, *22*, 402–409. [CrossRef]

69. Barton, S.S.; Pineo, R.S.; Carter, L. Implementing sustainable practices on campus through student independent study. *Horttechnology* **2010**, *20*, 495–498. [CrossRef]

70. Ou, C.; Yao, X.; Chen, J. Discussion on campus landscape construction of local colleges under the background of ecological city—As an example of campus landscape construction of local colleges in northwest of Anhui. *Chin. Agric. Ence Bull.* **2009**, *25*, 240–243.

71. Yang, X.; Li, B. The rolls on vegetation of the campus of Qiqihar University. *J. Ence Teach. Coll. Univ.* **2006**, *26*, 74–109.

72. Li, X.; An, X.; Pan, H. Species and landscape application of color-leafed plants in Beijing. *Chin. Landsc. Archit.* **2010**, *26*, 62–68.

73. Wu, W.; Liu, H. Color landscape planning in city environment. *J. Chongqing Jianzhu Univ.* **2006**, *28*, 33–35.

74. Gao, C.; Cheng, D.; Liu, K. Study on color landscape area from the perspective of the fifth facade. *J. Cent. China Norm. Univ. (Nat. Sci)* **2016**, *50*, 770–776.

75. White, S.S. Sustainable campuses and campus planning. *Int. J. Sustain. High. Educ.* **2013**, *4*, 344–356. [CrossRef]

76. Clauson, C.; Mcknight, J. Welcome to campus: Planning for diversity, inclusion, and equity. *Plan. High. Educ.* **2018**, *47*, 39.

77. Gedzelman, S.D.; Austin, S.; Cermak, R.; Stefano, N.; Patridge, S.; Quesenberry, S.; Robisnosn, D.A. Mesoscale aspects of the urban heat island around New York City. *Theor. Appl. Climatol.* **2003**, *75*, 29–42. [CrossRef]

78. Yin, Q. University campus and university spirit shaping—Based on Norberg-Schulz's genius loci. *J. Nanjing Univ. Sci. Technol. (Soc. Sci. Ed.)* **2018**, *31*, 74–77.

79. Sun, J.; Xie, Y. From the presence of power to the presence of aesthetics: The shift of place spirit from the perspective of tourism experience: A case of Mao mausoleum of emperor Wu of Han dynasty. *Hum. Geogr.* **2017**, *32*, 129–136.

80. Ya, L.; Zhang, Y.Y.; Ma, L.D.; Cao, B.J.; Gu, X.P.; Ma, H.Y. A SWOT analysis of the campus tourism development in Shenyang Agricultural University. *J. Shenyang Agric. Univ. (Soc. Sci. Ed.)* **2017**, *19*, 340–345.

81. Ding, H.; Jin, Y.; Yuan, X.; Yang, H. Campus characteristic landscape design based on university tourism. *Art Sci. Technol.* **2020**, *33*, 99–105.

82. Zhang, H.; Meng, X. The inspiration of the landscape construction in the University of Cincinnati. *Chin. Landsc. Archit.* **2012**, *28*, 33–36.

83. Yao, Y.; Li, S. Research about the relationship between landscape architecture and public health. *Garden* **2018**, 80–83. [CrossRef]

84. Bray, P.M. Rethinking urban parks [to rally discussion]. *Places* **2004**, *16*, 78–79.

85. Li, P.; Liu, Y.; Zhang, Q. Research on college campus landscape strategy based on affordance theory—Taking the Xinzhuang Campus of Nanjing Forestry University as an example. *Garden* **2019**, 74–79. [CrossRef]

Assessing Architecture-and-Landscape Integration as a Basis for Evaluating the Impact of Construction Projects on the Cultural Landscape of Tourist Seaside Resorts

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Abstract: The coastline of Western Pomerania has natural and cultural assets that have promoted the development of tourism, but also require additional measures to ensure the traditional features and characteristics are protected. This is to ensure that new developments conform to a more uniform set of spatial structures which are in line with the original culture. Today, seaside resorts are characterized by a rapid increase in development with a clear trend towards non-physiognomic architectural forms which continually expand and encroach on land closer to the coastline. This results in a blurring of the original concepts that characterized the founding seaside resort. This study evaluates 11 development projects (including a range of hotels, luxury residential buildings and hotel suites) built in 2009–2020 in the coastal area of Western Pomerania. An assessment of architecture-and-landscape integration for each development project was made, using four groups of evaluation criteria: aesthetic, socio-cultural, functional and locational factors. The study methodology included a historical and interpretative study (iconology, iconography, historiography) and an examination of architecture-and-landscape integration using a pre-prepared evaluation form. Each criterion was first assessed using both field surveys and desk research (including the analysis of construction plans and developer materials), and then compared with the original, traditional qualities of the town. This study demonstrates that it is possible to clearly identify the potential negative impact of tourism development on the cultural landscape of seaside resorts, and provides recommendations for future shaping, management and conservation of the landscape.

Keywords: architecture-and-landscape integration; cultural landscape; seaside resorts; tourism development

1. Introduction

In view of the progressive landscape degradation occurring in many regions around the world as a result of the intensive development of tourism, it is necessary to continuously monitor this process and develop effective ways to conserve the natural/traditional landscape and promote a sustainable approach to spatial management and tourism. In Western Pomerania, the Baltic Sea coastal area is distinguished by its superior natural and cultural resources. This 185 km long coastal strip is characterized by a wealth of fauna and flora, with a cliffed coast and sandy beaches, which are separated from the mainland by dunes which support unique plants. Furthermore, according to the National Heritage Board of Poland (NID) data, there are 3139 objects entered in the register of immovable historical monuments in the West Pomeranian Province. Many of these features are architectural, related to the development of the recreational and spa facilities in the second half of the nineteenth century, which have shaped the unique cultural landscape of the region. Given the natural and cultural assets of this region, these areas are particularly attractive for tourism-driven development projects, with a significant number of planning decisions being made in order to promote the tourism-related economy but which also often result

in landscape degradation. Therefore, additional consideration for conserving traditional values is required, whilst also supporting the economic development of the region.

The modern seaside tourist resorts of Western Pomerania have developed from former fishing villages or small summer resorts. Before World War II, these localities conformed to regional and national traditional architectures with shared cultural roots. They all contained distinctive and similar features, including a promenade, a pier, blocks of changing rooms, family bathing beaches, a spa park and a band shell; the form and usage of guesthouses and hotels reflected the concept of a resort as an recreational drawing room for the upper class [1,2]. More recently, seaside resorts have experienced a heavy increase in developments which have a more modern architecture with fewer regional features, and which have expanded further toward the coastline creating areas of congested development [1]. Overall, this has resulted in a blurring of the traditional founding ideas that were central to the original seaside resorts.

Therefore, it is imperative to analyze and evaluate the growth of tourism and the impact of the development along the coast on the natural and cultural landscape. Using a range of criteria to assess architecture-and-landscape integration [3] can be a useful tool in evaluating planned and completed development projects related to tourism in the region. The integration of architecture and landscape as part of the rebuilding and conservation of cultural landscape increases local awareness of their relationship with the surrounding environment, which will promote sustainable development and contribute to suitable planning and management of the region.

This study aims to evaluate selected construction projects (completed in recent years in the coastal strip of Western Pomerania) in the context of landscape transformation and the growth of tourism in regional seaside resorts. The analysis included 11 architectural and urban planning projects which were completed in 2009–2020, or which were in the final stages of the investment process (due for completion in 2021). These development projects included hotels, luxury residential buildings and hotel suites, which have been constructed in response to the intensive expansion of tourism in seaside resorts. The research is based on the original concept of architecture-and-landscape integration, developed by the authors of the article. Similar studies with the use of the criteria of integration of architecture and landscape for investment evaluation have not been conducted so far.

2. Background and Context

2.1. Previous Studies on the Impact of Tourism on the Landscape of Seaside Resorts

Tourism is a force that both creates new spaces and transforms existing settlements [4]. The cultural landscape of a given region is determined by a combination of local, national and continental heritage (in this case European) [5]. Unfortunately, many traditional landscapes are vulnerable to transformation as a result of increasing tourism, which affects the environment, economy, society and aesthetics [6]. Destinations that feature assets relating to both the land and the water are particularly sensitive; hence the development of tourism and leisure has a significant impact on the changes in the cultural and natural landscape of the coastline. Additionally, changes in the cultural landscape and development of seaside resorts are enhanced as tourism causes additional broader changes in social and demographic factors [7].

Analyses on the impact of tourism usually consider three factors: environmental, socio-cultural or economic [8]. These studies attempt to take a multi-faceted approach to search for links between tourism, the economy, the environment and the local community, in order to understand the key relationships between these factors that attract tourists [9–15]. According to Urry [16], tourists look for unique, unusual and untamed places or landscapes. Cultural heritage, architecture, vegetation and sensory experiences (i.e., flavors, scents and sounds) are also identified as important for tourists [17]. The uniqueness and authenticity of a place is also an attractive asset [18]. However, the increased interest in such places leads to changes in their character. *"There is a characteristic transformation of places where the local and the global are linked together through tourism"* [19] (p. 384). There is a need to provide

a large number of tourists with lodging, and this stimulates the growth of hotel and luxury residential developments. Although the growth of condominium-style accommodation may initially be the main factor to attract a large number of tourists to a town, it may prevent its successful "rejuvenation" in the future [20]. In some places, there is the effect of a second-home landscape, which has a physical, empirical and cultural impact [21].

In seaside landscapes, which are particularly vulnerable to the adverse effects of tourism, landscape deterioration is often caused by urbanization and development which degrades natural and cultural resources [22,23]. In towns where tourism takes on a mass character, a progressive westernization or "McDonaldization" of the landscape is observed [24], where non-physiognomic forms of building emerge [25]. Development is often characterized by construction of large hotel buildings and suites for rent, whose size and form are often dramatically different from local construction traditions and disturbs the cultural continuity in the town [1]. Counterintuitively, this could lead to the destruction of the traditional landscapes that attracted tourists in the first place [26]. The expansion and intensification of land development also often destroys unique natural assets. For example, the native vegetation of coastal areas is reduced and replaced by agricultural land and residential, recreational, commercial or industrial buildings [27]. These changes affect not only how the tourists perceive the town, but also how the local community understands and experiences the landscape [28]. This is because the tourist landscapes exist at the border of history and politics, where the social relations and the perception of culture meet [29].

The solution for this could be to expand tourism through use of sustainable development and management practices, which take into account both the needs of tourists and local residents whilst facilitating future development opportunities in these areas [30,31]. Sustainable tourism seeks to ensure a suitable balance between the economic, environmental and social aspects of tourism development in order to safeguard its long-term sustainability [32]. In line with this, long-term monitoring and evaluation of current and ongoing changes occurring as a result of expanding tourism is essential, including analysis of both the conditions set for already issued planning permissions and the number of planning permissions accepted.

The analysis of the cultural landscape appears to be a useful tool for evaluating the multi-faceted impact of tourism on the development of towns, showing the societal approach to spatial management. Developing appropriate methods by which to assess the landscape is critical to ensure proper conservation and shaping targets are set. These targets include suitable activities that could create conditions for sustainable development and spatial order [3], and which enable tourism to develop whilst protecting the natural/traditional assets that attract tourists.

2.2. Evaluation of the Landscape in Existing Studies

The methods previously used to evaluate the landscape to date can be divided into methods that evaluate individual natural features of the environment (to determine natural values), methods that evaluate aesthetic value of the landscape associated with its composition, and methods that analyze the usefulness of the landscape for a specific purpose (e.g., recreation, spatial planning and sozology). Previous evaluations of cultural landscapes use methods based on subjective evaluation of the observer's visual experience (spatial order), such as the Scenic Beauty Estimation (SBE) method, which is based on the intensity of observer's experience [33]. Alternatively, the Visual Resource Management (VRM) system [34] is used to find the level of contrast between the conducted investment and the existing landscape, and in the evaluation of its visual resources while the Experience Curve Method is a graphical record of observer's emotions related to the aesthetics of surroundings occurring over time [35]. Landscape visual quality, which is defined as the aesthetical perfection of the landscape [36], is the primary component of the natural and cultural environment, which in turn has an influence on the overall quality of the tourism/leisure experience [37]. Therefore, the Visual Landscape Quality Assessment is appropriately used

in analyses conducted to study various tourist regions. These assessments are based on expert opinions, user perception or a combination of both expert and user opinion [38]. The participation of users in visual landscape quality analyses increases the objectivity of results [39] and contributes to the validity of the study [40,41].

The selection of appropriate evaluation criteria is essential in such studies. Keleş E., Atik D. and Bayrak G. [42] stated that visual quality assessment is based on 14 parameters (coherence, imageability, historicity, sense of place, visual impressiveness, stewardship, complexity, legibility, originality, accessibility, naturalness, security, inconsistency and city identity), which they used to evaluate places with significant historical values. Alternatively, Myga-Piątek U. [43] proposed that cultural landscape should be evaluated using the following criteria: ancientness, historicity, aesthetic value, genuine substance, harmony, uniqueness, content, emotional and practical value. In another study, B. Żarska [44] proposed the best method to assess the cultural landscape should use criteria derived from how monuments are preserved. This study suggested that an evaluation of the cultural features of local and supra-local importance should be made, such as monuments harmonizing with their surroundings and the existence of valuable cultural elements.

A conservation-oriented evaluation of cultural landscape provides a basis for the preservation of historical architectural and landscape ensembles but appears to be somewhat less useful in analyzing new projects and the conditions of towns where the growth of tourism is not based mainly on historical assets. This is mainly due to the absence of studies that assess the links between tourism and landscape [28]. Therefore, the different aspects of the landscape (including tourism) require individually appropriate methods for planning, managing and evaluation. An alternative method is the Seascape Character Assessment (SCA) which can evaluate, characterize, map and describe the character of the coastal landscape [45]. There is a need to develop new cultural landscape evaluation methods that are more appropriate for areas with many construction projects already under construction, which take into account future seaside development plans and strategies, and which are relevant to the specific nature of the study region.

3. Materials and Methods

The evaluation of the selected development projects in this study was based on the authors' definition of architecture-and-landscape integration and used a multi-faceted series of criteria. The integration of architecture and landscape demonstrates maturity of a town/region in sustainably managing space, where informed understanding of cultural and natural landscape conservation in spatial planning and management should be an important element of planning policy. The integration of architecture and landscape is understood as a result of a synergy of factors influencing both the spatial and social factors, which consequently results in the formation of a basic and non-standard enclave, which sustains coherent and multi-functional social and cultural relationships. The effects of synergistic actions are mutually strengthening and complementary, and therefore more important than the sum of the individual factors considered [2].

In order to integrate architecture and landscape in the designing and planning of construction projects, proper consideration of aesthetic, socio-cultural, functional and location-specific factors must be made. In addition, there is a need to conduct specifically designed studies, which take into account the reference to the original (founding) character of a town (Figure 1).

The first step was to select the construction projects to be evaluated (step 1, Figure 1) 11 investments (hotels, luxury residential buildings and hotel suites) completed in 2009–2020 or in the final phase of the investment process (completion planned for 2021) were selected for the analysis. The location factor was important in selecting the investment—all of them are located on the coast in the region of Western Pomerania, in touristic seaside towns, near the beach and the sea.

To ensure a full evaluation was made, it was important to carry out interpretative and historical studies (step 2, Figure 1) to identify the characteristics of a seaside resort in its

original, founding form, the uniqueness and identity of the locality and its leisure- and tourism-related functionality. This was important to establish a reference point for the evaluation of current construction projects. Interpretive and historical desk research included investigating the iconology and iconography of the region, including interpretations of graphic representations (e.g., historical postcards, photographs, maps) and historiography, which deals with archival research (e.g., archive documents, journals, books). These source materials were obtained primarily from the municipal offices, the Regional Office for the Protection of Monuments, National Digital Archive as well as other archived materials.
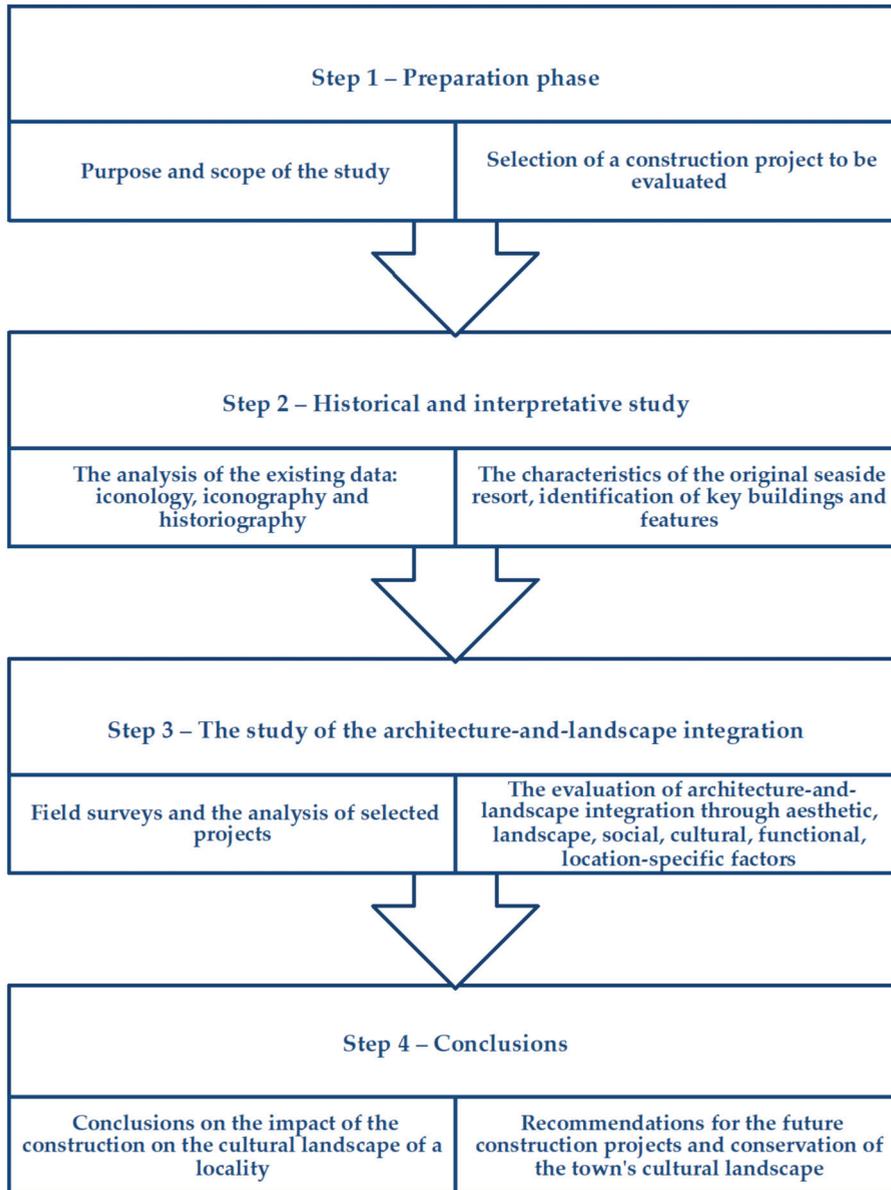
Figure 1. Study methodology diagram. Source: Authors' work.

The third step was examining the degree of landscape-and-architecture integration using a pre-prepared form, which assigned a score for different criteria relating to four groups of factors (aesthetic, socio-cultural, functional and locational). The individual criteria were evaluated using both field surveys and desk research (e.g., analysis of construction plans and source information available in the press or on the internet). This analysis covered town-planning, landscape, aesthetic, cultural, social and natural aspects, providing a holistic take on the assessment of architecture-and-landscape integration. During the field surveys, data was collected on a building sheet form. Particular attention was taken to assess the coastal strip which includes the Maritime Office, dunes, protected cliffs and national parks, which are subject to other forms of landscape protection and which frequently implement local spatial development plans (land use plans). However, detailed analysis of coastal cliff erosion caused by the increased number and congestion of planned construction projects in the close vicinity of the seacoast has not been made.

Based on the evaluation of architecture-and-landscape integration, the fourth methodological step had two objectives. Firstly, it identified the characteristics of the architectural features or town-planning establishments, which were being evaluated. Secondly, it compared those characteristics with those identified as central to the original, founding concept of the seaside resort. Based on this information, the final step was to draw conclusions on the degree of architecture-and-landscape integration implemented in current construction projects and to provide recommendations for future development, management and conservation of the cultural landscape.

The research method developed here is universally applicable and can therefore be used to evaluate the degree of architecture-and-landscape integration in selected architectural and urban-planning projects in seaside resorts, located in different global locations. However, the specific details of a locality and its characteristics must always be determined based on relevant historic and interpretative studies.

4. Results

4.1. Historical and Interpretative Study

Tourist destinations located on the Baltic coast were generally developed from fishing settlements or small port towns at the end of the 19th century. However, in Western Pomerania, most of the resorts developed later in the interwar period (1918–1939), evolving from existing settlements and localities into so-called summer resorts, health resorts or resorts (various forms and scales of holiday resorts). The English models, which were initially used to shape coastal towns, have since been replaced with the original style of buildings [46] and the Polish expression of a resort with its more unique architectural and urban characteristics [1]. In the first two decades of the 20th century, Pomerania's seaside resorts began to stand out with a nearly-uniform, clearly defined spatial and functional layout, in line with the architectural style of private residences and public buildings. The specific character and nature of a resort was shaped by the upper-class style of recreation. The resulting need to experience luxury, opulent aesthetics and a desire to develop intellectually in a variety of forms, has influenced the way in which the town was shaped, matched by the exquisite lifestyle and expectations of the guests (the subject of the evolution of resorts and the search for their new cultural identity has been discussed in greater detail both in the previous article by the authors "The stages of the cultural landscape transformation of seaside resorts in Poland against the background of the evolving nature of tourism" published in this journal and in many previous studies [1,2,46]).

Archived source material was obtained from the Regional Office for the Protection of Monuments, National Digital Archive and other online archives. Analysis of these references allowed the identification of key elements and characteristics of the towns' development and composition, including nodal enclosed structures, multi-threaded architectural features or how the use of public space has changed over time as the mature form of a seaside resort emerged (Table 1).

Table 1. The key compositional elements and characteristics of a mature seaside resort. Source: Authors' work.

Elements of the Resort	Buildings and Features	Style and Functional Characteristics	Importance in the Landscape
Linear Elements	Promenade	Formal structure of the space, numerous small architectural elements (e.g., fountains) and plant features (flower beds), with an absence of tall trees which would block the view of the sea	Promenade runs parallel to the shoreline, linking other elements of the town, creating a scenic sequence (linear view of the sea and dunes), strong visual links with the sea
	Pier	This element functions both as a dock/harbor and a promenade, with light, wooden buildings, usually one-storied with sculpted roofs The Pier includes the following elements: the dock/harbor, a gallery, a restaurant, changing rooms	Pier is perpendicular to the coastline, extending from the promenade, with a view of the buildings along the coastline, forming the town's distinctive "sea gateway"/"welcome gate"
Nodal Elements	Spa House	Has distinctive characteristics for the resort architecture; forming an elegant architecture as part of a grandiose building	The Spa house is most often an enclosed building, in the immediate vicinity of the dune strip
	Theatre/Bandshell	Elegant architecture, where the buildings satisfy cultural needs, contributing to its functional range	Objects that complement the composition and function
	Beach Bathrooms	Distinctive U-shaped wooden structure situated adjacent to the sea, with a consistent form along the coast; a provisional character	Characteristic feature of the beach, a landmark
	Dock/Harbor Station	Sometimes connected to a pier (at the end of the pier), it supplemented transport to the coast	Panoramic sea view
Surface Features	Beach	Divided into bathing water for women, men and families. Additional features include wooden bathing buildings (bathrooms), piers, marinas and decks	Alternating and temporary character (lightweight structures), absence of a fixed boundary, numerous cultural elements, varied availability
	Spa Park	Landscaped or geometric style, with important functional significance—the park accommodates buildings important for clients (spa house, water drinking rooms) with numerous small architectural elements (garden houses, kiosks, fountains), as well as rich tree stands including exotic species	The composition of the park is connected to the town by the layout of the alleys and streets, as is a carefully composed and integrated part of the seaside quarter
Point elements	Villas, Guest Houses and Hotels	Buildings with skeleton-like forms and luxurious finishes, including balconies, verandas, oriel windows, triangular gables ("Swiss style"—the late 19th century and Norwegian until 1910)	Harmony and consistency in the landscape

The model composition elements of seaside resorts on the southern Baltic Sea includes four groups: (1) linear elements modelled on English resorts established earlier: a promenade and pier (Figure 2a,b); (2) nodal elements: a spa house, a water drinking rooms, a casino, a bandshell and a theatre, beach bathrooms, a dock/harbor (Figure 3a–d); (3) surface elements: beach, spa park (Figure 4a,b); and (4) point elements: villas, guest houses, hotels (Figure 5a,b). The public spaces played an important role in the town's vibrancy, representing a kind of an elitist drawing room. Along a seaside promenade, where social interaction flourished and concentrated, the space was more functionally arranged and composed. The promenade connected the important features for resort life (a spa resort, a spa garden, beach bathrooms, pier, etc.) and provided a linear view overlooking the sea, due to the occasional point-wise development in the dune strip. The resort's architecture was characterized by a rich finish and was functionally adapted to the expectations of the upper class. Villas, guest houses and hotels were commonly designed in the "Swiss style," which is synonymous with a wooden summer-resort (late 19th century). Typically,

they were two- or three-story wooden buildings with bay windows, sophisticated towers, balconies and verandas, which were designed to ensure openness and integration with the landscape. The defining characteristics of public space and architecture were logic, order, harmony, coherence, elitism, elegance and strong water-land links, but with limited impact on the landscape.

Figure 2. Linear elements: A bird's-eye view of the promenade in Świnoujście: (**a**) A postcard from the beginning of the 20th century; (**b**) Photo from 2004. Source: Scans of archival postcards—Private collection of the author (**a**), Cezary Skórka (**b**).
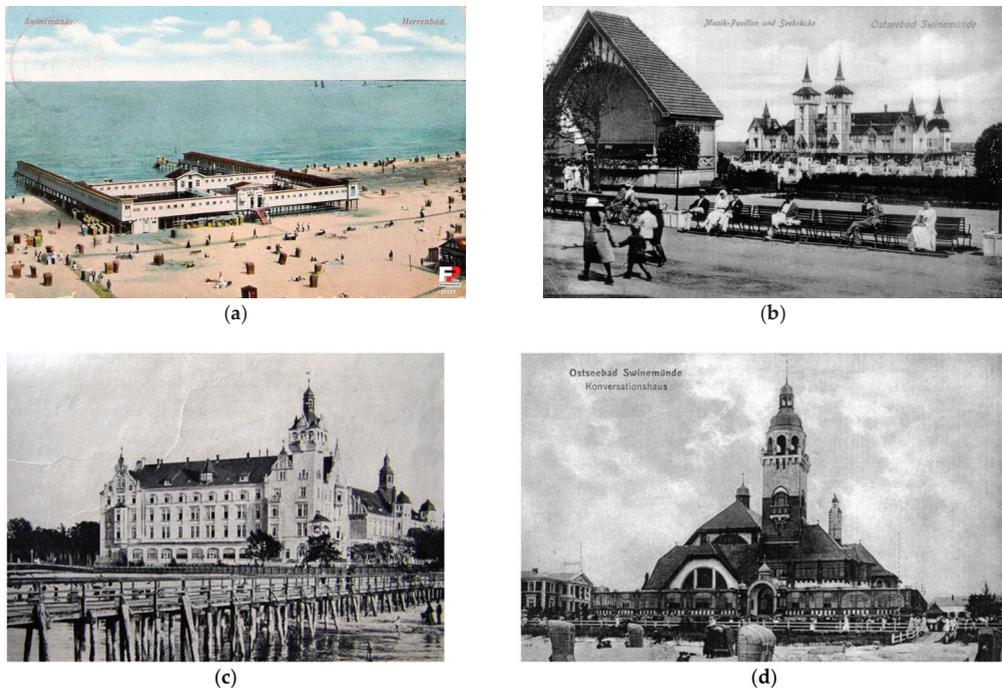
Figure 3. Nodal elements: (**a**) Swimming area in Świnoujście; (**b**) Concert shell and beach palace (**c**) Spa house in Kołobrzeg; (**d**) Spa house in Świnoujście. Source: Fotopolska.pl (**a**), Scans of archival postcards—Private collections of the author (**b**,**d**), Motzke P.; Deutchlands Stadtebau. Kolberg, Berlin-Halensee: "Dari" Verlag, 1921 (**c**).

Figure 4. Surface elements: (**a**) Kołobrzeg Spa Park—the beginning of the 20th century, (**b**) Międzyzdroje Spa Park—2018. Source: Motzke P.; *Deutschlands Stadtebau*. Kolberg, Berlin-Halensee: "Dari" Verlag, 1921 (**a**), Author's photo (**b**).

Figure 5. Point elements: Historic guesthouse buildings—facilities after adaptation and renovation: (**a**) guesthouse at Pomorska Street in Międzyzdroje), (**b**) guesthouse at Promenada in Międzyzdroje. Source: Author's photo (**a**,**b**).

4.2. Examination of the Architecture-and-Landscape Integration

Analysis of 11 new construction projects located in the Western Pomeranian seaside showed a relatively poor integration of architecture and landscape. The study was conducted for each construction project using a pre-prepared evaluation form (Appendix A, Figures A1–A11), which scores each project based on 20 criteria, grouped by four key factors: aesthetic, socio-cultural, functional and locational-natural. The maximum score that could be awarded from all criteria was 60 (including the maximum score in each factor group, 15) (Table 2).

The lowest scoring criteria for all projects occurred in the following groups: socio-cultural factors (average score 5.27) and aesthetic factors (average score 6.34). These two groups include criteria that relate directly to the preservation of cultural continuity, therefore low scores in these groups of criteria show that a discord in cultural continuity where the original character of a location was not properly protected. Although the stylistic characteristics of the architecture did generally exhibit signs of consistency with historical buildings (e.g., scale, details, town-planning arrangement), the construction projects being analyzed were also characterized by buildings with a height, volume and footprint area significantly different from those of traditional, historical resort architecture (Figure 6a–c).

Table 2. Summary of the scores for each construction project analysed using the building evaluation forms (Appendix A). Source: Authors' work.

Construction Project	Aesthetic Factors	Socio-Cultural Factors	Functional (Practical) Factors	Location-Related and Natural Factors	Total Points
Baltic Palace Hotel	10	8	7	5	30
Baltic Park Molo	8	11	11	8	38
Baltic Park Plaża	3	6	6	5	20
Baltic Park Promenada	12	10	9	10	44
Balticus Apartments	3	5	6	5	19
Hotel Gołębiewski	3	4	9	4	20
Marine Hotel	11	8	8	8	35
Rogowo Pearl	7	6	7	9	27
Porta Mare Wellness & SPA	4	3	6	7	20
Shellter Hotel & Apartments	5	7	7	7	26
Wave Apartments	7	5	5	7	24
Average score	**6.34**	**5.27**	**7.36**	**6.82**	**27.54**

On the other hand, the functional factor criteria (average score 7.36) and the locational-natural factor criteria (average score 6.82) were assessed relatively better, as the resort's function has continued to adhere to the original tradition of the region (resort-forming functions). This is because functional factor criteria are often intrinsically linked with the economic importance, accessibility and usability of the project for various functions. Projects, which scored lower for this group of factors, were mainly as a result of the construction of "dead" luxury residential buildings, whose function only seemed to match the idea of a resort, whilst their rooms remained vacant for the most of the year.

The use of seaside locations and the impact of a project on vegetation and a littoral zone ecology was also evaluated as part of the locational and natural factors. The vast majority of buildings were positively identified as using land in the vicinity of the beach during construction planning. The buildings assessed were typically arranged and shaped to capitalize on the seaside location, where the capacity of each building was designed to allow for a view of the sea from the suites and the building's proximity provided convenient access to the beach. The relationship between how the building was integrated into the waterfront and the surroundings space was evaluated less well. Over time, buildings are being constructed closer and closer to the beach, often at the expense of naturally valuable dunes and causing removal of tree stands, which disturbs the soil cohesion and necessitates installation of invasive geoengineering measures (Figure 7a,b). Another disadvantage is the construction of large complexes of buildings, which form isolated enclaves and cause the buildings to appear to merge along the coast. This strongly contrasts to traditional resort buildings, whose sizes were much smaller and fitted more harmoniously into the surrounding town, featuring lower buildings with smaller internal volume) and a greater distance between the buildings.

The highest score was awarded to the project called Baltic Park Promenada in Świnou-jście, for which the sum of points was 44, and the average score for each group of criteria was 11. The construction is a complex of five luxury residential buildings, and was one of the oldest of the projects analyzed. The buildings' architecture, despite resembling a Mediterranean seaside resort, was built prior to the extension and lengthening of the promenade in the eastern direction. The buildings in this project are distinguished by their traditional size/scale and point-wise dispersed layout, which has clearly been inspired by the structure of traditional guest houses (Figure 8a,b).

Figure 6. Międzyzdroje. Contrast of old and new buildings: changing the scale of buildings and the way of rest (**a–c**). Source: Author's photo (**a–c**).

Figure 7. New buildings closer to the beach: (**a**) Dziwnówek. Porta Mare—extension and superstructure of the center from 1976–1983. (**b**) Dziwnów. Gardenia Seaside Apartments. Source: Author's photo (**a** [1], **b**).

Figure 8. Świnoujście, Baltic Park Promenada (**a,b**). Source: Author's photo (**a,b**).

On the other hand, the Balticus Apartments in Międzyzdroje, which was the lowest scoring project, drastically diverged from the cultural continuity of the promenade, degrading the traditional landscape and depreciating the spatial order (Figure 9a,b). This project is a perfect example of very poor architecture-and-landscape integration, in virtually all of the examined groups of factors.

(**a**)   (**b**)

Figure 9. Międzyzdroje, Balticus Apartments—an example of monstrous buildings in the central part of the resort (**a**,**b**). Source: Author's photo (**a**,**b**).

5. Discussion

A number of authors have suggested that resort development goes through a predictable sequence of stages: moving from a discovery stage to full tourism development [47–53]. Among them, Butler's Tourism Area Life Cycle [50], a general model of the evolution of a hypothetical tourist area, is one of the best-known and most cited concepts [54,55]. The few models that are strictly related to the coast and coastal towns include: Liszewski's phases of development of tourist space [25], Butowski's model of development of maritime tourism areas for sailing tourism [56,57], Gormsen's model of tourism development specific to coastal resort [58] and Smith's beach resort model [59]. It should be noted, however, that the developed models of tourism development are mostly general in nature and relate to aspects other than architecture and the impact of tourism development on the character and features of buildings [1]. Against this background, the model of Bal and Czalczynska [1] seems to be unique, as it refers to the specificity of seaside tourism architecture, combining two perspectives: the history of architecture and urban planning, and the development of tourism. The model consists of four basic stages of cultural landscape transformations of seaside resorts in Poland: Stage I: Formation—Elite resort (early 19th century–20th century); Stage II: Regionalism—National resort (1918–1939); Stage III: Socialization—A resort for working masses (1945–1989); Stage IV: Pluralism—Egalitarian resort (since 1989). Further development (Stage V) is possible in two directions: Unified pluralism—Network tourist destination or Secondary regionalization—Sustainable Resort [1].

Unfortunately, the analysis of contemporary tourism architecture on the coast shows that tourist destinations are developing rather towards unification and loss of regional features. The results of this study align with the previous observations, confirming that the increase of mass commercial tourism has a strong impact on the traditional landscape of coastlines and often causes severe spatial changes which destroy the cultural identity of a town. Also, along the Polish coast, the issues associated with "second-homes" [20,21] and the decreasing consideration for the tradition and uniqueness of a town [18] is becoming increasingly noticeable. Over time, this gradually leads to the destruction of landscape assets that originally attracted tourists [26]. Tourism has become a large-scale phenomenon that results in changes across all aspects of the landscape [60]. The tourism landscape can

be a sensitive tool for analyzing geographical changes, although what drives these changes remains largely unknown [28]. Changes in the landscape, although inevitable [6], should be kept to a minimum in order to protect the uniqueness of traditional spaces. In general, the specific impact of tourism on seaside resorts has not been taken into account by commonly used methods for evaluating the cultural landscape. Furthermore, the development of tourism creates a conflict between economic growth and the preservation of landscape assets [61], which makes it difficult to draw up suitable evaluation criteria.

The method outlined in this study is a response to the growing problem of spatial disintegration, which is connected with the introduction of foreign elements within it that are functionally and morphologically unsuited to their surroundings, and awaken mostly negative feelings [62]. Therefore, the search for methods of landscape integration seems justified. In landscape architecture, the concept of integration refers to activities of landscape conservation, restoration of degraded landscapes [63] as well as merging the historic urban landscapes with the contemporary built-up areas [64]. In design practice, the integration of architecture and landscape is most often implemented in the design of buildings with organic, amorphous shapes and using trendy ecological and pro-environmental solutions. The developed method evaluates construction projects on the basis of criteria, which assess architecture-and-landscape integration, taking into account the tradition of the site and the uniqueness of the original seaside resort. This facilitates a critical evaluation of recent architectural and town-planning developments as well as the current trends in planning and designing of buildings in the seaside area. At the same time, social aspects, including the impact of projects on the economic development of a town, are also taken into account. The multi-faceted nature of this method is important, as management of tourism is a highly synergistic endeavor [65]. The developed research procedure can be used to evaluate investments in seaside towns located in various regions of the world. However, it should always be preceded by a locally appropriate historical analysis in order to define the features of the original resort. Working in a team and precisely defining the assessment criteria can minimize the subjectivity of the assessment.

6. Conclusions

Coastal areas are an extremely sensitive part of an uncontrolled town-planning experiment, which leads to a rapid loss of the original (founding) features of the area [66]. The intensive growth of tourism causes the original concept of a seaside resort to become distorted, where the unique characteristics of seaside towns that was once their assets are destroyed or devalued. This reduces the importance of public spaces, which were originally a key part of resort life. Traditional hotels and guest houses are increasingly being replaced by large luxury residential complexes with new buildings which do not conform to the local scale and follow a non-physiognomic design which become dominant in seaside locations. As a result, modern seaside resorts of Western Pomerania are now characterized by aesthetic chaos, with a functional and spatial disarrangement and poor spatial order.

The analysis undertaken in this study helped identify the specific negative impacts of tourism development on the cultural landscape of seaside resorts, including:

- the construction of "inactive" luxury residential buildings that remain vacant for most of the year and are a dead urban tissue;
- island-like buildings—large, self-sufficient buildings, which form individual islands which are isolated from the surrounding space, contrasting with the traditional development of resorts which are also present in the seaside landscape;
- linear, band-like, congested development of the waterfront—it is increasingly evident that there is a fusion of coastal towns as they have expanded laterally along the coast and have begun to merge, with an increasingly uniform structure, as in the western countries;
- An imperfect, deficient planning process is lacking the input of experts to with regards to the planning and implementation of development projects, where local authorities

do not require consideration of results from landscape analyses and studies, social discussions, or more informed shaping of holiday areas;

- The lack of an appropriate tool for the evaluation of planned construction projects in terms of conservation and protection of seaside resorts reflects the economically driven and short-sighted policies of local governments, which are considered more important than protecting their landscape assets. This has resulted in the completion of developments that have distorted the cultural continuity and devalued the landscape.

The problems identified in this study require urgent action in seaside resorts to protect their cultural landscape, as it is a key asset for its tourism industry. In the long term, the squandering of the uniqueness of the former resort can result in losses not only of cultural importance, but also have a damaging impact on the local economy due to the reduction in the attractiveness of the location as a tourist destination. Therefore, it appears imperative:

- to conduct analyses and studies on landscape evaluation in localities which still resemble the original features of the traditional resorts; these assessments would serve to draw up guidelines for updating local development strategy documents (master plans) and local spatial development plans;
- a town or locality with a similar nature to that of an original resort should be given a special status/designation, to ensure that it is properly governed by regulations for the establishing, management and planning as a cultural park, with suitable conservation plans which will enable these valuable landscapes to be protected;
- create a system/tool for designers and local governments to form of a code of best practice, to ensure proper conduct during the planning process and which takes into account the synergies between the architecture and landscape of seaside resorts.

Although this study does not completely explore the impact of tourism development on landscape of seaside resorts, the methodology described here can provide a useful tool to look critically at development projects recently completed along the coast and aid projection of future trends. It is desirable to pursue further studies which aim to draw up guidelines for local development plans that will reconcile the growth of tourism in a town, with the conservation of the resort's original values at heart. The criteria of architecture-and-landscape integration can be an important reference point, allowing for a comprehensive and multi-faceted approach to planning and designing.

Appendix A

Figures A1–A11: construction project analysis form—building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information		
Baltic Palace Hotel	Date 1: September 2019	Date 2: September 2020	
Location	Description		
Pobierowo	A boutique hotel, 4-cond. building with a SPA zone. Architects: Mateusz Tański and Piotr Michalewicz		Source: Author's work
Year(s) of construction	Study conditions	Total points	Average score
2010–2015	Sunny weather, quite warm	30	1.58

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture			x		
2. Colours and materials – the degree to which the project matches with the surrounding architecture		x			
3. Form – the degree to which the building matches with the surrounding architecture			x		Shape of the building inspired by modernist architecture, unusual, asymmetrical silhouette
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort			x		
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced				x	The building is distinguished by the form and shaping of the facade

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project			x		
2. Cultural importance – the importance of the project in continuing the resort's founding ideas			x		
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity		x			
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition			x		

Functional factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort			x		
2. Local plan – the level of provisions implemented as part of the local development plan		x			
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development			x		
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised		x			

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected		x			
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented					Not applicable
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected/linked in space		x			
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning			x		

¹ The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A1. Baltic Palace Hotel in Pobierowo. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information				
Baltic Park Molo	Date 1: August 2019	Date 2: August 2020			
Location	Description				
Świnoujście	A complex of four buildings (including Radisson Blu and Hilton Świnoujście Resort & Spa) with public space located between them.				
					Source: swinoujskie.info
Year(s) of construction	Study conditions		Total points		Average score
2013-2020	Sunny weather, quite warm		38		1,8

Aesthetic factors

Criteria	Score for the construction project[1]				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture		x			
2. Colours and materials – the degree to which the project matches with the surrounding architecture				x	Natural colors of the earth and sea flora
3. Form – the degree to which the building matches with the surrounding architecture			x		
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort		x			
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced		x			High-quality public space

Socio-cultural factors

Criteria	Ocena inwestycji				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project				x	
2. Cultural importance – the importance of the project in continuing the resort's founding ideas			x		
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity			x		
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition				x	Project selected in an architectural competition organized by the investor and SARP

Functional factors

Criteria	Ocena inwestycji				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort				x	
2. Local plan – the level of provisions implemented as part of the local development plan			x		Hotels play the role of dominants and subdominants in the landscape
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development				x	
4. Green solutions – the degree to which green solutions are taken into account			x		Hilton Świnoujście Resort & Spa - facility built in accordance with the LEED ecological certification
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised		x			

Location-related and natural factors

Criteria	Ocena inwestycji				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected	x				
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented		x			
3. Climate change – the degree to which climate change mitigation solutions are considered			x		
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected/linked in space			x		
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning				x	

[1] The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A2. Baltic Park Molo in Świnoujście. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information		
Baltic Park Plaża	Date 1: August 2018	Date 2: : August 2019	
Location	Description		
Świnoujście	Complex of 7 apartment buildings, 4-storey, located 30 m from the beach. Developer: Kristensen Group		Source: Author's work
Year(s) of construction	Study conditions	Total points	Average score
2010-2015	Sunny weather, warm	20	1.0

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture		x			
2. Colours and materials – the degree to which the project matches with the surrounding architecture		x			
3. Form – the degree to which the building matches with the surrounding architecture		x			
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort	x				
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced	x				The building complex resembles a typical housing estate

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project				x	
2. Cultural importance – the importance of the project in continuing the resort's founding ideas	x				
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity		x			
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition		x			

Functional factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort	x				
2. Local plan – the level of provisions implemented as part of the local development plan			x		
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development		x			
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised			x		

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected	x				Location in a dune - negative impact on plant cover
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented	x				
3. Climate change – the degree to which climate change mitigation solutions are considered	x				
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected / linked in space			x		
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning				x	Buildings located on the dune between the promenade and the beach

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¹ The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A3. Baltic Park Plaża in Świnoujście. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information		
Baltic Park Promenada	Date 1: August 2019	Date 2: August 2020	
Location	Description		
Świnoujście	Kompleks 5 budynków apartamentowych, 4-kond., lokalizacja przy promenadzie Deweloper: Kristensen Group		Source: StaszekM, polskaorg.pl
Year(s) of construction	Study conditions	**Total points**	**Average score**
2007 – 2009	słoneczna pogoda, ciepło	44	2,2

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture				x	
2. Colours and materials – the degree to which the project matches with the surrounding architecture				x	
3. Form – the degree to which the building matches with the surrounding architecture				x	The form of the buildings resembles former guesthouses
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort				x	Features of the architecture of seaside guesthouses
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced			x		

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project				x	
2. Cultural importance – the importance of the project in continuing the resort's founding ideas			x		
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity			x		
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition			x		

Functional factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort			x		
2. Local plan – the level of provisions implemented as part of the local development plan			x		
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development			x		
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised			x		

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected			x		
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented			x		
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected / linked in space				x	Buildings well-integrated into the surroundings
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning				x	Location on the promenade

[1] The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A4. Baltic Park Promenada in Świnoujście. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information				
Balticus Apartments	Date 1: –		Date 2: September 2020		
Location	Description				
Międzyzdroje	Multi-family residential building with 12 floors, retail units and a garage in the building substructure. Located at the promenade. The roof features an open-air swimming pool, sauna and an observation deck.				Source: najlepszeapartamenty.pl
Year(s) of construction	Study conditions		Total points	Average score	
2016–2019	Sunny weather, quite warm		**19**	**0.95**	

Aesthetic factors

Criteria	Score for the construction project[1]				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture	x				
2. Colours and materials – the degree to which the project matches with the surrounding architecture			x		
3. Form – the degree to which the building matches with the surrounding architecture	x				
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort	x				
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced		x			

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project			x		
2. Cultural importance – the importance of the project in continuing the resort's founding ideas		x			
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity	x				
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition		x			

Functional factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort		x			
2. Local plan – the level of provisions implemented as part of the local development plan		x			
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development			x		
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised		x			

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected		x			
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented		x			
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected/ linked in space	x				
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning			x		

[1] The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A5. Balticus Apartments in Międzyzdroje. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information		
Gołębiewski Hotel	Date 1: May 2018	Date 2: May 2019	
Location	Description		
Pobierowo	11-storey hotel facility, 25m high, conference rooms, sports fields, swimming pools and SPA, a year-round ice rink, two cinemas. Plot area 30 ha.		Source: kamienskie.info
Year(s) of construction	Study conditions	Total points	Average score
2017 – 2021	Sunny weather, quite warm	20	1.0

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture	x				
2. Colours and materials – the degree to which the project matches with the surrounding architecture		x			
3. Form – the degree to which the building matches with the surrounding architecture		x			
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort	x				The form and scale of the facility differ significantly from the old resort architecture
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced		x			

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project		x			The building is controversial
2. Cultural importance – the importance of the project in continuing the resort's founding ideas		x			
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity	x				
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project			x		
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition	x				

Functional factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort		x			
2. Local plan – the level of provisions implemented as part of the local development plan				x	
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development			x		
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised			x		

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected	x				Strong negative impact on nature (massive logging)
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented	x				
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected/ linked in space	x				
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning				x	

¹ The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project

Figure A6. Gołębiewski Hotel in Pobierowo. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information			
Marine Hotel	Date 1: September 2019	Date 2: September 2020		
Location	Description			
Kołobrzeg	Hotel in a condo system, 231 residential units, 3 restaurants, a cafe, a lobby bar, a night club, a banquet hall, a business center, a SPA & Wellness Center and a playroom and garden for children, located near the beach and promenade.			Source: Author's work
Year(s) of construction	Study conditions		Total points	Average score
2010	słoneczna pogoda, dość ciepło		35	1.75

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture			x		
2. Colours and materials – the degree to which the project matches with the surrounding architecture				x	
3. Form – the degree to which the building matches with the surrounding architecture				x	The V-shaped building is to guarantee a sea view from each apartment
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort		x			
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced			x		

Czynniki społeczno-kulturowe

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project				x	
2. Cultural importance – the importance of the project in continuing the resort's founding ideas		x			
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity		x			
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition			x		

Czynniki funkcjonalne

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort			x		
2. Local plan – the level of provisions implemented as part of the local development plan		x			
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development			x		
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised			x		

Czynniki lokalizacyjno-przyrodnicze

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected		x			
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented		x			
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected / linked in space			x		
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning				x	Located 20 meters from the sea

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[1] The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A7. Marine Hotel in Kołobrzeg. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information			
Rogowo Pearl	Date 1: –	Date 2: September 2020		
Location	Description			
Rogowo	Five apartment buildings located close to the lake and the sea. Extensive recreation function. Relaxation zone with swimming pools, playgrounds and yacht marina, pier and water sports center. Inside one of the buildings: swimming pool, SPA, fitness room, gym, restaurant and indoor playground.		Source: rogowopearl.pl	
Year(s) of construction	Study conditions		**Total points**	**Average score**
2018 – 2021	Sunny weather, quite warm		27	1.35

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture		x			
2. Colours and materials – the degree to which the project matches with the surrounding architecture			x		
3. Form – the degree to which the building matches with the surrounding architecture			x		Wavy shapes inspired by the sea wave
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort	x				
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced			x		

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project				x	
2. Cultural importance – the importance of the project in continuing the resort's founding ideas		x			
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity	x				
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition		x			

Functional factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort		x			
2. Local plan – the level of provisions implemented as part of the local development plan		x			
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development			x		
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised			x		

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected		x			
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented		x			
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected / linked in space		x			
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning				x	On the seafront, close to the beach

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[1] The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A8. Rogowo Pearl in Rogowo. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information		
Porta Mare Wellness & SPA	Date 1: –	Date 2: September 2020	
Location	Description		
Dziwnówek	2 buildings with a common base, 13-storey, a "second home" facility, on the lower floors commercial and service facilities with indoor swimming pools and a SPA center.		Source: Author's work
Year(s) of construction	Study conditions	Total points	Average score
2017 – 2019	Sunny weather, quite warm	20	1.0

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	**1**	**2**	**3**	
1. Scale – the degree to which the project matches with the surrounding architecture		x			
2. Colours and materials – the degree to which the project matches with the surrounding architecture			x		
3. Form – the degree to which the building matches with the surrounding architecture		x			
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort	x				There is no reference to the features of the old resort architecture
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced	x				

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	**1**	**2**	**3**	
1. Social acceptance – how well local community accepts the project		x			
2. Cultural importance – the importance of the project in continuing the resort's founding ideas	x				
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity	x				
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition		x			

Functional factors

Criteria	Score for the construction project				Comments
	0	**1**	**2**	**3**	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort		x			
2. Local plan – the level of provisions implemented as part of the local development plan		x			
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development		x			
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised			x		

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	**1**	**2**	**3**	
1. Impact on vegetation – the degree to which the natural vegetation is protected		x			
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented		x			
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected/linked in space			x		
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning			x		

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[1] The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A9. Porta Mare Wellness & SPA in Dziwnówek. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information			
Shellter Hotel & Apartments	Date 1: –		Date 2: September 2020	
Location	Description			
Rogowo	Apartment and hotel complex including apartments, a hotel with an outdoor and indoor swimming pool and a spa & wellness area, cafes and restaurants, walking paths and a boulevard along the dunes. Project: Głębowski Studio			Source: Author's work
Year(s) of construction	Study conditions		Total points	Average score
2020	Sunny weather, quite warm		26	1.3

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	**1**	**2**	**3**	
1. Scale – the degree to which the project matches with the surrounding architecture		x			
2. Colours and materials – the degree to which the project matches with the surrounding architecture			x		
3. Form – the degree to which the building matches with the surrounding architecture		x			
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort	x				The architectural features do not correspond to the original resort architecture
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced		x			The complex resembles a typical modern housing estate

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	**1**	**2**	**3**	
1. Social acceptance – how well local community accepts the project				x	
2. Cultural importance – the importance of the project in continuing the resort's founding ideas		x			
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity	x				
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition			x		

Functional factors

Criteria	Score for the construction project				Comments
	0	**1**	**2**	**3**	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort		x			
2. Local plan – the level of provisions implemented as part of the local development plan		x			
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development			x		
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised			x		

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	**1**	**2**	**3**	
1. Impact on vegetation – the degree to which the natural vegetation is protected		x			
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented	x				Location in the dunes (strong transformations)
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected/linked in space			x		
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning				x	

¹ The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A10. Shelter Hotel & Apartments in Rogowo. Building sheet.

Construction project analysis form – Building sheet

Building name	Field survey information			
Wave Apartments	Date 1: September 2019	Date 2: September 2020		
Location	Description			
Międzyzdroje	Five apartment buildings, 11 floors, residential function (390 apartments), recreational, sports and commercial and service functions (SPA, Wellness zone, heated swimming pool, fit & gym are planned. Design: MODOarchitektura		Source:archinea.pl	
Year(s) of construction	Study conditions		Total points	Average score
2018 – 2021	Sunny weather, quite warm		24	1.2

Aesthetic factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Scale – the degree to which the project matches with the surrounding architecture	x				
2. Colours and materials – the degree to which the project matches with the surrounding architecture			x		
3. Form – the degree to which the building matches with the surrounding architecture			x		Design inspired by the coastal breeze and sea wave
4. Nature of the original resort – the degree to which the project is inspired by traditional or regional stylistic features of the resort	x				
5. Uniqueness – the degree to which customized solutions and new stylistic features are introduced				x	

Socio-cultural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Social acceptance – how well local community accepts the project		x			
2. Cultural importance – the importance of the project in continuing the resort's founding ideas		x			
3. Identity – the degree to which the project refers to the tradition of the space and how it emphasises the local cultural identity	x				
4. Societal participation – the degree to which the opinions and needs of the local community are taken into account in the construction project		x			
5. Good practice – the degree to which high-quality solutions are promoted; whether the design was selected in a competition			x		

Functional factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. "Resort-creating" function – importance of the construction project for the town's function as a seaside resort		x			
2. Local plan – the level of provisions implemented as part of the local development plan	x				No spatial development plan, revitalization plan for the village
3. Economic importance – the importance of the construction project for the improvement of the town's life and economic development			x		
4. Green solutions – the degree to which green solutions are taken into account		x			
5. Accessibility – to what extent a construction project is adapted to the needs of various user groups; whether the building can be utilised		x			

Location-related and natural factors

Criteria	Score for the construction project				Comments
	0	1	2	3	
1. Impact on vegetation – the degree to which the natural vegetation is protected		x			
2. Impact on the littoral zone – the degree to which erosion of dunes and coastline is prevented		x			
3. Climate change – the degree to which climate change mitigation solutions are considered		x			
4. Landscape assets (amenities) – the degree to which the waterfront panorama integrates with surroundings, including how they are connected / linked in space		x			
5. Location-related assets – the degree to which the seaside location and the adjacency of beach are utilized and emphasized in the construction project planning				x	On the seafront, only 60 m from the beach

¹ The evaluation on a scale of 0 to 4, where 0 means that the criterion is least considered, not considered or intentionally neglected during completion of the project.

Figure A11. Wave Apartments in Międzyzdroje. Building sheet.

References

1. Bal, W.; Czalczynska-Podolska, M. The stages of the cultural landscape transformation of seaside resorts in Poland against the background of the evolving nature of tourism. *Land* **2020**, *9*, 55. [CrossRef]
2. Bal, W. Contemporary trends and transformations in the public space of seaside resorts. In *Social Sciences & Arts, Proceedings of the 5th International Multidisciplinary Scientific Conference on Social Sciences and Arts SGEM 2018, Albena, Bulgaria, 26 August–1 September 2018*; STEF92 Technology Ltd.: Albena, Bulgaria, 2018; Volume 5, pp. 133–140.
3. Bal, W.; Czalczynska-Podolska, M. The integration of architecture and landscape as a model factor for assessment of the cultural landscape. In *Social Sciences & Arts, Proceedings of the 5th International Multidisciplinary Scientific Conference on Social Sciences and Arts SGEM 2018, Albena, Bulgaria, 26 August–1 September 2018*; STEF92 Technology Ltd.: Albena, Bulgaria, 2018; Volume 5, pp. 621–628. [CrossRef]
4. Crang, M. Cultural Geographies of Tourism. In *A Companion to Tourism*; Lew, A., Hall, C.M., Williams, A.M., Eds.; Blackwell Publishing Ltd.: Oxford, UK, 2004; pp. 74–84.
5. Council of Europe. European Landscape Convention. Available online: https://www.eea.europa.eu/policy-documents/european-landscape-convention (accessed on 10 September 2020).
6. Coccossis, H.; Tsartas, P. Tourism and the Environment. In *Tourism Recreation Series*; Kritiki: Athens, Greece, 2001.
7. Williams, A.M.; Hall, C.M. Tourism and migration: New relationships between production and consumption. *Tour. Geogr.* **2002**, *2*, 5–27. [CrossRef]
8. Roe, D.; Leader-Williams, N.; Dalal-Clayton, B. Take Only Photographs, Leave Only Footprints. In *The Environmental Impacts of Wildlife Tourism*; The International Institute for Environment and Development: London, UK, 1997.
9. Jafari, J. Bridging out, nesting afield: Powering a new platform. *J. Tour. Stud.* **2005**, *16*, 1–5.
10. Jafari, J. Entry into a new field of study: Leaving a footprint. In *The Study of Tourism: Anthropological and Sociological Beginnings*; Nash, D., Ed.; Elsevier: Oxford, UK, 2007; pp. 108–121.
11. Hudson, J.; Lowe, S. Understanding the Policy Process. In *Analysing Welfare Policy and Practice*, 2nd ed.; The Policy Press: Bristol, UK, 2004.
12. Crouch, D. Tourism, performance and the everyday. *Leis. Stud.* **2011**, *30*, 378–380. [CrossRef]
13. Williams, S.W. *Tourism Geography: A New Synthesis*, 2nd ed.; Routledge: New York, NY, USA, 2009.
14. Postma, A.; Schilder, A.K. Critical Impacts of tourism; the case of Schiermonnikoog. In *Social and Cultural Change: Making Space(s) for Leisure and Tourism, Leisure Studies Association Publication*; Casado-Diaz, M., Everett, S., Wilson, J., Eds.; University of Brighton: Eastborne, UK, 2001; Volume 98, pp. 131–150.
15. Stoffelen, A.; Vanneste, D. An integrative geotourism approach: Bridging conflicts in tourism landscape research. *Tour. Geogr.* **2015**, *17*, 544–560. [CrossRef]
16. Urry, J. *The Tourist Gaze*; SAGE Publications Ltd.: London, UK, 2002.
17. Carneiro, M.J.; Lima, J.; Lavrador Silva, A. Landscape and the rural tourism experience: Identifying key elements, addressing potential, and implications for the future. *J. Sustain. Tour.* **2015**, *23*, 1217–1235. [CrossRef]
18. Munt, I. The "Other" Postmodern Tourism: Culture Travel and the New Middle Classes. *Theory Cult. Soc.* **1994**, *11*, 101–123. [CrossRef]
19. MacCannell, D. Remarks on the Commodification of Cultures. In *Host and Guests Re-Visited: Tourism Issues of the 21st Century*; Smith, V.L., Brent, M., Eds.; Cognizant Communication Corporation: New York, NY, USA, 2001.
20. Warnken, J.; Russel, R.; Faulkner, B. Condominium developments in maturing destinations: Potentials and problems of long-term sustainability. *Tour. Manag.* **2003**, *24*, 155–168. [CrossRef]
21. Pitkänen, K. Second-home Landscape: The Meaning(s) of Landscape for Second-home Tourism in Finnish Lakeland. *Tour. Geogr.* **2008**, *10*, 169–192. [CrossRef]
22. Antrop, M. Landscape Change: Plan or Chaos? *Landsc. Urban Plan.* **1998**, *41*, 155–161. [CrossRef]
23. Terkenli, T.S. Landscapes of tourism: Towards a glob-al cultural economy of space? *Tour. Geogr.* **2002**, *4*, 227–254. [CrossRef]
24. Ritzer, G. *The McDonaldization of Society: An Investigation into the Changing Character of Contemporary Social Life*; Pine Forge Press: Thousand Oaks, CA, USA, 1993.
25. Liszewski, S. Przestrzeń turystyczna i osadnictwo turystyczne. In *Kompendium Wiedzy o Turystyce*; Gołembski, G., Ed.; Wyd. Naukowe PWN: Warszawa, Poland, 2002; pp. 77–109.
26. Relph, E. *Place and Placelessness*; Pion: London, UK, 1976.
27. Leyva, C.; Espejel, I.; Escfet, A.; Bullock, S.H. Coastal Landscape Fragmentation by Tourism Development: Impacts and Conservation Alternatives. *Natl. Areas J.* **2006**, *26*, 117–125. [CrossRef]
28. Terkenli, T.S. Tourism and Landscape. In *A Companion to Tourism*; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; Blackwell Publishing: Oxford, UK, 2004; pp. 282–293.
29. Morgan, N. Problematizing Place Promotion. In *A Companion to Tourism*; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; Blackwell Publishing: Oxford, UK, 2004; pp. 171–183.
30. Tuğba, K. Role of Ecotourism in Sustainable Development. In *Advances in Landscape Architecture*; Özyavuz, M., Ed.; IntechOpen: Rijeka, Croatia, 2013; Available online: https://www.intechopen.com/books/advances-in-landscape-architecture/role-of-ecotourism-in-sustainable-development (accessed on 2 October 2020).
31. Mill, R.C.; Morrison, A.M. *The Tourism System*, 4th ed.; Kendall/Hunt Publishing Company: Dubuque, IA, USA, 2002.

32. World Tourism Organisation. Sustainable Development of Tourism. Concepts and Definitions. 2004. Available online: www.world-tourism.org/sustainable/top/concepts.html (accessed on 2 October 2020).

33. Daniel, T.C.; Boster, R.S. Measuring Landscape Esthetics: The Scenic Beauty Estimation Method. USDA Forest Service. 1976. Available online: https://www.fs.fed.us/rm/pubs_rm/rm_rp167.pdf (accessed on 2 October 2020).

34. Visual Resource Management Program. *Bureau of Land Management*; US Department of Interior: Washington, DC, USA, 1980.

35. Wejchert, K. *Elementy Kompozycji Urbanistycznej*; Arkady: Warszawa, Poland, 1974.

36. Polat, A.T. Visual Quality Assessment in Landscape Architecture. In Proceedings of the 9th International Academic Conference, Florence, Italy, 16–19 September 2015; International Institute of Social and Economic Sciences: London, UK, 2015; pp. 637–648. Available online: https://www.researchgate.net/publication/282665755_Visual_Quality_Assessment_in_Landscape_Architecture (accessed on 15 October 2020).

37. Clay, G.; Daniel, T. Scenic Landscape Assesssment: The Effects of Land Management Jurisdiction On Public Perception Of Scenic Beauty. *Landsc. Urban Plan.* **2000**, *49*, 1–13. [CrossRef]

38. Ak, M.K. Visual Quality Assessment Methods in Landscape Architecture Studies. In *Advances in Landscape Architecture*; Özyavuz, M., Ed.; IntechOpen: Rijeka, Croatia, 2013; Available online: https://www.intechopen.com/books/advances-in-landscape-architecture/visual-quality-assessment-methods-in-landscape-architecture-studies (accessed on 15 October 2020).

39. Lothian, A. Measuring and Mapping Landscape Quality Using the Community Preferences Method. In Proceedings of the New Zealand Planning Institute Annual Conference, Blenheim, UK, 1–4 May 2012; Available online: https://scenicsolutions.world/wp-content/uploads/2017/08/measuring-and-mapping-landscape-quality-using-the-community-preferences-method.pdf (accessed on 15 October 2020).

40. Kaplan, R.; Kaplan, S. *Experience of Nature*; Cambridge University Press: New York, NY, USA, 1989.

41. Nasar, J.L. *The Evaluative Image of the City*; Sage Publications: Thousand Oaks, CA, USA, 1998.

42. Keleş, E.; Atik, D.; Bayrak, G. Visual Landscape Quality Assessment in Historical Cultural Landscape Areas. *Eur. J. Sustain. Dev.* **2018**, *7*, 287–300. [CrossRef]

43. Myga-Piątek, U. Kryteria i metody oceny krajobrazu kulturowego w procesie planowania przestrzennego na tle obowiązujących procedur prawnych (Criteria and methods of assessment of cultural landscape in the process of spatial planning against the existing legal procedures). In *Waloryzacja Środowiska Przyrodniczego w Planowaniu Przestrzennym (Environmental Assessment in Physical Planning)*; Kistowski, M., Korwel-Lejkowska, B., Eds.; Uniwersytet Gdański: Gdańsk, Poland, 2007; pp. 101–110.

44. Żarska, B. *Ochrona Krajobrazu*; SGGW: Warszawa, Poland, 2012.

45. Natural England. *An Approach to Seascape Character Assessment*; England Commissioned Report NECR105; Natural England: York, UK, 2012. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/396177/seascape-character-assessment.pdf (accessed on 15 October 2020).

46. Bal, W. Specyfika krajobrazu kulturowego kurortów nadmorskich. Próba określenia tożsamości kulturowej regionu nadmorskiego w kontekście postępującej degradacji krajobrazu kulturowego kurortów nadmorskich na Pomorzu Zachodnim Specificity of the cultural landscape of seaside resorts. In *An Attempt to Determine the Cultural Identity of a Coastal Region in the Context of the Progressive Degradation of the Cultural Landscape of Seaside Resorts in Western Pomerania*; Wyd. HOGBEN: Szczecin, Poland, 2009.

47. Gilbert, E.W. The growth of inland and seaside health resorts in England. *Scott. Geogr. Mag.* **1939**, *55*, 16–35.

48. Christaller, W. Some considerations of tourism location in Europe. *Pap. Reg. Sci. Assoc.* **1963**, *12*, 95–105.

49. Cohen, E. Towards a sociology of international tourism. *Soc. Res.* **1972**, *39*, 164–182.

50. Butler, R.W. The concept of the tourist area life-cycle of evolution: Implications for management of resources. *Can. Geogr.* **1980**, *24*, 5–12. [CrossRef]

51. Smith, R.A. Beach resort evolution: Implications for planning. *Ann. Tour. Res.* **1992**, *2*, 304–322. [CrossRef]

52. Smith, R. Review of Integrated Beach Resort Development in Southeast Asia. *Land Use Policy* **1992**, *9*, 209–217. [CrossRef]

53. Young, B. Touristization of Traditional Maltese Fishing-farming Villages. *Tour. Manag.* **1983**, *4*, 35–41. [CrossRef]

54. Bianchi, R. Tourism Development and Resort Dynamics: An Alternative Approach. In *Progress in Tourism, Recreation and Hospitality Management*; Cooper, C.P., Lockwood, A., Eds.; Belhaven: London, UK, 1994; Volume 5, pp. 181–193.

55. Hall, C. Trends in ocean and coastal tourism: The end of the last frontier? *Ocean Coast. Manag.* **2001**, *44*, 601–618. [CrossRef]

56. Butowski, L. Maritime Tourism Space. *Turyzm* **2014**, *24*, 57–64. [CrossRef]

57. Butowski, L. Model of sustainable tourism. Teoretical and empirical approach. *Folia Turistica.* **2014**, *33*, 9–33.

58. Gormsen, E. The spatio-temporal development of international tourism: Attempt at a centre-periphery model. In *La Consommation D'Espace par le Tourisme et sa Preservation*; Intenational Geographical Union, Ed.; CHET: Aix-en-Provence, France, 1981; pp. 150–170.

59. Smith, R.A. Beach resorts: A model of development evolution. *Landsc. Urban Plan.* **1991**, *21*, 189–210. [CrossRef]

60. Myga-Piątek, U. Krajobraz kulturowy jako walor i produkt turystyczny—Problemy oceny i ochrony. In *Krajobraz Kulturowy—Cechy, Walory, Ochrona. Problemy Ekologii Krajobrazu*; Wołoszyn, W., Ed.; UMCS: Lublin, Poland, 2006; Volume 18, pp. 201–212.

61. Larsen, K. The Other Side of "Nature". In *Producing Nature and Poverty in Africa*; Broch-Due, V., Schroeder, R.A., Eds.; Nordiska Afrikainstitutet: Uppsala, Sweden, 2000.

62. Pielesiak, I. Dezintegracja przestrzeni łodzi w świetle badań społecznych. *Stud. Miejskie* **2016**, *21*, 53–65.

63. Merida, R.M.; Lobon, M.R. Landscape Integration and Its Foundations. Method of Application for Remote Buildings in Rural Areas. *Assoc. Geogr. Newslett.* **2011**, *56*, 455–461.

64. Komarova, M. Integration of the historic urban landscape with contemporary architecture. In *Resilient Landscape for Cities of the Future*; Uniscape: Ascoli Piceno, Italy, 2015; pp. 292–294.
65. Pearce, D. *Tourist Development*, 2nd ed.; Longman Scientific & Technical: New York, NY, USA, 1989.
66. Bal, W. Pluralistic trends in development of seaside landscape of Western Pomerania. *Files Urban Plan. Archit. Comm. Branch PAS Krakow* **2018**, *46*, 483–495.

Framing the Hierarchy of Cultural Tourism Attractiveness of Chinese Historic Districts under the Premise of Landscape Conservation

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Abstract: While empowering the revitalization of Chinese historic districts, the rapid development of the tourism industry may also endanger local cultures and streetscapes. To achieve the goal of sustainable development and find an approach for the Chinese historic districts to develop tourism while taking into account landscape conservation, district management, and living convenience, this paper uses expert interviews (including in-depth and Modified Delphi interviews) and structural observation to explore redefining Chinese historic districts and cultural tourism attractiveness in order to provide a hierarchical framework. The research results reveal: 1. The respective redefinitions of a Chinese historic district and cultural tourism attractiveness; 2. A hierarchical framework for the cultural tourism attractiveness of Chinese historic districts, using two aspects—the physical environment and the cultural and natural environments—and five criteria including the morphology of the landscape and tourism infrastructure, along with 21 elements, including the natural and cultural landscapes. This research is expected to provide a theoretical reference for the planning and management of tourism and landscapes in Chinese historic districts.

Keywords: cultural tourism attractiveness; landscape conservation; hierarchical framework; Chinese historic districts

1. Introduction

Historic districts reflect the images of a city and form an important part of its historical legacy. The cultural value of historic districts still plays a key role in the economic development of modern cities [1,2]. However, the survival spaces of historic urban landscapes and traditional culture are being compressed by the rapidly developing modern economy with many historic districts bearing memories of the city having declined or disappeared in the process of globalization, urbanization, and commercialization [2–6]. Landscape conservation is conducive to satisfying not only the modernization of historical areas, but also the conservation of history, memory, and the environment [5]. Therefore, tourism attractiveness in this article does not focus on tourism development. It is both necessary and imperative that landscape conservation and the revitalization of historic districts' happen [7–9], whilst supporting their sustainable development [10].

Tourism is a driving force for landscape conservation and sustainable development. However, the rapid development of the tourism industry may also affect the lives of residents, destroy the landscape and environment, and impair the quality of the tourist experience, leading to excessive commercialization, the disappearance of traditional culture, and other issues [9,11–13]. Therefore, to enable the sustainable development of historic districts, economic development, landscape conservation, and cultural inheritance should go hand-in-hand [11,14,15]. Cultural tourism can bridge economy and culture whilst

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contributing to the sustainable development of heritage sites [16–23]. At the same time, how to introduce tourism to become a driving force for cultural heritage and urban renewal has become a hot topic world-wide [24]. Chinese historic districts are no exception. They are trying to pass on a district's culture, boost its prosperity, and promote sustainable development by integrating the landscape resources in the district to support cultural tourism [25–29]. It could be said that the cultural tourism industry in Chinese historic districts attracts tourists with its own landscape resources which are a combination of the hardware environment and software culture, so that they find a balance between the historic nature of the district and the modernization of life, and eventually develop into sustainable districts. However, at present, the overall development of Chinese historic districts is facing the test of three pairs of contradictions specific to the conservation of their landscapes: protection and development, the new and the old, and the past and the present [30]. The relationship between tourism development and district conservation is difficult to balance [31]. It has caused conflicts between cultural conservation, economic development, residents' interests, and management and planning [32]. Therefore, the core of the cultural heritage attractiveness is to handle the above-mentioned conflicts to a greater extent. Only in this way can Chinese historic districts truly achieve the goals of revitalization and sustainable development.

Within the large amount of related Chinese and foreign literature, scholars have taken various research perspectives to explore a district's problems in-depth [33–37]. However, current research is constrained in three areas: in terms of research scope, some research has focused on historic districts on both sides of the Taiwan Straits or overseas Chinatowns; however, researchers have not provided a broad summary of what Chinese historic districts themed with Chinese cultural characteristics are [38–40]; in terms of research content, some of the research content has focused on tourism development or district conservation, but researchers have not explored how the attractiveness of cultural tourism satisfies both their tourism development and landscape conservation from the perspective of sustainable historic districts, nor have they systematically summarized the criteria and hierarchical framework for this process [41,42]; in terms of research method, the frameworks were mostly established based on integrations of literature collections, while expert interviews have been infrequently used to collect information and improve the research [32,43].

In this paper, expert interviews (both in-depth and using the Modified Delphi Method) and structured observations are taken as the research method to redefine the connotations of Chinese historic districts and cultural tourism attractiveness mainly based on expert opinions and the definitions of four term: "Chinese district", "historic urban area", "cultural tourism", and "tourism attractiveness", and to establish a hierarchical framework of cultural tourism attractiveness applicable to Chinese historic districts that takes landscape conservation and economic development into parallel consideration. Finally, Dadaocheng historic district in Taiwan will be taken as an example to show how the elements of the framework correspond to the real landscape in a historic district. The results of this research aim to provide a theoretical reference for the development of tourism and the landscape conservation of historic districts whilst aiming to achieve sustainable development.

2. Literature Review

The literature review mainly includes publications related to Chinese historic districts, cultural tourism attractiveness, and a hierarchical framework for historic districts and tourism attractiveness. The term "historic district" and related concepts include literature relating to the terms "historic area/city", "historic urban areas", "historic towns and urban areas", "urban conservation", and "historic urban".

2.1. Chinese Historic Districts

In this section, the context of the two terms "Chinese district" and "historic urban area" are explored to facilitate the understanding of "Chinese historic district".

The term "Chinese district" appeared in Chinese in the article "Chinese Communities in the Russian Far East (1891–1900)" and the book Famous Chinese Districts in the World: Chinatown. The former refers to the Chinese settlements in the Russian Far East, while the latter refers to overseas Chinatowns [38,44]. Both terms have Chinese cultural characteristics, but neither is a description of the dominant Chinese presence on both sides of the Taiwan Straits. Therefore, the author assumes that "Chinese districts" are the places where Chinese congregate and settle and which bear distinctive Chinese cultural characteristics. The scope of "Chinese districts" should include all districts around the world where Chinese culture predominates.

With regard to the definition of "historic district", according to UNESCO(United Nations Educational, Scientific and Cultural Organization) and ICOMOS(International Council on Monuments and Sites) International Council on Monuments and Sites), the scope of "historic area/city" and "historic districts" should cover both cities and rural areas [5,45,46]. ICOMOS holds that "historic urban areas" should include both the natural and human-made environments [47], and "historic towns and urban areas" should include "tangible elements" and "intangible elements" [9,46]. In mainland China and Taiwan, there are distinct definitions of "historic district". In mainland China, the authorities emphasize that "the cultural relics preserved are particularly diversified, the historical buildings are clustered, and the traditional patterns and historical styles can be integrally and authentically manifested" [39]; whereas in Taiwan, the Tainan municipal government emphasizes "a group of buildings worthy of conservation and revitalization" [40]. It can be seen that international organizations have outlined the relevant scope and contents from a relatively macroscopic perspective, but their expression of the values is not so lucid. Mainland China and Taiwan have described the values in more detail, but they have not defined the contents and the scope.

To summarize, the concept of "Chinese historic district" should include both "Chinese district" and "historic district", to emphasize the macroscopic scope and characteristics of a Chinese district, as well as the territory, contents, and value of a historic district.

2.2. Cultural Tourism Attractiveness

In this section, the context of the two terms "cultural tourism" and "tourism attractiveness" are explored to facilitate the understanding of "cultural tourism attractiveness".

With regard to the definition of "cultural tourism", Richards and UNWTO (United Nations World Tourism Organization) held that cultural needs link people with tourism destinations [48,49], but they ignored the attracting effects of cultural resources; ICOMOS claimed that the cultural environment is a key feature [18], yet it neglected the roles of the physical and natural environments; the EU and COE (the European Union and the Council of Europe) proposed the three resources theory, which highlighted the roles of historic space and modernized function, yet they overlooked the experience and wishes of tourists [50]. Therefore, "cultural tourism" is a "cultural behavior" developed under the stimulation of cultural needs and cultural resources.

With regard to the definition of "tourism attractiveness", Middleton et al. held that, from a demand perspective, tourism attractiveness originated from the subjective demands or feelings of tourists [51,52], but they ignored the roles of tourism resources; Gunn et al. held that, from a supply perspective, tourism attractiveness was a pull from the tourist destination [53,54], but they ignored the role of subjective demand; Iatu et al. integrated the two perspectives and proposed that both tourists' demand and the resources of tourism destinations were the components of tourism attractiveness [55,56], yet they failed to describe the macro environment in which that attractiveness was developed. Therefore, the contents of tourism attractiveness should include the background and components leading to its development.

In a brief, the concept of "cultural tourism attractiveness" should include both "cultural tourism" and "tourism attractiveness", to emphasize the core role of culture, as well as the development background and components of tourism attractiveness.

2.3. Hierarchical Framework of Historic Districts, Tourism Attractiveness, and Landscape Conservation

This section reviews the relevant content based on the establishment method, research contents, or scope of research into frameworks for evaluating historic streets, tourism attractiveness, or landscape conservation.

With regard to the hierarchical framework for historic districts, Ruoming Shi et al. established frameworks based in the literature where the former assessed the status of conservation and impacts, and the latter assessed the impact of conservation efforts on the sustainable development of a district from the Historic Urban Landscape (HUL) perspective [32,43]. Liu et al. leveraged the textual analysis approach to analyze public comments and established a hierarchical framework to assess public perceptions of the authenticity of urban heritage [42]. It can be seen that the establishment of hierarchical frameworks has mainly relied on consolidating the existing literature and textual analysis with insufficient regard for input from experts in related fields. In terms of the research object, research has focused directly on areas related to heritage or landscape conservation and not on a direct exploration of district conservation, landscape conservation, and sustainable development from a second perspective, such as cultural tourism. Therefore, in this research, literature consolidation and expert input will be integrated to study sustainable districts and landscape conservation from a cultural tourism perspective.

With regard to the hierarchical framework of tourism attractiveness, the academic community has established hierarchical frameworks mainly through literature consolidation. In terms of scope, some of the research was country-based or county-based whilst other investigations were city-based with some being based on several areas within a country [57–59]. Sorting out a hierarchical framework from the literature could easily lead to the trap of being too subjective. If opinions of an expert panel were considered in amending this process, the decision-making could be more precise [60]. Since the scope of research is relatively diversified and its geographical base relatively vast reducing the scope of research to a single district might provide data and results of greater accuracy.

With regard to the hierarchical framework for landscape conservation, Francesca Nocca et al. directly established frameworks based in the literature where the former took cities as the research scope, trying to find out the relationship between landscape variation and wellbeing variation, and the latter took natural landscape conservation areas country-wide as the research scope, evaluating the status of natural landscapes in China based on the criteria of typicality, aesthetics, authenticity, integrity, and historical and cultural values [10,61]. Vassiliki Vlami et al. established frameworks based on a combination of literature review and extensive field trials, taking an island as the research scope to diagnose a holistic landscape for the purpose of conservation instead of evaluating from the perspective of traditional visual aesthetics [62]. It can be seen that the establishment of hierarchical frameworks was mainly based on a single review of the literature reviews; meanwhile, the research scope was too large, which increases the difficulty of the research and is prone to deviations in data collection. In terms of the research content, the research was insufficiently focused or too abstract. Therefore, during this research, the methods for establishing the hierarchical framework should be enriched, the research scope should be narrowed, and the specific elements related to landscape conservation should be studied.

In short, research into the "hierarchical framework of historic districts, tourism attractiveness, and landscape conservation" may take a single district as the scope of research, the cultural tourism attractiveness as the research content, and the sustainable district in the context of cultural and landscape conservation as the ultimate goal. This allows a hierarchical framework for scientific research into the specific element of landscape in the district to be established by combining literature consolidation and expert interviews.

3. Research Design

In this paper, three research methods have been used: in-depth interviews to aid the redefinition of terms, the Modified Delphi Method for the establishment of a hierarchical

framework, and structured observation for the validation of the hierarchical framework. The same expert panel of 17 people in total were invited for the first two parts.

3.1. In-Depth Interviews

First, experts were introduced to the prototype definitions of terms obtained through literature consolidation. Experts then revised these definitions one-by-one until an agreement was reached (oral agreement or no questions raised) on every revised definition, which then became the final definitions.

3.2. Modified Delphi Method

This section consists of two parts: the process and the expert panel.

a. Process

This process was divided into two rounds. In Round 1, the Delphi items extracted from the references were organized into a semi-structured questionnaire. Experts then commented on each item's applicability and the clarity of its contents. Then, the author used this expert input to make relevant corrections. In Round 2, the necessity for each corrected item and its content was rated, and an expert consensus reached [60,63]. During the whole process, each expert's considerations and ratings for each item are equally important [64].

b. Expert Panel

On the composition of an expert panel, some scholars suggest that a panel should be heterogeneous rather than homogenous [65], with some scholars believing that a panel composed of 10–18 members is a reasonable number [66]. Following these suggestions and, at the same time, in order to avoid the conflicts caused by the imbalance between landscape preservation and tourism development affecting the sustainable development of the district, the expert panel was composed of 17 heterogeneous experts representing cultural and historic practitioners, district delegates, tourism practitioners, and planning and operating personnel. To ensure the integrity and accuracy of the elements in the hierarchical framework, the number of experts with corresponding expertise was evenly distributed. However, because experts might have multiple attributes, one expert might be reviewing more than one category. Since the members were selected based on the principle of having rich experience and knowledge, an understanding of the Delphi method, and a willingness to continue to participate in the research [67], all 17 experts participated in the whole research with no withdrawals or replacements.

c. Statistical Approach

In this paper, a six-point Likert-type scale was used to rate the necessity of using the criteria for the final hierarchical framework of cultural tourism attractiveness for Chinese historic districts. 1 point meant "strongly disagree", 2 points "disagree", 3 points "disagree with reservations", 4 points "agree with reservations", 5 points "agree", and 6 points "strongly agree" [68]. The level of expert consensus could be judged according to the quartile deviation (QD). A QD < 0.6 meant a high consensus, $0.6 < QD \leq 1$ meant a moderate consensus, and QD > 1 meant no consensus was reached [68–70].

d. Criteria Screening Approach

The average value could be referenced when making a decision on the deletion of a criterion. The average value 3.5 was the neutral point. Those below 3.5 were very unlikely to occur or unlikely to occur as options, those above 3.5 (inclusive) were likely or very likely to occur as options [64,68]. Therefore, in this paper, a criterion with an average less than 3.5 was deleted, and a criterion with an average greater than or equal to 3.5 was retained.

3.3. Structured Observation

For the structured observation task, a handy and reliable checklist with a minimum of observations was used to obtain relevant visual information [71]. In this study, the hierarchical framework for the cultural tourism attractiveness of Chinese historic districts was used as the checklist, and the landscapes corresponding to the observation objects were located and photographed within a specific historic district. This provided a concrete illustration of how the framework elements correspond to the district landscape.

3.4. Scope of Research

When the hierarchical framework for the cultural tourism attractiveness of Chinese historic districts was used, the contents with obvious cultural tourism attractiveness were selected from the 21 items according to the situation of the corresponding district. As a consequence, selections made for different districts might differ. This was because the hierarchical framework only provided the possible (instead of absolute) causes of obvious cultural tourism attractiveness. In addition, this hierarchical framework provides a complete list of elements that may generate cultural tourism attractiveness; that is, the 21 items contents in the framework can be found in any Chinese historic district. The selection of contents with obvious cultural tourism attractiveness in a specific Chinese historic district was further considered using this framework; however, this lies beyond the scope of this paper.

4. Research Results

This section is composed of term redefinitions and the hierarchical framework. The first part covers the redefinitions of two terms: Chinese historic district and cultural tourism attractiveness; the second part covers the establishment of a hierarchical framework for the cultural tourism attractiveness of Chinese historic districts.

4.1. Redefinition of a Chinese Historic District and Cultural Tourism Attractiveness

This section includes both the prototype and final definitions.

4.1.1. Prototype Definition

According to the Literature Review, the prototype definitions of Chinese Historic District and Cultural Tourism Attractiveness are as follows (refer to Table 1).

Table 1. Prototype definition of a Chinese historic district and cultural tourism attractiveness.

Term	Definition (Reference + Personal Amendment)	Reference
Chinese Historic District	Places (1) where a certain number of Chinese congregate and reside, (2) which have particularly diversified cultural relics approved and acknowledged by the authority, (3) where historic buildings are clustered, and (4) which verifiably show that traditional patterns and historic styles are integral.	[39]
Cultural Tourism Attractiveness	A force of attraction that lures tourists to cultural attractions to satisfy their cultural needs.	[48,53,54]

4.1.2. Final Definition

Experts made relevant suggestions for amendments to the definitions (refer to Literature Review for the supplementary references). The seventeen experts reached agreement on the amended definition of the two terms. The final versions are shown in Table 2.

Table 2. Final definitions of a Chinese historic district and cultural tourism attractiveness.

Term	Final Definition	Reference
Chinese Historic District	Places in urban or rural areas where (1) Chinese cultural characteristics are distinctive; (2) the historic artifacts preserved are particularly diversified; (3) the old buildings are clustered; (4) the traditional patterns and historic styles are integral and verifiably manifested; and (5) a group of buildings is worthy of conservation and revitalization.	[5,39,40,45–47]
Cultural Tourism Attractiveness	An action whereby a tourism destination with historic spaces and modern functions leverages the cultural tourism resources inherent in the physical environment, the cultural environment, and the natural environment to attract tourists and stimulate their cultural needs.	[18,48–50,53–56]

4.2. A Hierarchical Framework for the Cultural Tourism Attractiveness of Chinese Historic Districts

This section consists of four parts: the prototype framework, the reasons for framework amendments, the amended framework, and the modified Delphi decision-making results.

4.2.1. The Prototype Framework

Based on the implicit assumptions of culture having three levels, formal, informal, and technical [72], the preservation of a historic urban landscape should cover both the physical and the human environment [5,73]. With marketing strategy constituting an important part of cultural asset management [2], the three cultural hierarchies correspond to the three aspects of the prototype: the physical environment, human environment, and tourism marketing. The difference between the two environmental aspects is that the former emphasizes the denotation of things whilst the latter stresses connotation of things [74].

To divide the three aspects further, the physical environment is composed of nature and natural resources, the building environment, and infrastructure [75]. The human environment can be divided into tangible and intangible cultural relics subject to the classification of cultural relics, where the former consists of both movable and immovable cultural relics [76], with the latter consisting of various traditional cultural expressions as well as related physical items and places [77]; tourism marketing covers the four elements of product, price, promotion, and place [78,79]. As a result, the above criteria provide the foundation for the prototype framework as in Tables 3 and 4.

Table 3. Integrated preliminary aspects.

Aspects	References
Physical environment	[5,72–74]
Human environment	[5,72–74]
Marketing strategy	[2,72]

Table 4. Integrated preliminary aspects.

Aspects	Criteria	References
Physical environment	Nature and natural resources.	[75]
	Infrastructure.	[75]

Table 4. *Cont.*

Aspects	Criteria	References
	Building environment.	[75]
Human environment	Movable resources.	[76]
	Immovable resources.	[76]
	Various traditional cultural manifestations.	[77]
	Related physical items and places.	[77]
Marketing strategy	Product strategy.	[78,79]
	Price strategy.	[78,79]
	Promotion strategy.	[78,79]
	Place strategy.	[78,79]

Because the prototype still had many imperfections, it was amended with the help and suggestions of the expert panel. The changes as shown in Figures 1–3, the final descriptions of the amended framework as shown in Tables 5 and 6.
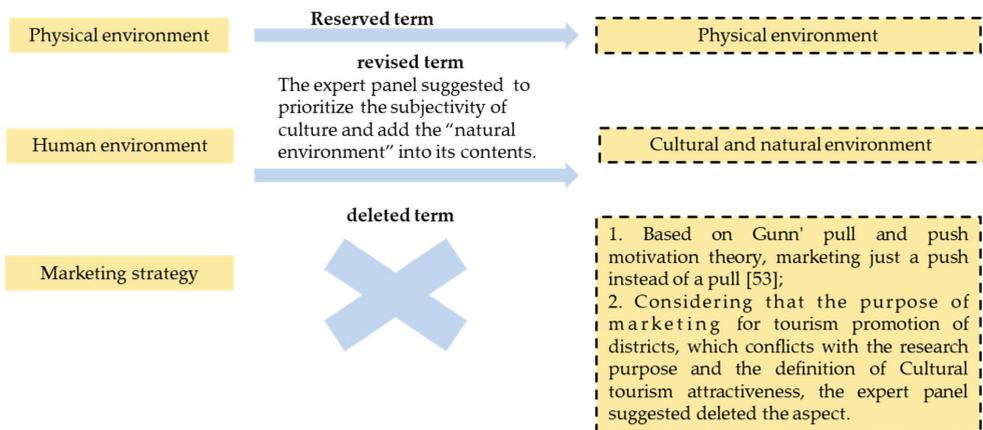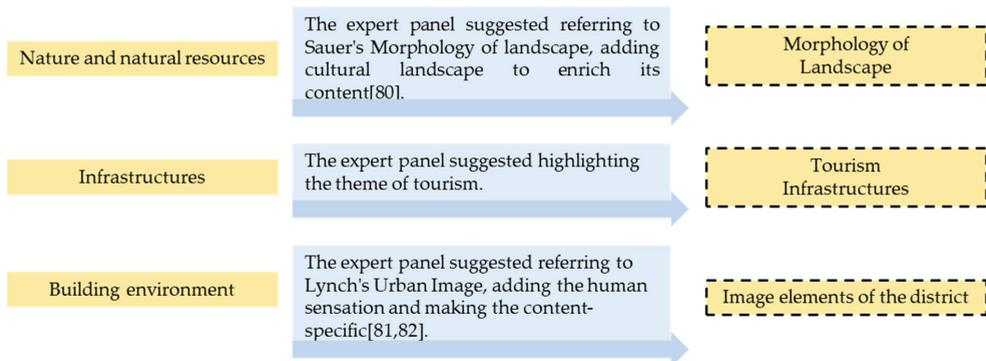

Figure 1. The Aspect Amendments [53].

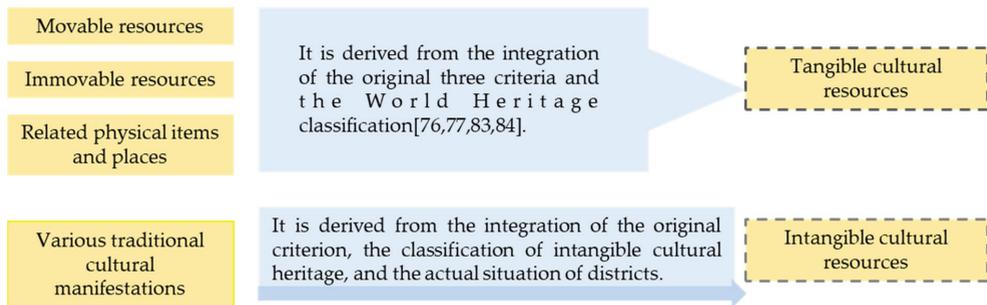**Figure 2.** The Criteria Amendments in Physical Environment [80–82].

Figure 3. The Criteria Amendments in Cultural and Natural Environment [76,77,83,84].

4.2.2. The Reasons for Amending the Framework

The hierarchical framework of cultural tourism attractiveness for Chinese historic districts was proposed based on an analysis of the literature, the experts' input, and district circumstances. It consisted of 2 aspects, 5 criteria, and 21 content items. Considering that the research purpose of this article was not to attract more tourists, but to find a cultural tourism attractiveness that could satisfy both economic development and landscape conservation, the original aspect "marketing strategy" was deleted as a whole based on the suggestions of the expert panel. At the same time, this result also fits Gunn's views on marketing as the push provided by tourist destinations, and tourism attractiveness as a pull from tourism [53]. For the remaining two aspects, experts suggested the following: 1. The aspects should be named in a way that could highlight their different attributes; and 2. In order to prioritize the subjectivity of culture, "cultural environment" should be substituted for "human environment", with the term "natural environment" being added to cover both the cultural and natural domains.

Physical Environment

This aspect consisted of three criteria: morphology of landscape, tourism infrastructure, and image elements of the district.

Morphology of landscape (A1): The original criterion "nature and natural resources" could be considered as a natural landscape when the cultural connotation was not stressed. With cultural landscape added, a complete morphology of landscape was formed [80], which shaped tourists' first impression of landscapes in a district. Tourism resources were divided into eight categories: geological landscape, water scenery, biological landscape, meteorological and climatological landscape, relics and ruins, buildings and facilities, tourism commodities, and cultural activities [85], with the first four categories being the natural landscape, and the last four the cultural landscape.

Tourism infrastructure (A2): As this paper focused on cultural tourism attractiveness, the original criterion "infrastructure" was renamed "tourism infrastructure", which included tourist-oriented tourism facilities and resident-oriented living facilities. Sunitha held that tourism infrastructure had four aspects: attractions, accommodation, accessibility, and amenities [86]. Charles E. Gearing mentioned recreational and shopping facilities as well as infrastructure, food, and shelter [87], while Krešić and Prebežac mentioned accommodation and catering facilities [58]. Considering that the terms "recreational and shopping facilities" and "accommodation and catering facilities" were the respective supersets of attractions and accommodation, the term "recreational and shopping facilities" was used to replace "attractions infrastructure", with "accommodation and catering facilities" replacing "accommodation infrastructure". To maintain consistency of terminology, this paper uses "infrastructure" at the criteria level and "facility" at the content level.

Image elements of the district (A3): While the original criterion "building environment" only determined whether the various architectural spaces exist or not, "image

elements of the district" pointed to the emotional attachment to the physical environment after developing a better acquaintance and understanding of the district. Urban image elements, e.g., paths, districts, nodes, landmarks, and edges, were the most interesting and impressive elements in a city [81]. Such image elements were also applicable to historic districts. As the word "district" was used as one of the urban image elements as well as in the term "historic district", to be more specific, the word "blocks" with a smaller scope was used for this criterion. In addition, the overall presentation of any physical environment was a combination of different sensory perceptions, including visual, tactile, olfactory, and kinesthetic [82]. Cultural tourism in historic districts refers to the visual, auditory, tactile, gustatory, and olfactory perceptions of tourists. Therefore, compared to urban image elements, the image elements of a district here seem to add a human touch.

Cultural and Natural Environments

Since the cultural environment has both tangible and intangible qualities [73], cultural heritage can similarly be divided into tangible and heritage with the natural environment bearing physical characteristics (refer to the natural heritage) [18,83]. Hence, the four original criteria can be re-organized into tangible and intangible cultural resources. According to the experts' suggestions, cultural resources in districts were divided into two types: those with legal identities related to cultural heritage conservation and those without such legal identities. The connotation referred to the corresponding values of "cultural and natural heritage" and "intangible cultural heritage" [83,88], and the forms were summarized from the three classifications of product technology innovation [89].

Tangible cultural resources (B1): Considering that there were both cultural relics and non-cultural relics in historic districts, and cultural heritage was divided into monuments, groups of buildings, and sites [84], these three types of heritage were integrated with movable cultural relics, immovable cultural relics, and related traditional artifacts and places, and their names modified or their meanings expanded [76,77]. Hence, the artifacts, buildings, and cultural and social fields can be derived. Apart from cultural heritage, world heritage also includes natural heritage, mixed cultural and natural heritage, and cultural landscapes (a special category) [83], which jointly contribute to the landscape features.

Intangible cultural resources (B2): The contents of this criterion were derived mainly by integrating the actual situation of districts and the relevant references (including the classification of intangible cultural heritage and the presentation of intangible culture). "Narratives and memories" was a combination of the UNESCO and Taiwanese definitions of oral traditions [88,90]; " Cultural activities" was a combination of traditional performing arts, performing arts, rituals, and festive events [88,90]; "Industrial culture activities" was a combined presentation of the cultural and creative industries and the traditional industries [91,92]; "Characteristic cultural manifestations" were the combination of various traditional cultural manifestations, traditional craftsmanship, folklore, traditional knowledge and practices, oral expressions—including language as a vehicle for intangible cultural heritage, social practices, traditional craftsmanship, and knowledge and practices concerning nature and the universe [77,88,90]; "Residents' images" was a combination of resident's participation, preservation awareness, residents' consensus, and a manifestation of values [93,94]; "District services" was a combination of the contents related to tourism and public services [95,96].

4.2.3. The Amended Framework

Following the first round of semi-structured questionnaires and interviews, a framework as shown in Tables 5 and 6, was proposed after consolidating the expert inputs.

Table 5. Description of revised framework aspects.

Aspects	Definition	References
A Physical environment	a. The hardware environment allows historic districts to develop attractive cultural tourism and to emphasize denotation-based attractiveness. b. This aspect includes three criteria: morphology of landscape, tourism infrastructure, and image elements of the district.	[5,72–74]
B Cultural and natural environment	a. This aspect is the software environment where historic districts develop cultural tourism attractiveness and emphasize the connotation-based attractiveness. b. It includes two criteria: tangible and intangible cultural resources shaped in the context of traditional culture and those shaped in the context of innovative culture. c. Tangible and intangible cultural resources can be divided into two types: those with legal identities related to cultural heritage conservation and those without such legal identities. Their connotation is the value in conservation, history, art, science, aesthetics, folklore, ethnography, anthropology, etc.	[5,18,72–74,83,88,89]

Table 6. Description of the revised framework criteria.

Description of the Revised Framework Criteria		Description of the Revised Framework Criteria in the Case Study of the Dadaocheng Historic District		
Criteria	Definition	Items	Landscapes	Description
A1 Morphology of Landscape: Landscape of the district that can be directly captured by people in or outside the district. It contains the following two items [75,80,85].	A1-1 Natural Landscape: A landscape composed of different forms of natural features, including geological landscape, water scenery, biological landscape, and the meteorological and climatological landscape.	Trees down the street of Sec. 1, Dihua St.		This is a biological landscape

Table 6. *Cont.*

	Description of the Revised Framework Criteria		Description of the Revised Framework Criteria in the Case Study of the Dadaocheng Historic District	
Criteria	Definition	Items	Landscapes	Description
A1 Morphology of Landscape: Landscape of the district that can be directly captured by people in or outside the district. It contains the following two items [75,80,85].	A1-2 Cultural Landscape: Scenic landscape formed under the long-term influence of human activities on the natural environment, including relics and ruins, buildings and facilities, tourism commodities, and cultural activities.	Diversified commodities in the Art Yard.		This is a tourist commodity landscape
A2 Tourism Infrastructures: Tourism infrastructure refers not only to the material conditions created for the tourism industry, but also the public utilities and facilities of modern life shared by residents and tourists, which cover the following four segments [58,75,86,87].	A2-1 Recreational and Shopping Facilities: the collective term for a wide range of tourism, leisure and shopping facilities, such as the scenic spot itself (including a viewing deck or viewing area), its auxiliary facilities, including sports, shopping, and entertainment facilities.	Double 8—Rock Climbing Center.		This is a sports facility
	A2-2 Accommodation and Catering Facilities refer to the various facilities that provide accommodation and catering for tourists, such as hotels, inns, camps, restaurants, breakfast shops, etc.	The Carp—Specialty restaurant.		This is a catering facility

Table 6. Cont.

Description of the Revised Framework Criteria		Description of the Revised Framework Criteria in the Case Study of the Dadaocheng Historic District		
Criteria	Definition	Items	Landscapes	Description
A2 Tourism Infrastructures: Tourism infrastructure refers not only to the material conditions created for the tourism industry, but also the public utilities and facilities of modern life shared by residents and tourists, which cover the following four segments [58,75,86,87].	A2-3 Accessibility Facilities are the various transportation facilities that bring tourists to the district, such as vehicles, roads, ships, etc.	Public bicycle rental system in front of the Dadaocheng Theatre.		This is an accessibility facility
	A2-4 Amenity Facilities: a series of infrastructures to support life in the neighborhood and provide convenience for tourists, such as home facilities, public facilities, communication facilities, and security facilities.	Visitor Information Center.		This is a public service facility
A3 Image elements of the district: Image elements of the district refer to the interesting and impressive elements located in the district that can be perceived by people after becoming familiar with the environment. These elements are recognizable and constitute an important part of the district space cognition. They cover the following five segments [75,81,82].	A3-1 Paths refer to the identifiable, continuous and directional street network in a historic district. They are usually roads with defensive, life, sacrificial, leisure, fengshui and other image features or functions;	The long main street—Dihua St.		This is an identifiable element

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Table 6. *Cont.*

Description of the Revised Framework Criteria		Description of the Revised Framework Criteria in the Case Study of the Dadaocheng Historic District		
Criteria	Definition	Items	Landscapes	Description
	A3-2 Blocks: the contents in blocks establish different continuity features according to the division of blocks, such as ancient place names, district functions, administrative management, topographical features, street nodes, architectural styles, residents' ancestral homes, and marriage relations.	The area with most Chinese medicine shops in Dihua St.		This is a characteristic element of specialist product sales
A3 Image elements of the district: Image elements of the district refer to the interesting and impressive elements located in the district that can be perceived by people after becoming familiar with the environment. These elements are recognizable and constitute an important part of the district space cognition. They cover the following five segments [75,81,82].	A3-3 Nodes refer to the junctions of traffic routes or the gathering points for district activities. A node is usually a public social or cultural space, such as the space formed by intersecting roads. It can also be a gathering point or an area enclosed by buildings and their auxiliary spaces, such as parks, rings, temples and ancestral halls as well as their auxiliary spaces, and famous ancient trees and their auxiliary spaces.	Traffic node between Dihua St. and Minsheng West Road.		This is a junction node of traffic routes
	A3-4 Landmarks are buildings or natural objects in a district with high popularity which are highly representative or commemorative, such as temples, ruins, monuments, and department stores.	Reservist Counseling Centre of the Datong District.		This is a representative architectural element

Table 6. *Cont.*

Description of the Revised Framework Criteria			Description of the Revised Framework Criteria in the Case Study of the Dadaocheng Historic District	
Criteria	Definition	Items	Landscapes	Description
A3 Image elements of the district: Image elements of the district refer to the interesting and impressive elements located in the district that can be perceived by people after becoming familiar with the environment. These elements are recognizable and constitute an important part of the district space cognition. They cover the following five segments [75,81,82].	A3-5 Edges refer to the boundary that separates the district from the surroundings. Edges are normally visible and continuous; they can be roads or boundary signs, or mountains, waters, bridges, walls, plants, archways, and temples.	Taipei Bridge.		It is a boundary element.
B1 Tangible cultural resources: Tangible cultural resources: the values, characteristics or significance demonstrated by the tangible cultural resources in the district, which cover the following four segments [76,77,83,84].	B1-1 Artifacts: human-made artifacts other than buildings and spaces, such as inscriptions, sculptures, books, calligraphy, paintings, and items that are connected to celebrities.	Inscriptions in the Xia-Hai City God Temple.		This is a stone inscription that demonstrates cultural connotations
	B1-2 Buildings: a single building or a group of buildings, such as architectural patterns, styles, materials, and buildings that are connected to celebrities.	Ten Joined Townhouses.		This is a group of buildings that demonstrates cultural connotations.

Table 6. *Cont.*

	Description of the Revised Framework Criteria		Description of the Revised Framework Criteria in the Case Study of the Dadaocheng Historic District		
Criteria	Definition	Items	Landscapes	Description	
B1 Tangible cultural resources: Tangible cultural resources: the values, characteristics or significance demonstrated by the tangible cultural resources in the district, which cover the following four segments [76,77,83,84].	B1-3 Cultural and Social Fields are fields (including those existing in the past, those that still exist today, and those newly emerging) that provide spaces for regular or irregular cultural or social activities, such as cultural and social spaces that carry various intangible cultural resources, archaeological sites, and fields that are connected to celebrities.	The former site of Yung-le-tso the former theater.		This is a cultural field group that demonstrates cultural connotations.	
	B1-4 Landscape Features refers to connotations demonstrated by natural or cultural landscapes, such as natural areas, special topography, geological phenomena, rare minerals, plants, animals, and landscape formed under the long-term interactions between humans and nature.	Qilou passages in Dihua St.		This is a cultural landscape that demonstrates cultural connotations.	

Table 6. *Cont.*

	Description of the Revised Framework Criteria		Description of the Revised Framework Criteria in the Case Study of the Dadaocheng Historic District	
Criteria	Definition	Items	Landscapes	Description
B2 Intangible cultural resources: Intangible cultural resources refers to the values, characteristics or significance demonstrated by the intangible cultural resources in a district, which are usually behaviors or manifestations of special or important significance to the inheritance of traditional culture or the fusion of old and new cultures in the district. The activity-related content can be divided into the following types: non-governmental, governmental, and jointly run. Intangible cultural resources include six segments as follows [77,88,90–96].	B2-1 Narratives and memories refer to the stories told by residents in the district. The types of stories include historic tales, historic events, myths, legends, and fables.	Stories about the musician Li Lim-Chhiu.		It is a historic stories that demonstrates the cultural connotations.
	B2-2 Cultural activities reference the various performances or folklore activities held to pass on or illustrate the district culture, such as dramas, rituals, and theme performances.	God Folk Festival.		This is a folk activity that demonstrates cultural connotations.
	B2-3 Industrial culture activities reference the various industrial activities held to pass on or illustrate industries in the district, such as traditional industrial shows, traditional industry innovation competitions, industrial experience activities, and cultural and creative product activities.	Harvest Festival activities.		An industrial culture activity for inheritance and innovation that demonstrates cultural connotations.

Table 6. *Cont.*

	Description of the Revised Framework Criteria	Description of the Revised Framework Criteria in the Case Study of the Dadaocheng Historic District		
Criteria	Definition	Items	Landscapes	Description
B2 Intangible cultural resources: Intangible cultural resources refers to the values, characteristics or significance demonstrated by the intangible cultural resources in a district, which are usually behaviors or manifestations of special or important significance to the inheritance of traditional culture or the fusion of old and new cultures in the district. The activity-related content can be divided into the following types: non-governmental, governmental, and jointly run. Intangible cultural resources include six segments as follows [77,88,90–96].	B2-4 Characteristic cultural manifestations refer to the various concrete or abstract cultural manifestations that have been passed on by residents from generation to generation, are generally accepted by residents, or are closely related to the life of residents, such as language, writing, food, music, dance, technology, knowledge, management, festivals, local beliefs, lifestyle, and social networks.	Traditional tailoring techniques.		This is traditional craftsmanship that demonstrates cultural connotations.
	B2-5 Residents' images refer to the collective image of residents when participating in political, economic, and cultural activities, such as district identity; service awareness, cultural conservation awareness, environmental protection awareness, spiritual features, friendliness, social inclusiveness, residents' consensus, social participation, and social values.	The pride of residents.		This demonstrates a district identity with cultural connotations.
	B2-6 Service refers to the various services to address the parallel needs of residents and tourists, such as a tourism information service, tourism public security service, tourism social service functions, a tourism environment service, tourism elements assurance service, tourism commercial service, and domestic services for residents.	Traditional costume experience.		This demonstrates the cultural connotation of a tourism commercial service

4.2.4. The Modified Delphi Decision-Making Results

After seventeen experts rated the hierarchical framework, the following results were obtained (refer to Table 7).

Table 7. Necessity of Criteria Rating Statistics (Data source: organized in this research).

Criteria	Quartile Deviation (QD)	Average	Median	Mode	Maximum	Minimum
A1 Morphology of landscape	0.5	5.65	6	6	6	5
A2 Tourism infrastructure	0.5	5.29	5	5	6	4
A3 Image elements of the district	0.5	5.41	6	6	6	3
B1 Tangible culture resources	0.5	5.71	6	6	6	5
B2 Intangible culture resources	0.5	5.59	6	6	6	4

As can be seen, all five criteria had a QD of 0.5, which was less than 0.6, indicating that a high consensus was reached. Such a consensus was reached at the first scoring in Round 2 for two reasons: adequate communication between the author and the experts and the use of few criteria. In other words, the amended hierarchical framework of cultural tourism attractiveness for Chinese historic districts was the final one.

5. Case Study

Located in the old city of Taipei, the Dadaocheng Historic District is a Chinese historic district popular with tourists where the culture and landscape have been relatively well preserved, the cultural and creative industries and the district rejuvenation have been closely integrated. In particular, Dihua Street is the highlight of the district and an ideal destination for cultural tourists. Therefore, the Dadaocheng Historic District was chosen as a typical case for studying the cultural tourism attractiveness of Chinese historic districts.

The author took the contents in the hierarchical framework of tourism attractiveness for Chinese historic districts as the basis for observation in the Dadaocheng Historic District and obtained the following results (refer to Table 6).

As shown in Table 6, the landscapes in the pictures correspond to the physical environment and the cultural and natural environment of the Dadaocheng Historic District. Therefore, each picture represents a landscape and corresponds to a content of the framework. There are many specific manifestations of each landscape, and photos are just one of them. And each landscape has many specific forms of expression, and the landscape in each photo is just one of them. Take the public bicycle rental system in front of the Dadaocheng Theatre as an example. It is just one of the accessibility facilities in the Dadaocheng Historic District. The landscapes formed by the MRT (Mass Rapid Transit) system and the public bus system also belong to landscapes of accessibility facilities.

It can be seen that many landscapes are directly related to tourism. Therefore, tourism development has a significant impact on the landscape of the tourist destination [97]. In brief, through the specific case analysis of the Dadaocheng historic district, the basic method of applying the hierarchical framework has been introduced. Of course, every landscape is only one of the specific manifestations of related contents in the hierarchical framework, and districts have different actual situations, the same content in different historic streets may correspond to different landscapes.

6. Conclusions and Suggestions

This section consists of two parts: conclusions and suggestions. The former covers the origin of the research, research findings, research contributions, and the limitations of this research; the latter makes proposals for follow-up research to address the above limitations.

6.1. Conclusions

Chinese are located in almost every continent of the world. As long as it is a place where there are Chinese people, it usually forms a district with Chinese characteristics. As an important part of the Chinese cultural heritage, Chinese historic districts showcase the history and culture of the Chinese, and attract many tourists. How to balance the relationship between landscape conservation and tourism development, and how to demonstrate the value of heritage in the sustainable development perspective, is a problem worthy of much thought. This is also the reason why this paper selects Chinese historic districts as the research object.

This paper takes expert interviews and structural observation as the research method to explore the cultural tourism attractiveness of Chinese historic districts and comes up with two findings. First, the redefinition of a Chinese Historic District is made by combining the two concepts of Chinese district and historic district, and the redefinition of cultural tourism attractiveness is made by combining the two concepts of cultural tourism and tourism attractiveness. The former is a space formed by one or more main streets and subsidiary alleys and lanes, including those with legal identities related to cultural heritage conservation and those without such legal identities. The difference between Chinese historic districts and non-Chinese historic districts lies in their different geographical locations: that is, Chinese historic districts generally exist in mainland China, Hong Kong, Macau, and Taiwan as well as overseas Chinatowns; in essence, different cultural styles contribute to the difference. Chinese historic districts are distinguished by the congregated settlement of Chinese, the numerous Chinese-style buildings, Chinese signs, and Chinese restaurants along with the strong atmosphere of Chinese folk customs and festivals, which manifest the "distinctive characteristics of Chinese culture". The latter is different from the general tourism attractiveness. Cultural tourism attractiveness is developed under the joint action of tourists' cultural motivation and the cultural resources in the tourist destination. Culture is the bridge that connects the two, and it is also the source and core of cultural tourism attractiveness. Second, a hierarchical framework of cultural tourism attractiveness for Chinese historic districts is produced, which takes the physical environment and the cultural and natural environments as the aspects and the morphology of landscape, tourism infrastructure, image elements of the district, and tangible and intangible cultural resources as the criteria, and 21 elements including natural landscape and cultural landscape as the contents. Reflecting on the prototype framework, the reason for the deletion for the aspect of marketing strategy is likely to be that tourism attractiveness added with an external force such as promotion and marketing is extra tourism attractiveness: that is, the cultural tourism attractiveness referred to the direct relationship between the tourism resources in the districts and the cultural needs of tourists. The biggest difference between this framework and a general tourism attractiveness framework is that it not only makes the cultural position more prominent, but more importantly, it considers issues from the perspective of tourism development whilst standing for sustainable development. Therefore, it has well balanced the relationship between tourism development and landscape conservation, and fully considered the interests of the four main participants in the development of districts, including cultural and historic practitioners, district delegates, tourism practitioners, and planning and operating personnel. At the same time, the framework provides a list of initial elements for the observation, understanding, and evaluation of the cultural tourism attractiveness of Chinese historic districts under the premise of landscape conservation.

The contributions of this research are mainly reflected in two areas. In theory, the redefinitions of "Chinese historic district" and "cultural tourism attractiveness" help to clarify the scope and meaning of the two terms, while the establishment of the hierarchical

framework outlines the components of cultural tourism attractiveness for Chinese historic districts in a systematic way. In practice, this framework provides a theoretical reference for the coordinated development of the economy and culture when authorities at different levels are making plans to improve cultural tourism attractiveness and to support the landscape conservation of Chinese historic districts.

Subject to the constraints of the research approach, research method, and reference data, this research has the following two limitations: first, the interactions among the criteria of cultural tourism attractiveness as applied to the Dadaocheng Historic District and the source of the interactions are not identified; second, the importance and performance of the various criteria of the Dadaocheng Historic District have not been obtained.

6.2. Suggestions

In order to further improve the researchers on this topic and provide follow-up researches with clearer thoughts and references, this paper makes the following suggestions:

A. Explore the interactions among the criteria of this hierarchical framework in specific Chinese historic districts, find out the source of the interactions, and plot a causal diagram;

B. Analyze the importance and performance of each criterion of this hierarchical framework in specific Chinese historic districts, and plot an Importance-Performance Analysis (IPA) diagram.

References

1. Prieto, I.; Izkara, J.L.; Béjar, R. Web-Based tool for the sustainable refurbishment in historic districts based on 3d city model. In *Advances in 3D Geoinformation*; Alias, A.R., Ed.; Springer International Publishing: Basel, Switzerland, 2017; pp. 159–169.
2. Veirier, L. *Historic Districts for All: A Social and Human Approach for Sustainable Revitalization*; Manual for City Professionals; United Nations Educational, Scientific and Cultural Organization (UNESCO): Paris, France, 2008; pp. 1–103.
3. Cho, W.; Kim, M.; Kim, H.; Kwon, Y. Transforming Housing to Commercial Use: A Case Study on Commercial Gentrification in Yeon-nam District, Seoul. *Sustainability* **2020**, *12*, 4322. [CrossRef]
4. Chou, L. The Conservation of China's Historical Sites under Rapid Urbanization in the Case of Xixing District. *Resourceedings* **2019**, *2*, 125–132. [CrossRef]
5. UNESCO. Recommendation on the Historic Urban Landscape. 2011. Available online: https://whc.unesco.org/uploads/activities/documents/activity-638-98.pdf (accessed on 5 August 2020).
6. UNESCO. The UNESCO Recommendation on the Historic Urban Landscape Implementation by Member States. 2019. Available online: https://whc.unesco.org/en/hul (accessed on 10 August 2020).
7. C.I.A.M. The Athens Charter for the Restoration of Historic Monuments. Available online: https://www.icomos.org/en/resources/charters-and-texts/179-articles-en-francais/ressources/charters-and-standards/167-the-athens-charter-for-the-restoration-of-historic-monuments (accessed on 10 August 2020).

8.   Ginting, N.; Rahman, N.V. Preserve urban heritage district based on place identity. *Asian J. Environ. Behav. Stud.* **2016**, *1*, 67–77. [CrossRef]
9.   ICOMOS. The Valletta Principles for the Safeguarding and Management of Historic Cities. Available online: https://www.icomos.org/en/resources/charters-and-texts (accessed on 5 August 2020).
10. Nocca, F.; Girard, L.F. Towards an integrated evaluation approach for cultural urban landscape conservation/regeneration. *Region* **2018**, *5*, 33–51. [CrossRef]
11. Dai, L.; Wang, S.; Xu, J.; Wan, L.; Wu, B. Qualitative Analysis of Residents' Perceptions of Tourism Impacts on Historic Districts: A Case Study of Nanluoguxiang in Beijing, China. *J. Asian Archit. Build. Eng.* **2017**, *16*, 107–114. [CrossRef]
12. Diaz-Parra, I.; Jover, J. Overtourism, place alienation and the right to the city: Insights from the historic centre of Seville, Spain. *J. Sustain. Tour.* **2020**, *29*, 158–175. [CrossRef]
13. Bal, W.; Czalczynska-Podolska, M. Assessing Architecture-and-Landscape Integration as a Basis for Evaluating the Impact of Construction Projects on the Cultural Landscape of Tourist Seaside Resorts. *Land* **2021**, *10*, 17. [CrossRef]
14. Cruz, G.R. The Cultural Heritage-Oriented Approach to Economic Development in the Philippines: A Comparative Study of Vigan, Ilocos Sur and Escolta, Manila. In Proceedings of the 10th DLSU Arts Congress, Arts and Culture Heritage, Practices and Futures, Manila, Philippines, 16 February 2017.
15. Hsieh, Y.L. Seeking Serious Tourists–Balancing Culture, Conservation and Economic Gains from Aboriginal Tourism. In Proceedings of the 2009 Ttra International Conference, Honolulu, HI, USA, 21–24 June 2009.
16. Du Cros, H.; McKercher, B. *Cultural Tourism*, 3rd ed.; Routledge: London, UK, 2020.
17. Engelhardt, R.A.; Rogers, P.R. Hoi an Protocols for Best Conservation Practice in Asia: Professional Guidelines for Assuring and Preserving the Authenticity of Heritage Sites in the Context of the Cultures of Asia. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000182617 (accessed on 16 August 2020).
18. ICOMOS. International Cultural Tourism Charter, Managing Tourism at Places of Heritage Significance. Available online: https://www.icomos.org/charters/tourism_e.pdf (accessed on 5 August 2020).
19. ICOMOS. The Seoul Declaration on Tourism in Asia's Historic Towns and Areas. Available online: https://www.icomos.org/xian2005/seoul-declaration.pdf (accessed on 5 August 2020).
20. UNWTO and UNESCO. Siem Reap Declaration on Tourism and Culture—Building a New Partnership Model. Available online: https://www.e-unwto.org/doi/abs/10.18111/unwtodeclarations.2015.24.01 (accessed on 20 August 2020).
21. UNWTO and UNESCO. Muscat Declaration on Tourism and Culture: Fostering Sustainable Development UNWTO Declarations. Available online: https://www.e-unwto.org/doi/abs/10.18111/unwtodeclarations.2017.26.05 (accessed on 20 August 2020).
22. UNWTO and UNESCO. Istanbul Declaration on Tourism and Culture: For the Benefit of All. Available online: https://www.e-unwto.org/doi/abs/10.18111/unwtodeclarations.2018.27.02 (accessed on 20 August 2020).
23. UNWTO and UNESCO. Kyoto Declaration on Tourism and Culture: Investing in Future Generations. Available online: https://www.e-unwto.org/doi/abs/10.18111/unwtodeclarations.2019.28.04 (accessed on 25 August 2020).
24. Wise, N.; Jimura, T. Changing Spaces in Historical Places. In *Tourism, Cultural Heritage and Urban Regeneration*; Springer: Berlin, Germany, 2020; pp. 1–19.
25. Lai, L.W. Sustainable development of heritage conservation and tourism: A Hong Kong case study on colonial heritage. *Sustain. Dev.* **2020**, *28*, 1181–1188. [CrossRef]
26. Wang, X.; Liu, J.X.; He, W.L. The Relationship of Tourism Motivation, Perceived Value and Destination Loyalt—A Case of Macao Cultural Heritage. *Stud. Hong Kong Macao* **2015**, *2*, 20–34. (In Chinese)
27. Liu, X.M.; Xu, H.G.; Bao, J.G. Preservation and Renewal of Historical and Cultural Blocks in Cities of Foreign Countries. *Mod. Urban Res.* **2005**, *11*, 13–21. (In Chinese)
28. Chiang, Y.J.; Lee, W.; Wu, L.Y. A Study on Relationship among Tourism Image, Tourism Experience and Behavioral Intentions-A Case Study for Sinhua Old Street. *J. Leis. Tour. Sport Health* **2013**, *3*, 151–173. (In Chinese)
29. Liang, X.C. The Tourism Development Model of Historic and Cultural Districts in under the Urbanization Background. *Soc. Sci.* **2020**, *5*, 14–20. (In Chinese)
30. UNESCO. Implementation of the UNESCO Historic Urban Landscape. Available online: https://whc.unesco.org/en/hul/ (accessed on 5 February 2021).
31. Wang, S.; Gu, K. Pingyao: The historic urban landscape and planning for heritage-led urban changes. *Cities* **2020**, *97*, 102489. [CrossRef]
32. Kou, H.; Zhou, J.; Chen, J.; Zhang, S. Conservation for sustainable development: The sustainability evaluation of the xijie historic district, Dujiangyan City, China. *Sustainability* **2018**, *10*, 4645. [CrossRef]
33. Zhang, X.D. A Literature Review of Historic District Conservation in China. In Proceedings of the 2018 Annual Conference of China City Planning (The Conservation of Urban Cultural Heritages), Beijing, China, 24 November 2018. (In Chinese).
34. Zhang, J.D. A Literature Review and Enlightenments of Conservation and Exploitation for Foreign Historic Districts. *China Constr.* **2013**, *10*, 70–73. (In Chinese)
35. Li, Z. A Review of the Research on Historic Conservation Area Protection in China. *Archit. Cult.* **2016**, *9*, 78–81. (In Chinese)
36. Miao, B.B. A Literature Review of Sustainable Development of Historic Districts in China. *City House* **2019**, *7*, 195–196. (In Chinese)
37. Xu, J.; Chen, X.J. Review and Reflection on the Research about Tourism Development of Historical Blocks in China. *Tour. Hosp. Prospect.* **2018**, *2*, 54–72. (In Chinese)

38. Wu, J.M. *World-Famous Chinese Districts: Chinatowns*; Jilin People's Press: Changchun, China, 2009. (In Chinese)
39. The State Council of the People's Republic of China. Regulation on the Protection of Famous Historical and Cultural Cities, Towns and Villages. Available online: http://www.gov.cn/zwgk/2008-04/29/content_957280.htm (accessed on 22 August 2020).
40. Tainan City Government. Tainan City Self-Government Ordinance for the Revitalization of Historic Street Districts. Available online: http://law01.tainan.gov.tw/glrsnewsout/NewsContent.aspx?id=224 (accessed on 17 August 2020).
41. Boivin, M.; Tanguay, G.A. Analysis of the determinants of urban tourism attractiveness: The case of Québec City and Bordeaux. *J. Destin. Mark. Manag.* **2019**, *11*, 67–79. [CrossRef]
42. Liu, T.; Butler, R.J.; Zhang, C. Evaluation of public perceptions of authenticity of urban heritage under the conservation paradigm of Historic Urban Landscape—A case study of the Five Avenues Historic District in Tianjin, China. *J. Archit. Conserv.* **2019**, *25*, 228–251. [CrossRef]
43. Shi, R.M.; Liu, M.Z. Applying Fuzzy Comprehensive Evaluation Model to Historical District Conservation Research. *Planners* **2008**, *24*, 72–75. (In Chinese)
44. Bai, X.T. Chinese Communities in the Far East of Russia from 1891 to 1900. Master's Thesis, Heilongjiang University, Haerbin, China, 2019.
45. UNESCO. Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas. Available online: http://portal.unesco.org/en/ev.phpURL_ID=13133&URL_DO=DO_TOPIC&URL_SECTION=201.html (accessed on 16 August 2020).
46. ICOMOS. The Hoi an Declaration on Conservation of Historic Districts of Asia. Available online: https://www.icomos.org/xian2005/hoi-an-declaration.pdf (accessed on 16 August 2020).
47. ICOMOS. Charter for the Conservation of Historic Towns and Urban Areas (The Washington Charter). Available online: https://www.icomos.org/images/DOCUMENTS/Charters/towns_e.pdf (accessed on 16 August 2020).
48. Richards, G. *Cultural Tourism in Europe*; Cab International: Wallingford, UK, 1996.
49. UNWTO. Tourism and Culture. Available online: https://www.unwto.org/tourism-and-culture (accessed on 18 August 2020).
50. EU and COE Cultural Tourism in the EU Macro-Regions: Cultural Routes to Increase the Attractiveness of Remote Destinations. Available online: https://rm.coe.int/routes4u-manual-attractiveness-remote-destination-cultural-tourism/16809ef75a%0A%0A (accessed on 27 August 2020).
51. Middleton, V.T. Marketing implications for attractions. *Tour. Manag.* **1989**, *10*, 229–232. [CrossRef]
52. Hu, Y.; Ritchie, J.B. Measuring destination attractiveness: A contextual approach. *J. Travel Res.* **1993**, *32*, 25–34.
53. Gunn, C.A. *Tourism Planning: Basics, Concepts, Cases*, 3rd ed.; Taylor and Francis: Washington, DC, USA, 1994.
54. Kim, S.S.; Lee, C.K. Push and pull relationships. *Ann. Tour. Res.* **2002**, *29*, 257–260. [CrossRef]
55. Iatu, C.; Bulai, M. A critical analysis on the evaluation of tourism attractiveness in Romania. Case study: The region of Moldavia. In Proceedings of the 5th WSEAS International Conference on Economy and Management Transformation, Timisoara, Romania, 23–26 October 2010.
56. Vetrova, E.A.; Kabanova, E.E.E.; Nakhratova, E.E.; Baynova, M.S.; Evstratova, T.A. Project management in the sphere of tourism (using the example of Taganrog). *Acad. Strateg. Manag. J.* **2018**, *17*, 1–9.
57. Vengesayi, S.; Mavondo, F.T.; Reisinger, Y. Tourism destination attractiveness: Attractions, facilities, and people as predictors. *Tour. Anal.* **2009**, *14*, 621–636. [CrossRef]
58. Krešić, D.; Prebežac, D. Index of destination attractiveness as a tool for destination attractiveness assessment. *Turiz. Međunarodni Znan. Stručni Časopis* **2011**, *59*, 497–517.
59. Giambona, F.; Grassini, L. Tourism attractiveness in Italy: Regional empirical evidence using a pairwise comparisons modelling approach. *Int. J. Tour. Res.* **2020**, *22*, 26–41. [CrossRef]
60. Murry, J.W., Jr.; Hammons, J.O. Delphi: A versatile methodology for conducting qualitative research. *Rev. High. Educ.* **1995**, *18*, 423–436. [CrossRef]
61. Du, A.; Xu, W.; Xiao, Y.; Cui, T.; Song, T.; Ouyang, Z. Evaluation of prioritized natural landscape conservation areas for national park planning in China. *Sustainability* **2020**, *12*, 1840. [CrossRef]
62. Vlami, V.; Zogaris, S.; Djuma, H.; Kokkoris, I.P.; Kehayias, G.; Dimopoulos, P. A field method for landscape conservation surveying: The landscape assessment protocol (LAP). *Sustainability* **2019**, *11*, 2019. [CrossRef]
63. Normand, S.L.T.; Mc Neil, B.J.; Peterson, L.E.; Palmer, R.H. Eliciting expert opinion using the Delphi technique: Identifying performance indicators for cardiovascular disease. *Int. J. Qual. Health Care* **1998**, *10*, 247–260. [CrossRef]
64. Turoff, M.; Linstone, H.A. *The Delphi Method-Techniques and Applications*; Addison-Wesley Educational Publishers: Boston, MA, USA, 1975.
65. Belton, I.; Mac Donald, A.; Wright, G.; Hamlin, I. Improving the practical application of the Delphi method in group-based judgment: A six-step prescription for a well-founded and defensible process. *Technol. Forecast. Soc. Chang.* **2019**, *147*, 72–82. [CrossRef]
66. Okoli, C.; Pawlowski, S.D. The Delphi method as a research tool: An example, design considerations and applications. *Inf. Manag.* **2004**, *42*, 15–29. [CrossRef]
67. Goodman, C.M. The Delphi technique: A critique. *J. Adv. Nurs.* **1987**, *12*, 729–734. [CrossRef]
68. Holden, M.C.; Wedman, J.F. Future issues of computer-mediated communication: The results of a Delphi study. *Educ. Technol. Res. Dev.* **1993**, *41*, 5–24. [CrossRef]

69. Lu, H.K.; Tsai, S.C.; Lin, P.C.; Chu, K.C.; Chen, A.N. Toward a New Real-Time Approach for Group Consensus: A Usability Analysis of Synchronous Delphi System. *Group Decis. Negot.* **2020**, *29*, 1–26.
70. Faherty, V. Continuing social work education: Results of a Delphi survey. *J. Educ. Soc. Work* **1979**, *15*, 12–19. [CrossRef]
71. Rydberg, A.; Ericson, B.; Lindstedt, E. Use of a structured observation to evaluate visual behavior in young children. *J. Vis. Impair. Blind.* **2004**, *89*, 172–179. [CrossRef]
72. Hall, E.T. *The Silent Language*; Doubleday: New York, NY, USA, 1959.
73. UNESCO. New Life for Historic Cities: The Historic Urban Landscape Approach Explained. Available online: https://whc.unesco.org/en/activities/727/ (accessed on 24 August 2020).
74. Arnauld, A.; Nicole, P. *La Logique de Port-Royal*; Hachette Livre: Paris, France, 1868.
75. Physical Environment. Available online: http://socialreport.msd.govt.nz/2003/physical-environment/physical-environment.shtml (accessed on 9 August 2020).
76. Standing Committee of the National People's Congress. Cultural Relics Protection Law of the People's Republic of China (2017 Amendment). Available online: http://www.scio.gov.cn/xwfbh/xwbfbh/wqfbh/37601/38374/xgzc38380/Document/1630060/1630060.htm (accessed on 25 August 2020). (In Chinese)
77. Standing Committee of the National People's Congress. Intangible Cultural Heritage Law of the People's Republic of China. Available online: http://www.gov.cn/flfg/2011-02/25/content_1857449.htm (accessed on 9 September 2020). (In Chinese)
78. Fletcher, J.; Fyall, A.; Gilbert, D.; Wanhill, S. *Tourism: Principles and Practice*; Pearson: London, UK, 2017.
79. McCarthy, E.J.; Shapiro, S.J.; Perreault, W.D. *Basic Marketing*; Irwin-Dorsey: Ontario, CA, USA, 1979.
80. Sauer, C. The morphology of landscape. In *the Cultural Geography Reader*; Routledge: London, UK, 2008; pp. 108–116.
81. Lynch, K. *The Image of the City*; MIT Press: Cambridge, UK, 1960; Volume 11.
82. Downs, R.M.; Stea, D. Cognitive maps and spatial behavior: Process and products. In *Image and Environment: Cognitive Mapping and Spatial Behavior*; Transaction Publishers: Piscataway, NJ, USA, 1973; pp. 8–26.
83. UNESCO. Operational Guidelines for the Implementation of the World Heritage Convention. Available online: https://whc.unesco.org/en/guidelines (accessed on 9 August 2020).
84. UNESCO. Convention Concerning the Protection of the World Cultural and Natural Heritage. Available online: https://whc.unesco.org/en/conventiontext (accessed on 9 August 2020).
85. National Standards of the People's Republic of China: Classification, Investigation and Evaluation of Tourism Resources. Available online: https://net.fafu.edu.cn/zgslgy/c6/70/c5616a116336/page.htm (accessed on 9 September 2020). (In Chinese).
86. Kavunkil Haneef, S. *A Model to Explore the Impact of Tourism Infrastructure on Destination Image for Effective Tourism Marketing*; University of Salford: Salford, UK, 2017.
87. Gearing, C.E.; Swart, W.W.; Var, T. Establishing a measure of touristic attractiveness. *J. Travel Res.* **1974**, *12*, 1–8. [CrossRef]
88. UNESCO. Convention for the Safeguarding of the Intangible Cultural Heritage. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000132540 (accessed on 16 August 2020).
89. Coombs, R.; Narandren, P.; Richards, A. A literature-based innovation output indicator. *Res. Policy* **1996**, *25*, 403–413. [CrossRef]
90. The Executive Yuan of the Republic of China. *Cultural Heritage Preservation Act*. Available online: https://law.moj.gov.tw/LawClass/LawAll.aspx?PCode=H0170001 (accessed on 9 September 2020). (In Chinese)
91. Jia, X. Research on the Culturalization of Traditional Industry in Gongjing District under the Background of Industrial Transformation. *Open Access Libr. J.* **2020**, *7*, 1. [CrossRef]
92. Dai, L.L.; Jiang, N. A Study on Tourist Satisfaction with the Cultural and Creative Industry in Historic Districts. *J. Yangzhou Univ.* **2016**, *20*, 60–65. (In Chinese)
93. Harper, R.E. The Role of Citizen Awareness in the American Historic Preservation Movement. *Rad. Inst. Povij. Umjet.* **1996**, *20*, 184–187.
94. Montealegre, M.G. Solutions for the Sustainable Management of a Cultural Landscape in Danger: Mar Menor, Spain. *Sustainability* **2020**, *12*, 335. [CrossRef]
95. Li, J.Y.; Xie, L.S.; Guan, X.H. Scale Development and Validation of Tourism Public Service Quality. *Tour. Trib.* **2016**, *31*, 117–127. (In Chinese)
96. Li, S.; Gan, Q.L.; Liu, W.B. Tourism Public Services System: An Exploration of the Theoretical Framework. *J. Beijing Int. Stud. Univ.* **2010**, *5*, 8–15. (In Chinese)
97. Bal, W.; Czalczynska-Podolska, M. The Stages of the Cultural Landscape Transformation of Seaside Resorts in Poland against the Background of the Evolving Nature of Tourism. *Land* **2020**, *9*, 55. [CrossRef]

Landscape and Tourism as Tools for Local Development in Mid-Mountain Rural Areas in the Southeast of Spain (Castilla-La Mancha)

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Abstract: The modernization of economic activities in mountain areas is conditioned by the physical characteristics of the territory, the weight of activities related to the primary sector, infrastructure deficits, low population density, as well as the declining and ageing population. The response to this situation has involved implementing a certain degree of functional diversification. One of the aspects that has assisted in the expansion of the tertiary sector is leisure and recreational activities. Rural tourism in European mid-mountain regions has emerged as a key element, supported by local development strategies and changing preferences in demand. In the tourism industry, the resources are the raw material, in which landscape plays a leading role. The aim of this prospective study is to evaluate the landscape as a heritage and a tourism resource, focusing on its capacity to reactivate depressed rural areas of inland Spain (mid-mountain areas in the southeast of the autonomous region of Castilla-La Mancha). The study is based on opinions provided by tourists and uses a directed survey as an analytical tool. The results highlight the key role of landscape, especially natural landscape, in the use of such areas for tourism. This, in turn, underlines the need for a greater focus on organizing how the landscape is utilized.

Keywords: landscape; multifunctionality; rural tourism; local development

1. Introduction

Understanding the rapid transformation of landscapes resulting from their adaptation to varying economic and social processes is currently a topic of considerable interest. Mountain areas in Europe are undergoing socioeconomic changes, and particularly those that promote the multifunctionality of rural regions. These changes impact the characteristics and uses of the landscape. The present study aims to contribute to the debate on the role of landscape, which is considered one of the resources with the greatest impact on the tourism system in mid-mountain areas, identifying the reasons for and characteristics of the recreational use made of such areas. The study analyzes the experience and opinions of the landscape of visitors to a rural area of inland Spain. The area in question is a Mediterranean mid-mountain region affected by the structural problems of traditional agricultural models, with marked demographic decline, problems of accessibility and a shortage of services. Over the last three decades, a large number of tourist establishments have been created, and rural tourism has become a notable focus of development. We specifically focus on excursionists and day-trippers' perceptions of the area, justifying their choice of destination and the increased supply of rural tourism accommodation.

As suggested by Lefebvre, there are three dimensions to the analysis of space: spatial practice, associated with daily life and the perception of common sense, centered on the action of people, which is often neglected in social research; space, as conceptualized and intellectually conceived by the world of academia; and the representational space of art and literature [1]. Space is in a process of continuous reconfiguration, whereby some regions

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lose out, but are then retrieved and used by society through fluid, sociomaterial networks, based on the actor–network theory [2].

Since the second half of the 20th century, rural areas in Europe have undergone intense processes of economic, social and environmental change [3], affected by the global forces generated by the increase in activities not related to the primary sector [4]. The change in the direction of agricultural policies in the 1980s [5] drove a search for alternative activities to diversify the economic functions of agricultural areas, with the aim of improving their future prospects. Since then, rural tourism has been considered one of the leading options for rural development, a priority in new policy guidelines. LEADER, the European Community initiative (launched in 1991), has been viewed as the largest program for the promotion of tourism in Europe, and, although the number of tourism-related projects has gradually decreased, the role of community policy in converting rural areas into tourist locations has been crucial.

The European Community institutions have encouraged multifunctionality built on respect for the environment, promotion of the local culture, greater integration of rural and urban worlds and the capacity to provide ecosystem resources [6–10]. Diversifying local economies helps reduce conflicts and optimizes benefits, making both space and time more efficient [11]. The principle of multifunctionality aims to change the traditional productive orientation of these areas devoted to the primary sector and thus encourage sustainable development and resilient landscapes [12]. Nonetheless, some authors have questioned the lack of such policies focused on highly rural areas [13]. It is true, however, that the current objectives seek to consolidate the new role of rural areas based on principles that are critical to the process of globalization, and that are oriented towards local development and build on strategies such as territorial marketing or new forms of governance.

In the so-called highly rural mountain areas of inland Spain, there is currently an evident, complex series of problems and multicausal weaknesses (low population density, poor accessibility, lack of infrastructures, excessive reliance on the primary sector, inadequate production conditions, etc.), which leave them in a highly disadvantaged position due to their growing economic and social impoverishment [14]. This situation is a manifestation of what is known as "territorial transition", a term that refers to the transformation of Spain since the second half of the 20th century. The country has completely transformed; what was originally a pattern of settlements characteristic of an agricultural and rural society is now a regionally polarized country, the result of its conversion into a typically 21st century urban service-based economy. The rural exodus and subsequent neglect of rural areas has marked this development. The primary characteristic of the current social crisis in these areas is typified by the declining demographic structures, the most visible consequences of which are the problems of ageing populations, the lack of generational turnover and dramatic depopulation [15], the same weaknesses found in other parts of Europe. In response to these failings, regional planning strategies of various scales have been undertaken, especially in highly rural areas.

In Spain, Article 10 of the *Law for the Sustainable Development of Rural Areas* defines "rural areas to be revitalised" as those with scant population, low levels of income, a significant presence of the agricultural sector, and geographic isolation [16]. Strategies to bolster rural tourism have targeted these areas, respecting the principles of local and sustainable development. This is designed to improve the management of resources to resolve social and economic needs while safeguarding the preservation of the culture, biodiversity, ecological processes and basic conditions of the local population. Indeed, the World Tourism Organisation highlights the need to protect the environment and enhance opportunities for the future in the relationships between tourism and tourist-receiving regions. In this scenario, regional and local tourism resources take on an increasingly leading role, with landscape being a particularly significant element.

The aim of the present study is to evaluate the potential of the landscape in mountain-area tourism, using the opinions of visitors collected through a field survey. When the role of landscape in tourism is analyzed, the questions arises of whether it actually is a resource

and, above all, what role it plays within the local touristic offers and products of a territory. A further question concerns whether the different administrations treat landscapes in a way that responds to the social uses made of them.

The work is organized into four parts. The first section addresses the relationships between tourism and local development in highly rural areas, and their associations with landscape. To this end, a review of the literature related to the sociocultural context of this study was conducted, with a focus on works published in the European Community, and specifically the case of Spain. The second section describes the methodology used to analyze these relationships, which was principally built on a survey of visitors and tourists in the area under study, namely a rural mid-mountain region of inland Spain. The third section discusses landscape as a dominant tourism asset, while the fourth presents our conclusions.

1.1. Tourism as a Tool for Development in Highly Rural Areas

Touristic activity, with its territorial, economic and environmental consequences [17–19], fosters multidimensional relationships between resources, consumers, companies and administrations [20], and has the capacity to adapt to the new circumstances and scenarios of postmodern society. Today, the importance of enjoying free time for leisure activities, and tourists' changing preferences, which necessitate alternatives to the well-worn destinations of mass tourism, are elements that have led to rural areas becoming the target of an influx of visitors interested in discovering the natural and cultural values of rural locations. Such values were once considered symbols of tradition and economic backwardness [21–24].

Rural tourism has thus emerged as a strategic element for local and sustainable development. It is widely regarded as a tool for socioeconomic revitalization, which can help counter or even reverse some of the previously mentioned problems [25,26]. Conceptually, however, there is no unanimous consensus on the definition of rural tourism in the scientific literature [27]. It can be broadly defined as the implementation of tourism activities in rural areas (including a diversity of formats: agrotourism, green tourism, eco-tourism, hunting tourism, wellness tourism, sport and adventure tourism, etc.). Despite the ambiguity of the concept, it has certain distinguishing characteristics, such as respect for environmental resources, appreciation of the authenticity of local communities, and interest in the preservation of local values, heritage, and resources [28] (pp. 9–11). It is primarily motivated by activities that bring individuals into contact with the rural environment and with its culture or local heritage. In addition, rural tourism is based on a micro model, from the perspectives both of products, namely micro-destinations (as opposed to the overcrowded locations of other mass tourism alternatives), and the enterprises involved (which are typically small businesses) [29] (p. 21).

The European initiative, LEADER, and the Spanish strategy, PRODER, have implemented measures in this line, designed to reactivate local economies, preserve the environment and promote tourism as an economic and social alternative [30] (pp. 407–411). This is also the direction taken by Spanish planning in the sector [31,32].

Consequently, the sector has grown significantly in mid-mountain areas, although there remain aspects requiring attention and improvement. Various weaknesses were underlined by the economic crisis in 2008 [33] as a result of the expansionary policy of setting up new establishments in rural areas without a parallel increase in specific, high-quality differentiated products [34]. The process of tourism development is highly dependent on the presence of territorial resources, which are strategic elements in this process of change.

1.2. Landscape as a Tourism Resource

The European Landscape Convention [35] led to a broader concept of the term and the promotion of policies related to landscape [36]. The theoretical groundings of the Convention provide a holistic vision of landscape, which goes beyond the previous selective and protective understanding (directed exclusively at areas of special environmental

interest), focusing on managing and planning landscape as a part of territory. It includes the temporal management of the concept [37] and considers the diversity and abundance of ecosystem services [38]. Above all, however, there is an insistence on citizen concern and participation, based on the view of landscape as "any part" of a territory perceived as such by the population [39–41].

Since 2008, when the Convention came into effect in Spain, there has been growing institutional interest in landscape in response to social concern and unease. Most of the laws concerning the natural heritage, the rural world or planning in Spain (at all levels and areas of action) include the concept of landscape as an element of priority attention, given the "increasing incorporation of natural landscapes in strategies of tourism and territorial development, together with the complexity of managing landscape and its vulnerability and the threats to which some landscapes are submitted", [42] (p. 6). The *Spanish Cultural Landscape Plan* was created to lay the foundations for the safeguarding of significant landscapes. Additionally, in the second decade of the 21st century, the *2011-17 Strategic Plan for the Natural Heritage and Biodiversity*, in its second goal (which refers to protecting, conserving and restoring the natural world in Spain and reducing the main threats it suffers), includes the aim of promoting ecological restoration, the environmental connectivity of territory, and landscape protection. Most of Spain's autonomous communities have enacted their own landscape laws or have included this element within other regulatory frameworks. Castilla-La Mancha, in this regard, is lagging behind [43], although at the time of writing, the *draft law on the protection, management, planning and promotion of the landscape of Castilla-La Mancha* has been made public, and will help fill the present vacuum in the region.

This change is largely due to the growing interest in landscape, wherein tourism is of undeniable significance. The environmental values and productive capacities of a territory have been recognized, while a territory is also seen as a support for activities, infrastructures, and tourist facilities. It is home to groups of human individuals with all their potential, and is underpinned by different landscapes [44] (p. 53). Landscape also constitutes an element of tourist consumption, having emerged as one of the key reasons for visiting rural areas in different parts of Europe [45]. Rural tourism appropriates and consumes territory [46], which becomes the source of non-relocatable assets and is then a resource itself, in the form of the sector's raw material.

The landscapes most widely used for tourism purposes are primary, and especially the intermediate ones, where the human footprint is limited and whose attraction lies precisely in the preservation of traditional features. Intermediate landscapes are undergoing changes in their functions, morphology, and character; new uses are being incorporated, associated with nostalgia, uniqueness, and environmental quality, as result of their utilization for leisure and tourism. Tourism micro-destinations have emerged, which boast the intangible values of their territories and their ability to generate sensations and emotions [47], which in turn become factors associated with the location [48] (p. 19). Rural landscapes have a twofold quality: they are the home and workplace of the local population, while also being a place of leisure and enjoyment for tourists. As such, the literature has underlined their role as a tool for the analysis of tourism, as a nexus of the global and the local, and as an example of the use value and exchange value of a location [49] (p. 183). Furthermore, promoting a region as a center of tourism has a significant repercussion on its population's quality of life, which is also related to the image projected of the destination [50,51].

Consequently, we can speak of a close relationship between rural tourism, the use of territory for this activity, and landscape. This link is more evident when landscape resources come together simultaneously with large numbers of attractions, accessibility, and opportunities for sustainable development [52]. It is also worth noting the coexistence of different models of aesthetic experience, namely, biological, personal, and cultural [53], in a context wherein time and space are increasingly limited and free time is on the rise [54].

Many traditional landscapes are being subjected to intense changes because of functional transformations, which, in turn, affect their morphology and character. It is precisely

these modifications that lead to new uses, associated with leisure and tourism, generally in settings that have a special appeal and serve as a base for outdoor activities. These are changes to a sustainable productive process built on post-material values. Landscape has entered the world of marketing and consumption in its dimension of leisure and entertainment [55] (p. 19). Despite its importance now being recognized, there are still gaps in the understanding of the role of landscape in the configuration of a tourist product. Drawing on the hypothesis that landscape, in mountainous and highly rural areas, has become the primary element of attraction and consumption, the present work analyzes a specific case in Spain, to determine how this relationship between landscape and rural tourism is established in inland mid-mountain regions.

2. Materials and Methods

This research used two complementary methodologies in order to focus on two key elements of the tourism system, namely, resources and tourists. We combined the elaboration and analysis of maps with a study of the perception of the landscape, for which a survey was conducted. On the one hand, we used a geographic information system (GIS), into which we introduced a series of characteristics, related to landscape as a resource, which help explain the territory under study. These were landscape units, the protected areas, the rural tourism establishments, and the predominant routes used across the landscape, associated with hiking trails. Both the rural tourism establishments and the hiking trails (obtained through fieldwork and by consultations with associations) are primary sources expressly generated for the present research. Both are related to the supply of other complementary services and are conditioned by the quality of the landscape in the area. The tool used to this end was ArcGis software, with which we designed layers, wherein the locations of the establishments and the trails are represented by dots and lines, respectively. Polygons were used to show the protected areas and landscape units. The aim was to integrate essential information to understand how the landscape is used for tourism, which helps explain the configuration of small hubs and micro-destinations. On the other hand, we also administered a survey to visitors to obtain the users' qualitative and perceptive evaluation of the landscape. The quality of agricultural landscapes has been assessed using different methodologies, such as the interpretation of photographs or other visual stimuli and direct surveys [56] (p. 45). Studies have also used quantitative techniques, such as preference and multivariate analysis models, for data treatment. Qualitative techniques, such as interviewing the actors concerned, have also proven valid [57,58]. In our case, a survey formed the main focus of this work, which was conducted in coordination with, and supported by, the regional administration.

Visitor Survey

Numerous works in the academic literature (from the fields of geography, agricultural economy, sociology, ecology and environmental studies) conducted in different sociocultural contexts analyze the perception of European rural spaces and the assessment of visitors' appreciation of such areas [59–64]. In some cases, the authors focus on the attitudes of people towards historic landscape transformation [65,66]. Traditional agricultural systems provide an image of authenticity and distinctiveness that is highly appreciated in tourist experiences.

The review of the literature confirms that each type of landscape may be attractive for particular groups of visitors, and that the variety in its elements has an influence on the positive assessment of the landscape. Elements that visitors find most satisfying include wildland areas, the presence of water and vegetation, attractive buildings and the color contrast associated with variety in cultivated crops, as has been reported for Andalusia (Spain) [60]. Attention has also been paid to the importance of the components of natural landscape in the tourist experience, with vegetation, slopes, and the presence of water (rivers, lakes, etc.) being some of the most appreciated parameters. In contrast,

abandoned fields and the uniformity of modern farmlands impair the perceived beauty of a landscape [67].

We opted for a field survey, aimed at individuals who, for reasons of leisure, had traveled to the area, using it as the setting for their tourism experience. The research draws on the premises of the European Landscape Convention. Given that the perceived quality of a landscape is a key variable in the design of sustainable and competitive tourism products, two basic premises formed our starting point. The first was the recognition of landscape as a holistic, integrated entity, which goes beyond its purely visual or aesthetic value. The second was the consideration of landscape as a regional asset, as a heritage, whose use for tourism is key for local communities. We decided to use questions that focused on all the components of the landscape, both human and natural, since their interaction determines the character of the landscape.

A direct survey of tourists is a costly procedure in terms of both time and resources, but it enables a significant amount of information to be collected about their characteristics, behavior and preferences. The survey was structured so as to enable the characterization of the tourists, and the type of trip, as well as to obtain their impression and perception of the landscape, and its potential for tourist use. It comprises various blocks, the last of which contains the most questions and focuses on landscape as a tourism resource. The questionnaire has thirty closed response questions, divided into five blocks, aimed at determining: (a) the profile of the tourist and day-tripper; (b) the characteristics of the trip and stay; (c) their opinion of the information available; (d) their reasons for choosing the destination; and (e) as the core aspect, their assessment of the tourist attractions and landscape. The data were collected between June and September 2016 (with the support of, and in coordination with, the Directorate General for Trade, Tourism and Crafts of the Regional Government of Castilla-La Mancha). The data collection procedure used was twofold. The interviewers gathered data directly from a sample of visitors to the territory, while surveys were also completed by visitors to tourist offices in the most important municipalities in the area. These offices are run directly by town councils and associations in coordination with Directorate General for Trade, Tourism and Crafts of the Regional Government of Castilla-La Mancha. The domain of analysis comprised all the visitors, of both sexes and aged over 18 years, that visited the tourist offices in 2015 and 2016 (87,475 individuals of both sexes in the entire province, of whom 39,899 were tourist in the area under study). Random probability sampling was used with 582 surveys being administered. All the information was entered into a database and was processed using the *Statistical Package for the Social Sciences* (SPSS). The error margin was 4.03% with a confidence interval of 95%, which ensured the results could help understand tourists' evaluation of the landscape (Table 1).

Table 1. Technical data sheet for the survey on visitors to the Albacete mountains.

Survey Data Sheet	
Sphere	Albacete mountain ranges (Regions of SACAM and the *Sierra del Segura*)
Universe	39,899 tourists of both sexes, aged 18 years or over, that visited the mountains in the province of Albacete in 2015 and 2016
Type of sampling	Simple random probability
Sample size	582 visitor respondents
Confidence level	95%
Margin of error	Very heterogeneous population (pq 0.5) = 4.03% Very homogenous population (pq 0.9) = 2.4%
Fieldwork date	June 2015 to September 2016

Source: Own preparation.

3. Results: Perception and Evaluation of Landscapes for Rural Tourism in the Selected Mid-Mountain Areas

The tourists and day-trippers surveyed presented a specific profile, characterized by adults in an intermediate age category (48% between 31 and 50 years, and 22% between 51 and 64 years); a substantial proportion of women (58%); high educational level (43% with university studies and 41% with secondary school studies); and being of domestic origin, given that 95% are Spanish, either from the same province as the study, or from other nearby ones, such as Alicante (16%), Valencia (15%), Murcia (13%) and Madrid (6%).

The visitors chose the destination for short stays, generally more than a day (68% of respondents). A little less than a third of the respondents were on day trips. The most common type of visit was weekend or public holidays (33%), followed by week-long stays (25%), and mostly with family (42%) or a partner (26%). The tourists' own car was the most common method of transport used (89%), with the activity being organized independently or as a personalized option (89%). It is significant that many of the tourists were already familiar with the region and were loyal to the destination (two thirds of respondents had previously visited the area). The primary channels of information were family and friends (mentioned by 47% of respondents), their own experience (39%) and the internet (20%).

The image of a destination shapes the expectations that form the basis of the travel decision. Thus, we asked respondents (who were allowed to choose more than one answer) about the attractions that most featured in the information they had consulted before the trip. The characteristics of the territory scored highest, with 88% of respondents indicating the natural landscape, followed by cultural heritage (59%), while special events, festivals and outdoor sports activities were also regarded as complementary options. The updated information available on the internet scored highest (3.9), while the information provided at the destination did not score especially high (around 3.5 out of 5).

In explaining their reasons for choosing the destination, more than half the respondents (53%) indicated "to visit natural and/or protected areas" as the main motive; a lower percentage (41%) mentioned "to visit small rural towns, museums, monuments … "; while a third said their stay was due to "visiting family or friends or staying in their own property" (34%). The second home function explains the significance of this last group (temporary residents). Different types of trip were identified (nature, culture, or family visit), depending on the main reason.

To determine the assessment of the landscape, we first asked about the attractiveness of six aspects (which respondents scored from 0 to 5). The area was generally perceived as one of undoubted resources and tourist potential, given that the scores are high. Ranked first was natural resources (mean of 4.5), followed by the tranquility and conservation of the location (4.4), the heritage (4.2), outdoor activities (4.1), and, finally, the festivals and the combination of natural and human elements (which both scored 4.0). When the responses were analyzed by group, according to the reason for the trip, the differences were found to be insignificant and the ranking of attractions remained the same.

The question on the components that shape the character of the Albacete mountain landscape allowed us to identify the features that give the area its distinctive, personal nature. The possibility of giving more than one answer led most of the respondents to choose a mean of 3.8 features from a list of 9 variables (with a total of 2241 answers). The list included elements of the natural environment (relief, water, climate, vegetation, wildlife), the human environment (habitat, rural landscape), and others of a more integrated nature, such as environmental quality and the combined natural and human elements. The ranking of these components reflects the importance given to relief, water and natural vegetation (Figure 1).
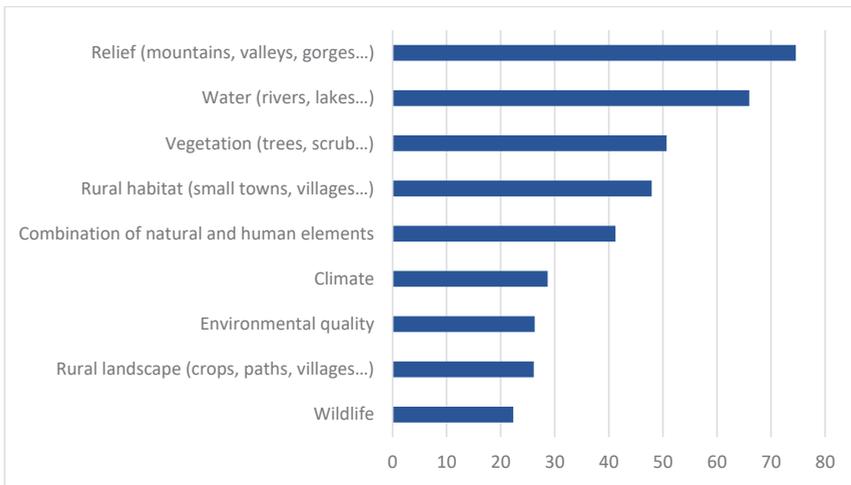
Figure 1. Elements that mark the character of the landscape in the Albacete mountains (% of respondents). (Source: Own preparation).

The three types of trip (for family reasons, to enjoy nature or cultural heritage) generated very few differences in the elements that shape the personality of the landscape. Broadly speaking, the predominance of the natural components is clear. First is the relief (mountains, valleys, gorges, etc.), accounting for more than 19% of answers, and the water landscapes (17%). At the second level, we find the vegetation cover (13%), the rural habitat (12%) and the integration of the environment and human activity (11%). The other elements scored considerably lower: climatic characteristics and heritage generated by agricultural activities (paths, plots of land, crop fields) (less than 7%), and wildlife, which is not considered a significant element (Figure 2).
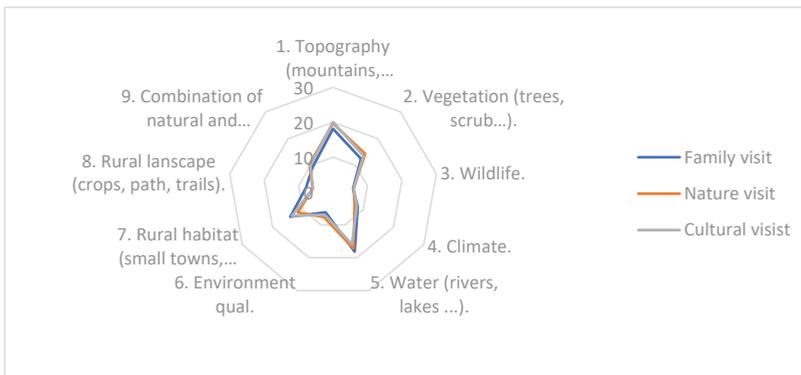
Figure 2. Elements that give personality to a landscape, according to the type of visit (% survey). (Source: Own preparation).

Another aspect to be noted is the quality of the environment visited, which determines sensory stimuli (key requirements in developing a tourist product). The assessment of the parameters affecting the quality of the landscape allows us to identify some of the threats it faces. When asked about the conservation of the environment, the visitors replied positively, especially regarding pollution and noise (70% and 54% of the respondents had not perceived these problems, respectively). The number of visitors and the distances between attractions means the area does not suffer, or only occasionally suffers, problems

of congestion (50% perceived no excess of visitors, although 22% reported having suffered congestion on occasions). Visual pollution in the form of aerials, power lines and quarries appears to be a bigger problem (30% of visitors had perceived such pollution occasionally and 9% considered it a common problem). Land pollution due to uncontrolled dumping (rubbish, livestock waste, etc.) was significant for 24% of visitors, although 46% had never noticed it. Visitors also noted aspects that might make the landscape lose its identity or authenticity, such as the disappearance of traditional elements or the appearance of imported ones. However, they recognized having insufficient knowledge of the problem, which means the percentage of blank answers was high (36%) (Figure 3).
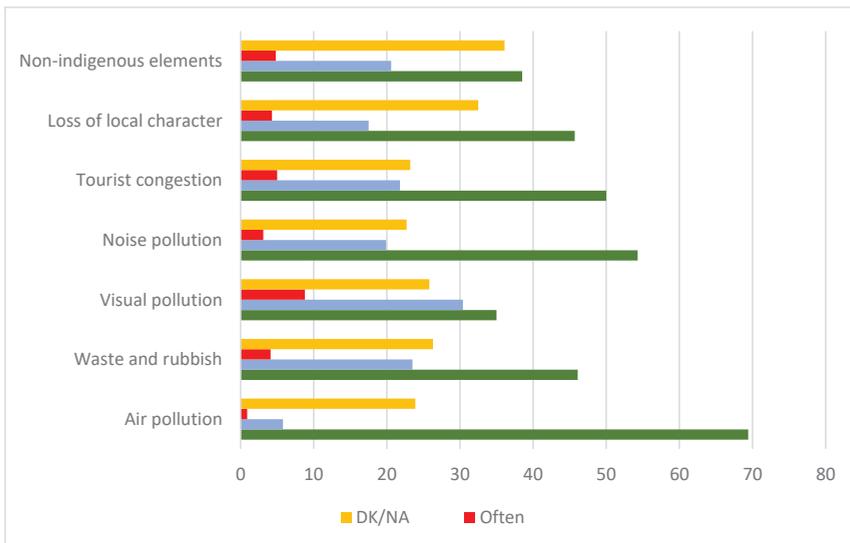
Figure 3. Landscape quality parameters detected (% survey) (Source: Own preparation).

The final overall assessment reveals that the natural landscape is the most appreciated (4.4 out of 5), followed by the inhabited landscape (villages, small towns and monuments) and the landscape generated by agricultural activity (cultivated fields, parcels of land, paths, etc.), both with a mean score of 4.1. It is striking that respondents who visit the mountains with their family because they have acquaintances or relatives in the area, or a second home, is the group that gave the lowest scores to all the aspects mentioned, especially the natural landscape and the rural habitat.

4. Discussion: The Use of Landscape for Tourism as a Core Element of the Multifunctionality and Revitalization of Inland Mid-Mountain Areas

The province of Albacete is situated in an underdeveloped region of Europe, where the per capita GDP is below 75% of the EU average (EUR 22,300 in 2018, compared to EUR 30,800 in the EU) [68]. The data for the province show an even more unfavorable situation (per capita GDP of EUR 20,900 in 2015). The mountain areas, still deeply rooted in the traditional economy and affected by problems of accessibility and depopulation, are among the most depressed areas of the entire region, and among the least developed parts of Europe.

4.1. The Territory under Analysis: Peripheral Mountain Districts Created to Drive Local Development in the Southeast of the Autonomous Community of Castilla-La Mancha

This work focused on the evaluation of the landscape in two groups created to promote local development: *The Local Action Group of Sierra de Alcaraz and Campo de Montiel* (SACAM),

launched in the middle of the 1990s, which permitted the implementation of development projects under the LEADER II initiative; and *the Local Action Group Association of Sierra del Segura*, which was founded in 2001 and has been managed by the LEADER+ initiative since 2002. The fact that these groups have been in place for 20 and 15 years, respectively, means they are experienced in rural development and have been able to implement actions to promote tourism on a relatively continuous basis. The outcome is an increase in the visible presence of tourism across the different elements of the local tourism system.

The two districts extend to the west and south of the province of Albacete and cover a significant part of its surface area (42%). However, there is a notable contrast between their spatial and populational importance, given that they only account for 10% of the total population of the province (Table 2). The *Sierra de Alcaraz and Campo de Montiel* comprises 25 municipalities (which together make up about a quarter of the province). The *Sierra de Segura* is a less extensive territory formed by 12 municipalities, covering about 18% of the whole area of the province. Different units can be identified, forming a mosaic with a certain diversity of geomorphology and landscape [69]. As regards physical characteristics, the two areas are home to the three types of natural units existing in the region, namely mountains, plains and foothills. These districts extend from the Baetic mountains of the Sierras de Segura and Alcaraz, through the areas of Paleozoic basement in the foothills of Sierra Morena, to the plateau of Campo de Montiel and the transition to the plains of La Mancha (towards the north and east) (Figure 4).

Table 2. Population and territory of the study area (Source: Inebase, 2020). Own preparation.

	Population		Surface Area		Pop. Density (2019)	Municipalities
	2019	%	km^2	%	Inhab/km^2	
SACAM	24,070	6.2	3668.9	24.6	6.6	25
Sierra de Segura	15,947	4.1	2665.1	17.9	6.0	12
All Albacete mountain areas	40,017	10.3	6334.0	42.4	6.3	37
Total Province	388,167	100.0	14,925.8	100.0	26.0	87

From a physical perspective, the mountains, formed predominantly by limestone rocks, reach altitudes of between 1000 and 2000 MASL. They give rise to a rugged terrain marked by folded and fractured rock, covered by shrub and tree vegetation, lending it a distinctly mountainous character. The watercourse of four river basins also enriches the variety of the landscape.

Among the many areas of geological and biogeographic interest in the district, there are two important natural parks: the Calar del Mundo in the Sierra del Segura and the Lagunas de Ruidera. These two natural areas have undergone little transformation. Owing to the beauty of their landscapes and the unique characteristics of their flora, fauna and topography, they are of notable ecological, aesthetic, educational and scientific value that deserves to be preserved. The former is a notable karst complex that is home to the source of the River Mundo, a tributary of the Segura River, while the Lagunas de Ruidera are included in the list of wetlands declared of international importance by the Ramsar Convention. In this case, the beauty of the landscape, together with the opportunity for water sports, has triggered the development of tourism. There also exist other protected areas, nature reserves or micro-reserves, scattered across the territory, which are representative of the significant interest of the physical and biogeographic components of its landscapes (Figure 5).
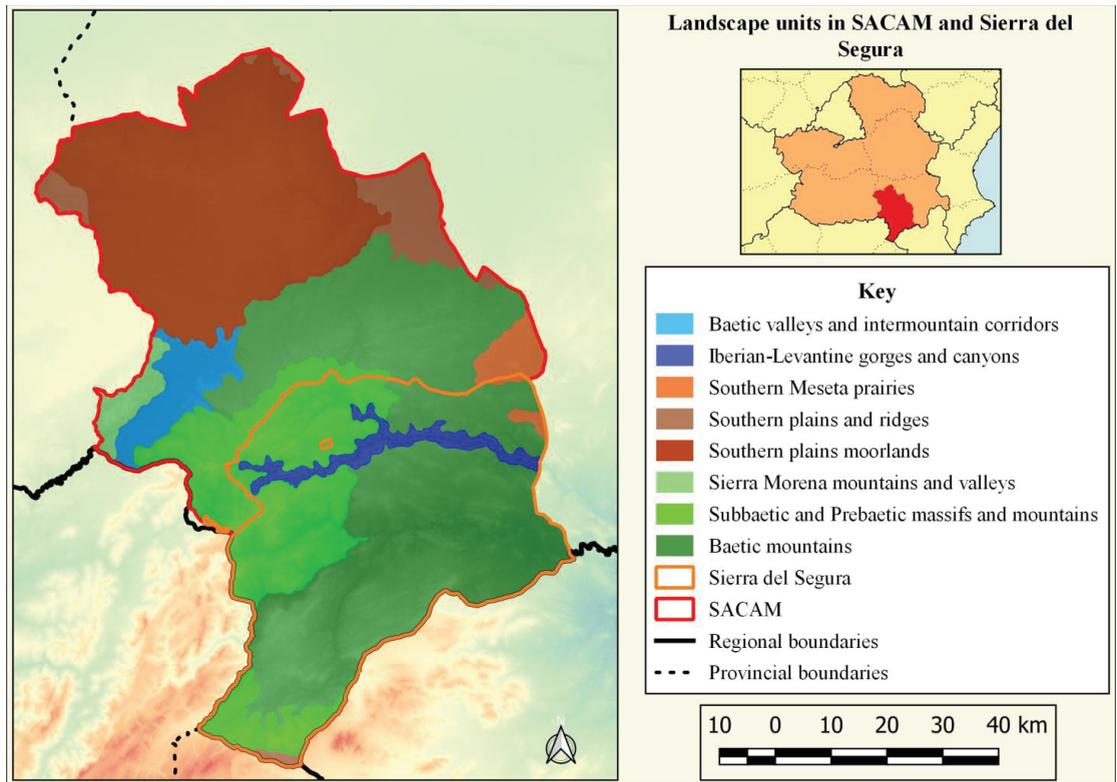
Figure 4. Landscape units (Source: Own preparation).

The variety of natural units has been the subject of analysis as a potential resource for tourism purposes [70,71]. Together with the mountains and "water landscapes", the territory includes distinctly agricultural areas, modeled on traditional farming practices. These are now beginning to be considered potential resources, apart from their value as productive areas. Initiatives, such as the Baeza Charter, have promoted the recognition as heritage of the mark left over time by agricultural activity, which manifests in the form of agrarian landscapes [72].

The area's natural diversity is completed by the cultural differences that are the result of historical events and socioeconomic activity. The two districts are characterized by their declining populations. Similar to other territories of inland Spain, since the 1950s, emigration has generated an area affected by increasing depopulation and ageing. This decreasing population trend persists in the 21st century, given the scant demographic vitality of these declining populations. The number of inhabitants is half what it was at the beginning of the 20th century. The result is an extensive territory, inhabited by some 40,000 people, representing a mean density of 6.5 inhab/km^2, with a very low birth rate (between 6 and 8 per 1000, since 2003) and a rising mortality rate (between 11 and 15 per 1000), due to the ageing population. Consequently, natural growth has been negative in all cases since the start of the 21st century, and, in most municipalities, the demographic structure does not guarantee generational turnover, which is a serious drawback as regards the possibilities for future development. The network of settlements is also typical of depressed rural areas, with 90% of the municipalities having a population of under 2000. Currently, however, and despite the evident process of regression, which has condemned

many inhabited areas from the last century to oblivion, the dynamic effect of tourism has given rise to a positive population balance in some small towns [73].
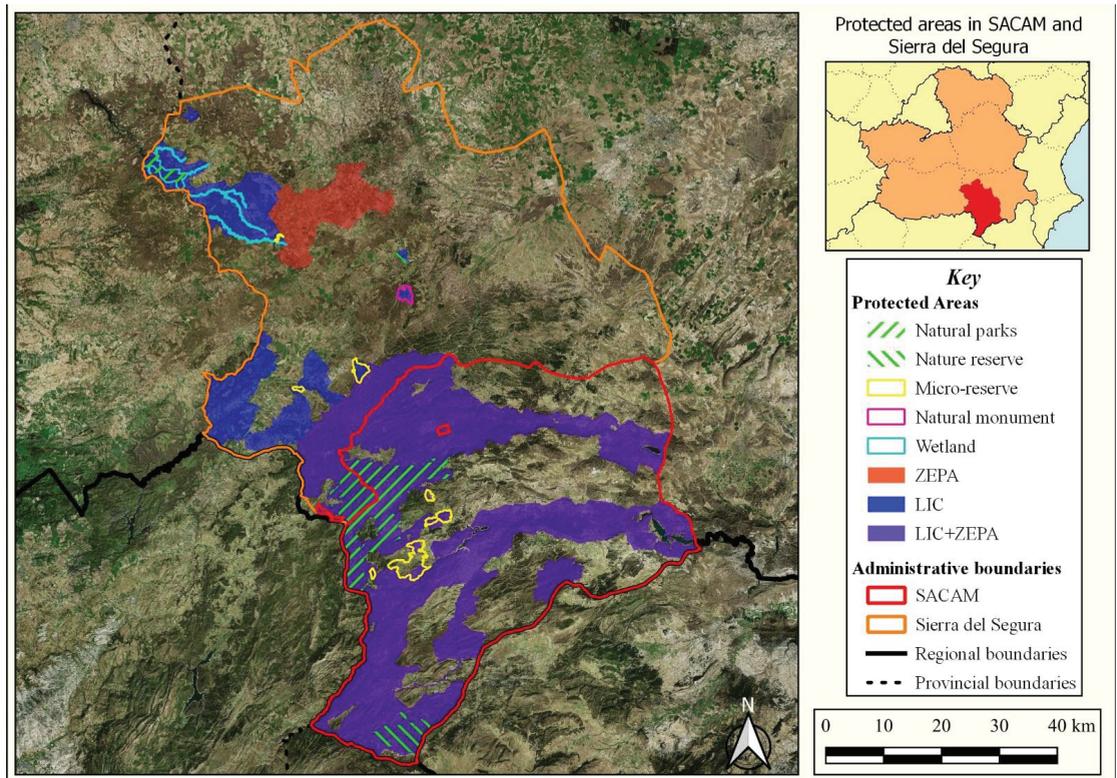
Figure 5. Protected areas (Source: Own preparation).

4.2. The Rapid Growth of Rural Tourism

In these depressed areas of inland Spain, the need to seek alternatives and the growing awareness of their natural and cultural attractions has led local actors, with the support of European Community grants, to promote the development of rural tourism. Since the end of the 20th century, this activity has grown in significance. The simplest way to visualize this process is arguably through the growth in rural tourism establishments. The province of Albacete has been a pioneer in the region of Castilla-La Mancha, with the southern mountain areas being leading players in the process, with the support of rural development programs and the efforts of local entrepreneurs and institutions [74].

In 2020, the region was home to 2346 rural tourism establishments (of various types, from country houses to rural tourism complexes and agrotourism enterprises, among others). Of these, 2202 (that is, 95% of the total) were rural houses, with accommodation for 19,669 guests (Table 3). However, apart from the absolute numbers, it is more important to look at how the supply has grown over time and across the territory, especially if we note that in 1996 there was only one. The province of Albacete, with 888 country houses in 2020 (950 rural accommodations including all categories), has been the undisputed leader in this process of creating tourist installations, with 40% of the regional total. The Segura and Alcaraz mountains, in the south and west of the province, have been the priority locations for rural accommodations. The substantial increases in the numbers of accommodations and tourists are far from homogenous, with the supply concentrated in

certain areas. Nonetheless, developments in recent years seem to suggest the possibility of a new trend derived from changes in the economic model, or as a result of the sector having been weakly structured, leading to questions about the future and a need for renewal [75]. However, tourism establishments have been the target of most of the public subsidies and institutional interest [70], with a much more limited focus being placed on the engines of the sector, which are the regional tourism resources.

Table 3. Growth in rural accommodations in Castilla-La Mancha (2000–2020).

	2000	**2010**	**2013**	**2014**	**2015**	**2016**	**2020**
Albacete (province)	152	662	793	809	775	784	950
Castilla-La Mancha	337	1621	1898	1950	1966	1969	2202

Source: Regional Government of Castilla-La Mancha. Data for several years. Data for 2020 as of October. Own preparation.

A key element is the role of the resources/products in this atypical growth, which is contributing to the expansion of the tertiary sector across the economy and local society. It is precisely here that landscape emerges as a resource. The natural attractions of the mountain areas (topography, vegetation and river basins) were the first to be leveraged for their potential to create tourism. However, as mentioned, other components of these rural territories, such as the traditional habitat, the elements of cultural heritage left by history over the years, or the agricultural landscapes, are, in the eyes of contemporary urban society, sights worth seeing and visiting. Mid-mountain areas are particularly attractive as places for outdoor activities, such as hiking, or sports and leisure pursuits typically associated with the rivers, lakes, and reservoirs in the region. Tourists' sensitivity to the rural setting leads them to visit places rich in history and tradition, and awakens their interest in knowledge about the local culture or the production processes used in the agricultural activities of the area. Nonetheless, the incorporation of landscape into the tourism system has been marked by improvisation, and a lack of strategy and determination among the different administrations. Indeed, lines for action are practically non-existent, despite the considerable increase in outdoor activities, as shown by the disorderly proliferation of unregulated hiking trails in the areas under study (Figure 6). The use of the survey allowed us to determine the perception and assessment of the quintessential tourism resources of the landscape.

The direct surveying of visitors is an appropriate method to understand their priorities when using the different elements of the tourist product in mid-mountain areas. The results show that landscape is a core aspect, which receives insufficient attention from the actors involved in revitalizing the tourism sector. The institutions responsible for its protection fail to view tourism as a dominant economic activity, and if they do, it is only tangentially. Including a variety of sensory parameters in the survey allows tourists' evaluations to be collected and the strengths and weaknesses of the territory to be identified.

As a tourist destination, the study area was found to be the recipient of moderate flows of Spanish tourists, of an intermediate age category and with a good level of education. Their prior expectations and the images available in various media play an important role in their assessment of the destination. The information visitors gather before their visit as part of their preparations, highlighting the importance and quality of the natural environment (mountains, valleys, water and forest), plays a decisive role in the identification of the character and singularity of the landscape in the area. The agro-ecosystems are not similarly evaluated, although the preservation of traditional systems (cultivation terraces, olive groves, crop variety) has been recognized in similar studies as a good indicator of visual quality. The visitors to the study area assessed these elements as a secondary attraction, which is a clear wake-up call regarding their neglect and, in some cases, their deterioration (Figure 7). It is necessary to invest in this aspect from the perspectives of both landscape education and maintenance.
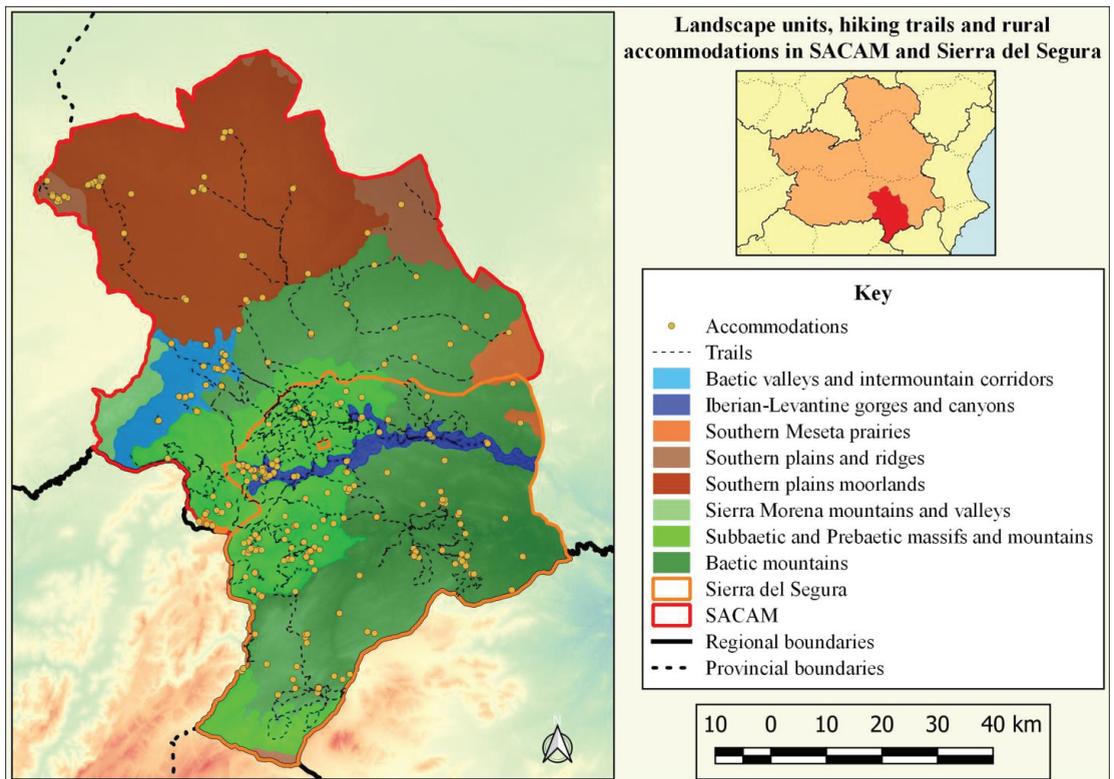
Figure 6. Rural accommodations, landscape units and hiking trails. Source: Own preparation.

Figure 7. Components of the rural landscape in the study area (abandoned cultivation terraces in Ayna and the source of the River Mundo in Riópar). Source: Own preparation.

5. Conclusions

Rural tourism and landscape have become inseparable and interdependent. On the one hand, rural tourism has grown as a result of policies designed to develop depressed

areas, although changes in tourist preferences in post-industrial society have also had an impact. On the other, hand landscape has gained prominence as a concept and a fact, as institutions have begun to recognize its value and, above all, the need for its conservation in light of increasing awareness and social use. The present work has identified some of the processes of socio-territorial transformation in a traditionally agricultural area (the southern mountains in the province of Albacete), which, in recent decades, has seen the expansion of the tertiary sector due to the rise in tourism. This activity is closely related to the characteristics of the territory, its landscape and the ecosystem resources, which are its primary attractions as a tourist destination. The use of a survey has proven to be a useful tool to understand the position of landscape within the elements of the tourism system. It is necessary, nonetheless, to conduct a more in-depth analysis, focusing with more detail on the evaluations and the impacts of specific territories. Surveys, but also other complementary methodologies, such as structured interviews or SIG tools, could help enhance the knowledge of the social use of landscape for tourism purposes. Comparative studies could also assist in understanding the behavior of tourism in mid-mountain regions.

Tourism is currently the most significant channel for the knowledge and consumption of landscape, which highlights these natural areas that are unspoiled by the everyday actions of humans, and especially their agricultural activities, over time. The landscape and its elements are also the primary tourist attraction in mountain areas, to which we can add other cultural elements, which are also present. These are the clear exponents of the identity of the area. Nonetheless, despite the growing use of landscape, the actions of public and private actors (administrations, local development groups and entrepreneurs) do not include it as an item of reference, or when they do so, it is merely part of a conceptual or propositional debate, with a lack of concrete actions being implemented. However, considering our findings, landscape is a key element of the tourism system from a resource perspective. It is the non-relocatable raw material associated with the territory, and the leading driver of tourist activity. It is necessary to encourage actions to raise awareness and to regulate, but also to recognize the value of landscape, using different optics and multidisciplinary interpretations. It is essential to incorporate landscape into the heart of the tourism process, and this should be done in coordination with local actors following the tenets of local and sustainable development.

The lack of consideration of landscape as heritage is one of the weaknesses of the development of tourism in many sectors. It is necessary to include landscape quality indicators in planning processes, and to encourage actions of participatory governance to incentivize the involvement of the local population in conserving and promoting the components of the landscape in their territory. Our research suggests that, in rural areas, landscapes are one of the most valued aspects, especially those least transformed [66], which highlights the need for landscape education programs aimed at preserving the elements of these resources. Multifunctional rural landscapes, the definition of which includes not only the natural environment but also the cultural heritage, are an example to be followed in designing tourism strategies and seeking solutions for the sustainable development of many depressed areas, especially in mountain regions.

References

1. Lefebvre, H. *The Production of Space*; Blackwell: Oxford, UK, 1991.
2. Whatmore, S. *Hybrid Geographies: Natures Cultures Spaces*; SAGE: Newbury Park, CA, USA, 2002.
3. Renwick, A.W.; Jansson, T.; Verburg, P.H.; Revoredo-Giha, C.; Britz, W.; Gocht, A.; McCracken, D. Policy reform and agricultural land abandonment in the EU. *Land Use Policy* **2013**, *30*, 446–457. [CrossRef]
4. OECD. *Rural Policy Reviews. The New Rural Paradigm: Policies and Governance*; OECD Publications: Paris, France, 2006.
5. Commission of the European Communities. *Proposals for Council Regulations (EC) Concerning Reform of the Common Agricultural Policy*; COM (1998) 158; CEC: Brussels, Belgium, 1998.
6. Comisión Europea. Estrategia Territorial Europea. In *Hacia un Desarrollo Equilibrado y Sostenible del Territorio de la U.E. [Towards Balanced and Sustainable Development of the Territory of the EU]*; Oficina de Publicaciones de la UE: Luxemburgo, 1999.
7. Dwyer, J.; Baldock, D.; Beaufoy, G.; Bennett, H.; Lowe, P.; Ward, N. *Europe's Rural Futures. The Nature of Rural Development II Rural Development in an Enlarging European Union*; WWF Europe and Institute for European Environmental Policy: London, UK, 2003.
8. Van der Ploeg, J.D.; Roep, D. Multifunctionality and rural development: The actual situation in Europe. *Multifunct. Agric. New Paradig. Eur. Agric. Rural Dev.* **2003**, *3*, 37–54.
9. Stürck, J.; Verburg, P.H. Multifunctionality at what scale? A landscape multifunctionality assessment for the European Union under conditions of land use change. *Landsc. Ecol.* **2017**, *32*, 481–500. [CrossRef]
10. Faludi, A. Territorial cohesión and subsidiarity under the European Union Treaties: A critique of the 'territorialism' underlying. *Reg. Stud.* **2013**, *47*, 1594–1606. [CrossRef]
11. Kato, S.; Ahern, J. Multifunctional Landscapes as a Basis for Sustainable Landscape Development. *J. Jpn. Inst. Landsc. Arch.* **2009**, *72*, 799–804. [CrossRef]
12. Reyers, B.; O'Farrell, P.J.; Nel, J.L.; Wilson, K. Expanding the conservation toolbox: Conservation planning of multifunctional landscapes. *Landsc. Ecol.* **2012**, *27*, 1121–1134. [CrossRef]
13. Zhang, L.; Schwärzel, K. Implementation of Multifunctional Land Management: Research Needs. In *Multifunctional Land-Use Systems for Managing the Nexus of Environmental Resources*; Springer International Publishing: Cham, Switzerland, 2017; Volume 10, pp. 137–148.
14. Rey Benayas, J.M.; Martins, A.; Nicolau, J.M.; Schulz, J.J. Abandonment of agricultural land: An overview of drivers and consequences. *Perspect. Agric. Vet. Sci. Nutr. Nat. Resour.* **2007**, *2*, 1–14. [CrossRef]
15. Gozálvez, V. Del empobrecimiento rural a los nuevos procesos de desarrollo territorial en España. El protagonismo de la población [From rural impoverishment to the new processes of territorial development in Spain. The leading role of population]. In *Sostenibilidad de los Espacios Rurales. Proyectos Europeos, Herramientas Participativas, Experiencias Municipales y Territoriales en España*; Martínez-Puche, A., Salas, J.P., Sánchez, J., Cortes, C., Eds.; Universidad de Alicante: Alicante, Spain, 2008.
16. Molinero, F.; Baraja, E.; Alario, M. "Agriculture y transformación del espacio rural en España 1986–2007" [Agriculture and transformation of rural areas in Spain 1986–2007]. In *España y el Mediterráneo. Una Reflexión Desde la Geografía Española. Aportación Española al XXXI Congreso de la UGI*; Alario, M., Ed.; Comité Español de la UGI: Madrid, Spain, 2008; pp. 61–66, ISBN 978-84-612-5196-4.
17. Pan, S.-Y.; Gao, M.; Kim, H.; Shah, K.J.; Pei, S.-L.; Chiang, P.-C. Advances and challenges in sustainable tourism toward a green economy. *Sci. Total. Environ.* **2018**, *635*, 452–469. [CrossRef]
18. Cebrián, F. (Ed.) *Turismo Rural y Desarrollo Local [Rural Tourism and Local Development]*; Universidad de Sevilla, Universidad de Castilla-La Mancha: Sevilla, Spain, 2008.
19. Vera, F.; López, F.; Marchena, M.; Antón, S. *Análisis Territorial del Turismo y Planificación de Destinos Turísticos [Territorial Analysis of Tourism and Planning of Tourist Destinations]*; Tirant Lo Blanc: Valencia, Spain, 2011.
20. Akadiri, S.S.; Adewale Alola, A.; Chigozie Akadiri, A. The role of globalization, real income, tourism in en-vironmental sustainability target. Evidence from Turkey. *Sci. Total Environ.* **2019**, *687*, 423–432. [CrossRef] [PubMed]
21. Pulido, J.I. (Ed.) *El Turismo Rural, [Rural Tourism]*; Síntesis: Madrid, Spain, 2008.
22. Ivars, J.V. Nuevas tendencias en la planificación turística [New trends in tourism planning]. In *Turismo Rural y Desarrollo Local*; Cebrián, F., Ed.; University of Sevilla: Sevilla, Spain, 2008.
23. Paniccia, P.; Valeri, M. Enhancing knowledge in tourist firms: Between maintenance and change. In *Management of Change in Tourism: Creating Opportunities-Overcoming Obstacles*; Erich Schmidt: Berlin, Germany, 2010; pp. 123–136.
24. Gregori, G.L.; Pencarelli, T.; Splendiani, S.; Temperini, V. Sustainable tourism and value creation for the territory: Towards a holistic model of event impact measurement. *Calitatea* **2013**, *14*, 97.
25. Briedenhann, J.; Wickens, E. Tourism Routes as a Tool for the Economics Development of Rural Areas—Vibrant Hope or Impossible Dream? *Tour. Manag.* **2004**, *25*, 71–79. [CrossRef]
26. Duglio, S.; Bonadonna, A.; Letey, M.; Peira, G.; Zavattaro, L.; Lombardi, G. Tourism Development in Inner Mountain Areas—The Local Stakeholders' Point of View through a Mixed Method Approach. *Sustainability* **2019**, *11*, 5997. [CrossRef]
27. Cebrián, F.; García, C. Uso y gestión del paisaje para la actividad turística en el medio rural: Aproximación teórica y empírica en el sureste de Castilla-La Mancha [Use and management of landscape for tourism activity in rural areas: A theoretical and empirical approach in the southeast of Castilla-La Mancha]. *Boletín Asoc. Geógrafos Españoles* **2016**, *72*, 381–408.
28. PNUMA. *Por un Turismo más Sostenible. Guía para Responsables Políticos. [For More Sustainable Tourism. Guide for Responsible Politicians]*; Programa de Naciones Unidades para el Desarrollo y el Medio Ambiente; OMT: Madrid, Spain, 2006.

29.   Reguero, M. *Ecoturismo. Nuevas Formas de Turismo en Espacio Rural [Eco-Tourism. New Forms of Tourism in Rural Areas]*; Bosch Turismo: Madrid, Spain, 1994.
30.   Esparcia, J.; Escribano, J.; Sánchez, D. Los territorios rurales [Rural territories]. In *Geografía Humana de España*; Romero, J., Ed.; Tirant Lo Blanc: Valencia, Spain, 2016.
31.   Instituto de Turismo de España. Plan Integral de Turismo Rural 2014. [Comprehensive Plan for Rural Tourism 2014]. 2014. Available online: http://www.tourspain.es/es-es/VDE/Paginas/PITR2014.aspx (accessed on 27 September 2017).
32.   Secretaría de Estado de Turismo. *Directrices Generales de la Estrategia de Turismo Sostenible de España 2030 [General Instructions for a Sustainable Tourism Strategy in Spain 2030]*; Ministerio de Industria, Comercio y Turismo: Madrid, Spain, 2019.
33.   Torres, E.; Ramírez, R.; Rodríguez, B. "La crisis económica en el sector turístico. Un análisis de sus efectos en la Costa del Sol" [The economic crisis in the tourism sector. An analysis of its effects in the Costal de Sol]. *Rev. Análisis Turístico* **2014**, *18*, 11–18.
34.   Ivars, J.V. Regional Tourism Planning in Spain: Evolution and Perspectives. *Ann. Tour. Res.* **2004**, *31*, 313–333. [CrossRef]
35.   Council of Europe. European Landscape Convention, Treaty N° 176, Florence 20.10.2000. 2000. Available online: https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/176 (accessed on 3 January 2010).
36.   Council of Europe. Orientaciones para la aplicación del Convenio Europeo del Paisaje [Notes for the application of the European Landscape Convention]. In *Convenio Europeo del Paisaje, Textos y Comentarios*; Ministerio de Medio Ambiente: Madrid, Spain, 2007; pp. 11–141.
37.   Ortega, M. "Paisaje y patrimonio territorial" [Landscape and territorial heritage]. In *Crisis y Territorio. Aportaciones y Conclusiones del VI Congreso Internacional de Ordenación del Territorio*; Serrano, A., Ed.; FUNDICOT: Pamplona, Spain, 2010; pp. 343–366.
38.   Huber, L.; Schirpke, U.; Marsoner, T.; Tasser, E.; Leitinger, G. Does socioeconomic diversification enhance multifunctionality of mountain regions? *Ecosyst. Serv.* **2020**, *44*, 101122. [CrossRef]
39.   Gómez, J.; Riesco, P. *Marco Conceptual y Metodológico para los Paisajes Españoles. Aplicación a Tres Escalas Espaciales [Conceptual and Methodological Framework for Spanish Landscapes. Application to Three Spatial Scales]*; Consejería de Obras Públicas y Vivienda, Centro de Estudios Paisaje y Territorio: Sevilla, Spain, 2010.
40.   Mata, R. La gestión del paisaje [Landscape management]. In *Retos y Perspectivas de la Gestión del Paisaje en Canarias. Reflexiones en Relación con el 10° Aniversario de la Firma del Convenio Europeo del Paisaje*; Simancas, M., Cortina, A., Eds.; Gobierno de Canarias, Universidad internacional Menéndez Pelayo: Las Palmas de Gran Canaria, Spain, 2011; pp. 19–40.
41.   Cortina, A. El reconocimiento jurídico del paisaje. Articulación del paisaje en el marco normativo español [Legislative recognition of landscape: Provisions for landscape in the Spanish legal framework]. In *Gestión del Paisaje. Manual de Protección y Gestión*; Cortina, A., Ed.; Ariel: Barcelona, Spain, 2011.
42.   Instituto del Patrimonio Cultural de España (IPCE). Plan Nacional del Paisaje Cultural. 2012. Available online: https://sede.educacion.gob.es/publiventa/d/20707C/19/0 (accessed on 25 September 2017).
43.   Cebrián, F.; García, J.A. Turismo rural y paisaje en zonas de montaña. Propuesta metodológica para identificar sus relaciones en las sierras meridionales de la provincia de Albacete [Rural tourism and landscape in mountain areas. A methodological proposal to identify the releationship between these elements in the southern mountains of the province of Albacete]. *Rev. An. Geogr. Univ. Complut.* **2016**, *36*, 237–257.
44.   Esparcia, J.; Escribano, J. Del enfoque LEADER al enfoque territorial y al Desarrollo Local participativo [From the LEADER territorial approach to participatory local development]. In *Redes de Innovación y Desarrollo Local Para el Medio Rural*; Compés, R., García, J.M., Aguilar-Ávila, J., Eds.; Ministerio de Agricultura, Alimentación y Medio Ambiente: Madrid, Spain, 2015; pp. 48–70.
45.   Carneiro, M.J.; Lima, J.; Lavrador, A. Landscape and the rural tourism experience: Identifying key elements, addressing potential, and implications for the future. *J. Sustain. Tour.* **2015**, *23*, 1217–1235. [CrossRef]
46.   Bonadonna, A.; Peira, G.; Varese, E. The European Optional Quality Term Mountain Product: Hypothetical Application in the Production Chain of a Traditional Dairy Product. *Calitatea* **2015**, *16*, 99–104.
47.   Nogué, J.; De San Eugenio, J. "Pensamiento geográfico versus teoría de la comunicación. Hacia un modelo de análisis comunicativo del paisaje" [Geographic thought versus communication theory. Towards a model of communicative analysis of landscape]. *Doc. Anàlisis Geogràfica* **2009**, *55*, 27–55.
48.   López, D. *Los Recursos Turísticos. Evaluación, Ordenación y Planificación Turística. Estudio de Casos, [Tourism Resources. Evaluation and Planning. Case Study]*; Tirant lo Blanc: Valencia, Spain, 2014.
49.   Terkenli, T. Landscapes of Tourism: A cultural geographic perspective. In *Tourism and the Environment. Regional, Economic, Cultural and Policy Issues*; Briassoulis, H., Van der Straaten, J., Eds.; Kluwer Academic Publishers: Dordrecht, The Netherlands, 2000; pp. 179–202.
50.   Stylidis, D.; Sit, J.; Biran, A. An exploratory study of residents. Perception of place image: The case of Kavala. *J. Travel Res.* **2014**, *55*, 659–674. [CrossRef] [PubMed]
51.   Loumou, A.; Giourga, C.; Dimitrakopoulos, P.; Koukoulas, S. Tourism contribution to agro-ecosystems conservation: The case of Lesbos Island, Greece. *Environ. Manag.* **2000**, *26*, 363–370. [CrossRef] [PubMed]
52.   Hall, C.; Page, S. Progress in Tourism Management: From the geography of tourism to geographies of tourism—A review. *Tour. Manag.* **2009**, *30*, 3–16. [CrossRef]
53.   Bourassa, S.C. *The Aesthetics of Landscape*; Wiley and Sons, Ltd.: Chichester, UK, 1991.
54.   Sgroy, F. Forest resources and sustainable tourism, a combination for the resilience of the landscape and development of mountain areas. *Sci. Total Environ.* **2020**, *736*, 139539. [CrossRef]

55. Martínez de Pisón, E. "El paisaje en España" [Landscape in Spain]. In *Atlas de los Paisajes de España*; Mata, R., Ed.; Sanz Ministerio de Medio Ambiente, Universidad Autónoma de Madrid: Madrid, Spain, 2003.

56. Häfner, K.; Zasada, I.; Van Zanten, B.T.; Ungaro, F.; Koetse, M.; Piorr, A. Assessing landscape preferences: A visual choice experiment in the agricultural region of Märkische Schweiz, Germany. *Landsc. Res.* **2018**, *43*, 846–861. [CrossRef]

57. De Aranzabal, I.; Schmitz, M.F.; Pineda, F.D. Integrating Landscape Analysis and Planning: A Multi-Scale Approach for Oriented Management of Tourist Recreation. *Environ. Manag.* **2009**, *44*, 938–951. [CrossRef] [PubMed]

58. Sayadi, S.; González, M.C.; Calatrava, J. Public preferences for landscape features: The case of agricultural landscapes in mountainous Mediterranean areas. *Land Use Policy* **2009**, *26*, 334–344. [CrossRef]

59. Stamps, E. Demographic effects in environmental aesthetic: A meta analysis. *J. Plan. Lit.* **1999**, *14*, 125–175. [CrossRef]

60. Arriaza, M.; Cañas, J.F.; Cañas, J.A.; Ruiz, P. Assessing the visual quality of rural landscapes. *Landsc. Urban Plan.* **2004**, *69*, 115–125. [CrossRef]

61. Van den Berg, A.E.; Koole, S.L. New wilderness in the Netherlands: An investigation of visual preferences for nature development landscapes. *Landsc. Urban Plan.* **2006**, *78*, 362–372. [CrossRef]

62. Hunziker, M.; Buchecker, M.; Hartig, T. Space and Place—Two aspects of the human–landscape relationship. In *A Changing World—Challenges for Landscape Research. Landscape Series*; Kienast, F., Ghosh, S., Wildi, O., Eds.; Springer: Dordrecht, The Netherlands, 2007; pp. 47–62.

63. Lindemann-Mathies, P.; Briegel, R.; Schüpbach, B.; Junge, X. Aesthetic preference for a Swiss alpine landscape: The impact of different agricultural land-use with different biodiversity. *Landsc. Urban Plan.* **2010**, *98*, 99–109. [CrossRef]

64. Mercado, I. 'Percepción y valoración de los paisajes disfrutados: Aportaciones desde el visitante para una gestión sostenible de espacios turísticos rurales. El caso de la Sierra de Aracena (Huelva)' ['Perception and assesment of landscapes enjoyed: Contributions from the visitor for a sustainable management of rural tourist spaces. The case of the Sierra de Aracena (Huelva)']. *Investig. Turísticas* **2015**, *9*, 160–183.

65. Kienast, F.; Ghosh, S.; Wildi, O. (Eds.) *A Changing World: Challenges for Landscape Research*; Landscape Series; Springer: Dordrecht, The Netherlands, 2007.

66. Tempesta, T. The perception of agrarian historical landscapes: A study of the Veneto plain in Italy. *Landsc. Urban Plan.* **2010**, *97*, 258–272. [CrossRef]

67. Arnberger, A.; Eder, R. Exploring the Heterogeneity of Rural Landscape Preferences: An Image-Based Latent Class Approach. *Landsc. Res.* **2011**, *36*, 19–40. [CrossRef]

68. EUROSTAT. Your Key to European Statistics. 2020. Available online: http://ec.europa.eu/eurostat/cache/RCI/#?vis=nuts3.population&lang=en (accessed on 27 December 2020).

69. Pons, B. (Ed.) *Atlas de los Paisajes de Castilla-La Mancha. [Atlas of Landscapes in Castilla-La Mancha]*; Universidad de Castilla-La Mancha: Ciudad Real, Spain, 2011.

70. Comíns, J.; Panadero, M. *Atlas del Turismo Rural de Castilla-La Mancha. [Atlas of Rural Tourism in Castilla-La Mancha]*; UAL, UCLM, IGN: Madrid, Spain, 2004.

71. García, C.; Panadero, M.; González, N. Patrimonio y paisaje en zonas rurales desfavorecidas: Sierra de Alcaraz y Campo de Montiel en la provincia de Albacete [Heritage and landscape in disadvantaged rural areas: Sierra de Alcaraz and Campo de Montiel in the province of Albacete]. In *Treinta años de Política Agraria Común en España. Agricultura y Multifuncionalidad en el Contexto de la Nueva Ruralidad*; Ruiz, A.R., Serrano de la Cruz, M.A., Plaza, J., Eds.; Asociación de Geógrafos Españoles (Grupo de Geografía Rural), Óptima Diseño e Impresión: Ciudad Real, Spain, 2016; pp. 666–681.

72. Castillo, J. *Carta de Baeza Sobre el Patrimonio Agrario [The Baeza Charter on Agrarian Heritage]*; Universidad Internacional de Andalucía: Sevilla, Spain, 2013.

73. Juárez, G. Transformaciones en el Turismo Rural en la Sierra del Segura. Ph.D. Thesis, University of Castilla-La Mancha, Ciudad Real, Spain, 2013.

74. Cebrián, F. Castilla-La Mancha. In *La Actividad Turística Española en 2018 [Tourist Activity in Spain in 2018]*; Edición 2019; Araújo, N., Ed.; Fraiz, Asociación Española de Expertos Científicos en Turismo (AECIT), Editorial Síntesis: Madrid, Spain, 2019.

75. Canovés, G.; Villarino, M.; Blanco, A.; Espejo, C. *Turismo de Interior. Renovarse o Morir. Estrategias y Productos en Catalunya, Galicia y Murcia [Inland Tourism: Reinvent or Die. Strategies and Products in Catalonia, Galicia and Murcia]*; PUV: Valencia, Spain, 2014.

Strategies of Landscape Planning in Peri-Urban Rural Tourism: A Comparison between Two Villages in China

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Abstract: Landscapes have multiple functions relating to natural preservation and cultural inheritance, which are fundamental factors for tourist development. Particularly in villages, rural tourism is primarily based on the rural landscape. However, peri-urban villages face complex conflicts of urbanization and ruralism, in which landscapes are dynamic and need synergistic plans and management. Thus, this research contributes to a better understanding of comprehensive landscape planning integrating natural and cultural dimensions in peri-urban villages. Taking as a comparison studies in two peri-urban villages, Heshu village and Pu'an village in the Yangtze River Delta in China, the research mainly adopted qualitative methods of document analysis, in-depth interviews and field observation. We found that local features and interactions with nature are both stressed in the village landscape plans but with different strategies. Firstly, Heshu village's landscape plan intends to reproduce eight scenes described in famous local poetry, while Pu'an village's plan intends to develop local traditional customs of bulrush craft. Secondly, the detailed landscape design of green-way and blue-way systems in Heshu village is people-oriented, while landscape design in Pu'an village is experience-oriented in relation to creative tourism. Finally, it is essential to consider both the interests of local villagers and tourists in the process of identifying, preserving and enhancing the locality of rural landscapes.

Keywords: landscape design; synergistic plans; multiple functions; sustainability; peri-urban village

1. Introduction

Landscape, constructed by both the natural environment and human actions, has always been a fundamental factor for tourist development [1,2]. Particularly in villages, rural tourism is primarily based on the rural landscape, whether in terms of idyllic or wild natural environment, authentic agricultural activities, and unique traditions and customs or lifestyles [3,4]. However, peri-urban villages are special kinds of villages facing complex conflicts of urbanization and ruralism [5–8]. The landscapes in peri-urban villages are dynamic and need comprehensive plans and management [9–11].

In China, tourism-induced landscape change has become a widespread phenomenon for peri-urban villages, which has induced both positive and negative effects [12–14]. On one hand, rural landscapes in peri-urban villages are transforming into sites of leisure with high-quality rural roads and living conditions. On the other hand, to meet the needs of the tourist market, rural landscapes are quickly changing to commercial land use and their unique cultural characters are gradually being lost. In addition, with the guidelines of the new urbanization policy proposed by the central government stating that "with green hills and blue waters in sight, bear the image of your homeland in mind", the unique local features of rural villages have been stressed in rural development. Peri-urban villages are

facing problems trying to make a proper landscape plan to promote local features of villages in rural areas and reduce negative effects from urban tourism balancing different interests.

Existing research has revealed that different aims and forms of governance in landscape related to tourist development have had different results [15,16]. Some, from tourists' perspective, point out that the diversity of rural culture can transform to consumption-based policy as place branding for tourist development [17]. Large infrastructure is demanded as a result of an influx of tourists [18]. In contrast, a neglected environment and crowded roads cause unpleasant impressions [19]. Others, from locals' perspective, emphasize the participation of rural communities in rural tourism. The relations of locals and tourists could be rebalanced as locals are not servants for tourists, but teachers representing their own culture [20]. In the increasing commodification of rural tourism, culture-led policy should be more embedded in rural tradition and heritage [21]. Actually, the management of rural landscape needs to combine these two sides towards multiple functions which not only promote villagers' income and revive rural communities, but also protect authentic rural environments and increase acknowledgement of rural culture and identity [22,23]. Faced with the demands of rural tourism, synergistic strategies incorporating both natural and cultural dimensions in landscape planning to realize multiple functions should be discussed further [24]. Moreover, strategies of landscape planning belong to rural planning, which is considered as a special planning in the Chinese spatial planning system of "five levels and three categories [25]. Transmitting the comprehensive development goals from township plans, rural planning aims to develop and enhance production, improve standards of living and rural civilization, create a clean and tidy environment, and promote democratic management. As a part of rural planning, the landscape plan should encompass multiple dimensions and multiple objectives according to local conditions.

Thus, our objective is to contribute to a better understanding of landscape planning integrating natural and cultural resources and to provide practical references for the implementation of rural planning in peri-urban villages comparing two cases in China. These two peri-urban villages are located near Changzhou city, a central area of the Yangtze River Delta, which have experienced a process of urbanization and industrial transformation. They chose different strategies to construct a beautiful village and succeeded in developing rural tourism without losing local identity, becoming models for nearby villages.

This paper is structured as follows. We first provide an overview of two villages as case studies and the methodology. Then, we compare the landscape plans in two cases and present the differences in the results section. Though both plans strengthen the locality of the landscape and interaction between humans and nature, they adopted different strategies based on their unique conditions. Last but not the least, the conclusions and limitations of this study are summarized.

2. Materials and Methods

2.1. Study Areas: Two Peri-Urban Villages

We investigated and compared the landscape plans in Heshu village and Pu'an village, both in Lijia town. These two villages have many similarities in terms of geographical conditions for tourist development. However, they adopted different strategies to construct beautiful villages as leisure and tourist resorts. Heshu village aims to develop an idyllic wetland environment, while Pu'an village aims to develop a creative cultural environment.

Firstly, the two villages are both peri-urban villages, located in the north of Lijia town and close to Changzhou city, a central city in the Yangtze River Delta (Figure 1). They have relative advantages in terms of location and transportation. It takes less than 30 min of driving to reach Changzhou city, with many county-level and village-level roadways. The city has strong consumption tendencies for tourism. Secondly, these two villages have similar requirements for protecting ecological environments as their major land use is non-construction, consisting of agriculture and forestry Figure 2. As Table 1 shows, Heshu village occupies 3.66 km^2 and Pu'an village occupies 4.14 km^2, of which respectively 89.48%

and 72.29% are non-construction areas. It is suggested by township planning that these two villages should build beautiful villages in unique rural landscapes [26]. Thirdly, they are faced with a series of challenges to comprehensive development against a background of rural revitalization. For example, locals have complained of the poor living environment in the villages because of low-efficiency industrial land use, poor environmental awareness of tourists and locals, and insufficient sanitation facilities [27,28]. There are 573 households and 1973 people in Heshu village, while there are 984 households and 3435 people in Pu'an village. In Pu'an village, northwestern areas occupied by factories have attracted large population inflows while deserted villages have appeared in eastern rural areas of Pu'an (Figure 2).
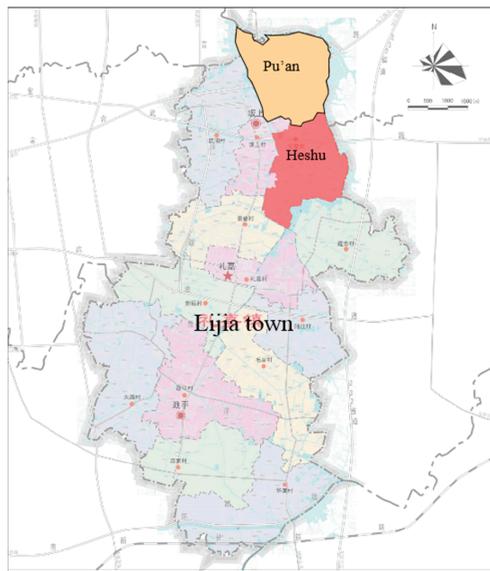

Figure 1. Location of Heshu village and Pu'an village in Lijia town.
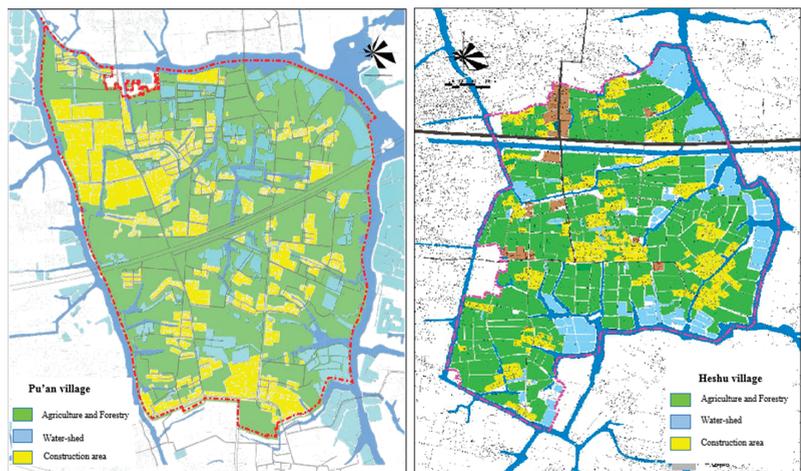
Figure 2. Land use in Heshu village and Pu'an village.

Table 1. Land use in Heshu village and Pu'an village in 2016.

Land Use Type	Pu'an Village		Heshu Village	
	Land Area (ha.)	Proportion of Urban and Rural Land (%)	Land Area (ha.)	Proportion of Urban and Rural Land (%)
Construction land	114.74	27.71	38.87	10.52
Non-construction land	299.26	72.29	330.79	89.48
Watershed	77.28	18.67	126.99	34.35
Agriculture and forestry	221.98	53.62	203.8	55.13
Other non- construction land	0		0	
Total	414		369.66	

Though the two cases have similarities, they have distinct differences, which seem more important in landscape plans. First, their industrial structures are different and imbalanced though they have both struggled in rural tourism development. Heshu village is an agriculture-dominated village with a large scale of farmland planting including rice, peaches, plums, grapes and other crops. As it used to be wetland, it is not easy to transform the farmland for industrial land use, so the non-agricultural economy is underdeveloped. Its output value of agriculture placed it fourth out of 14 villages in Lijia town, whereas on output of manufacturing it placed last in the year 2016. In contrast, Pu'an village is a manufacturing-dominant village and it is one of the largest production bases for suitcase fabric and refrigeration equipment with an output value of manufacturing placing it fifth in the town. It also has a large area of green fields of farmland, forestry, and wild grass. Nevertheless, the land in greenfield areas is not suitable for producing food. Instead, local villagers choose to plant bulrushes. The bulrush is a typical aquatic plant in rivers and ponds and can be used in food production, medicine and handicrafts. Pu'an village has the potential to develop an advanced industry processing bulrushes, but it is weak in non-industrial sectors encompassing the service industry.

Second, the rural cultural landscapes and heritage values are varied. Heshu village has a long history of more than 1400 years. It was a key node of waterway transportation in ancient times. Many poets passed by and left famous poems describing the beautiful scenery. One of the famous poets is Mr. He Shutang, who settled down in this village after his retirement and had a great influence there. Unfortunately, some historic landscapes and relics such as five old bridges described in poems have not been well protected, and some are missing. In contrast, Pu'an village has maintained the intangible heritage of the bulrush craft well as local villagers have carried on the tradition and struggled to sustain it. However, affected by industrialization, the attitude of acceptance towards local culture and history is weak, especially among young people. The local appreciation of rural culture and customs needs to be strengthened.

Third, the natural landscapes are different. In Heshu village, farmlands are divided by the river network into small pieces, which look like islands. Various kinds of crops are planted, which form a diversified farming landscape. In Pu'an village, small ponds are distributed among scattered rural settlements and this rich biological source of bulrushes forms a large area of the geo-landscape.

2.2. Methodology

This research mainly applied qualitative methods. Primary data were collected through document analysis, in-depth interviews and field observation.

We firstly analyzed a series of documents including planning policies and historical books and records. A series of planning policies, including landscape plans, land-use plans, and rural plans in the two villages helped us understand the development conditions of villages in Lijia town. As there is no specific tourism plan in the villages, we combined the framework and goals of industrial development plans in rural plans with the policies of landscape planning. In addition, historical books and records improved our understanding

of the villages' history and local culture. Some historical relics have already disappeared or been destroyed. We could assess the policies in landscape planning of restoring meaningful historic sites according to historical documents.

Secondly, we made four fieldwork assessments, including mapping and taking photos in 2016 in these two villages, to investigate designed landscapes with seasonal features. In Heshu village, we conducted 40 semi-structured interviews in April 2016 with representative interviewees in terms of local villagers, leaders of collective groups, and immigrants. In Pu'an village, we conducted 37 interviews in August 2016 (Table 2). The main questions were as follows: (1) What do you think of the current environment or landscape in the village? (2) What do you expect to change concerning the rural landscape with tourist development? (3) What do you know about your village's history? (4) Are you satisfied with the landscape plan in the village? Appendix A. Each interview lasted approximately 120 min. The interviews were recorded and transcribed for analysis with a manual identification of key words.

Table 2. The structure of interviews in Heshu village and Pu'an village.

Interviewers	Leaders of Collective Groups	Villagers	Immigrants	Total
Heshu village	5	20	15	40
Pu'an village	4	20	13	37

3. Results

3.1. Strengthen the Locality of Landscape Design from Different Perspectives

Preserving and caring for the environment is the priority for rural development. In Heshu and Pu'an villages, environmental improvement and river cleaning are emphasized in the plans. However, policies to strengthen the locality of the landscape are different: Heshu village is planting special plants to revive the cultural landscape mentioned by famous local poems, whereas Pu'an village is developing traditional bulrush craft to revive local customs originating from a culture of cultivation.

In Heshu village, there is one famous poem named "Eight scenes in Heshu village" describing beautiful scenery with eight different plants. This poem was preserved in Heshi Temple's stone, which has attracted many tourists. The landscape plan in Heshu investigated the restoration of eight scenes in interpreting the poetry to revive the rural community. Combined with the natural conditions, different types of plants were chosen to reflect and refresh the eight new scenes in response to the famous local poem (Figure 3).
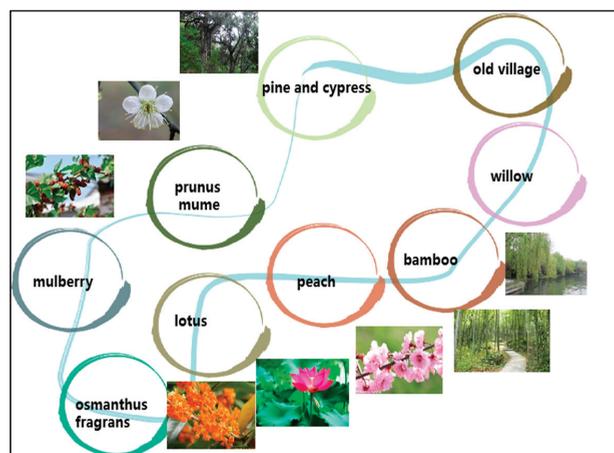
Figure 3. Design of eight scenes with typical plants in Heshu village.

For example, the first sentence in the famous local poem says that the peach and plum trees in the garden are very beautiful and their flowers are blooming in competition; the bridges connecting the gardens seem to be covered by trees and flowers. Inspired by this sentence of the poem, peach was selected as a representative plant for the village. In the meantime, local villages are planting peaches as agri-products. One villager, Mr. He, said, "I never heard about the story from the poem and never knew the tradition of planting peaches in the village could be traced back to 1000 years ago. Now I am quite proud of planting and selling peaches in the village and will expand my planting area to create the landscape of peach flowers in full bloom in spring, like the poem described". Therefore, peaches in spring, lotuses in summer, sweet-scented osmanthus in autumn, plum blossom in winter, and other four evergreen plants including pine and cypress, bamboo, willow and mulberry trees were chosen to plant in special areas of the village to reflect the famous local poem. In each special area, an explanation of the poetry will be illustrated to help tourists understand the spiritual meaning of the landscape. A deputation of elders from Heshu village said, "The original poem was carved in stone preserved in the temple. It used to be famous and attracted other poets to come. Local elder villagers are all familiar with this poem as they were requested to recite it when they were children. Unfortunately, as time passed by, scenery changed and the current landscape is quite different from what the poem described. Some younger generations in the village do not know the local poem at all. Therefore, it is necessary to revive the cultural landscape based on this local poem to strengthen our sense of place". It is very interesting to review the key elements of plants originally described in local Chinese poems and add them to the landscape design to revive rural culture in villages.

In Pu'an village, the major plant is the bulrush, which is an aquatic plant with multiple functions in terms of economy, society and culture. The name of the village relates to the bulrush as it used to be a wetland covered by bulrushes. Therefore, there is a long history of local villagers using bulrushes in making shoes, fans, cushions, baskets and other practical handicrafts. The bulrush craft is a precious intangible part of the local heritage, which attracts tourists as an experience.

The landscape plan aims to revive these cultural customs by encouraging planting of bulrushes. The plan has designed three types of bulrush landscapes in Pu'an as Figure 4 shown. The first type is bulrushes with traditional architecture to reproduce earlier lives in the village, as traditional architecture was built along rivers or ponds suitable for planting bulrushes. Tourists can choose to stay in theses renovated old houses to experience the past rural life. The second type is bulrushes in creative agricultural farmland, integrating with bulrush farming. Although farming is common in rural villages, the experience of farming is a special experience for urban tourists. Tourists can learn the technology of planting bulrushes and experience the hardship of life in the past. A local villager said, "agro-tourism with bulrushes helps increase our profits from agriculture. We are not only farmers in the rural landscape, but also teachers spreading the rural culture of bulrushes". The third type is theme parks designed with bulrushes to utilize local existing water systems and networks to create landscapes attracting animals. This type of park can be a scenic base for wedding photography and tourist sightseeing. All these plantings are related to the bulrush industry including bulrush craft, processing and creative industries, which respond to the local culture.

An entrepreneur who invested in Pu'an village, Mr. Zhang, said, "Pu'an village has a solid foundation to develop a bulrush processing industry as local villagers have the tradition of planting and using bulrushes. I was attracted by lush bulrushes and the twisting river, as it shows that the raw material of the bulrush industry is rich in the village. With the help of advanced technology in the processing industry, the tradition of bulrush craft will be upgraded and develop further". The leader of a collective group, Mrs. Xu, showed a positive attitude to these three types of bulrush landscape. She said, "Diversified landscapes with diversified activities provide tourists various options to experience our intangible heritage of bulrushes in different ways. These types of creative

tourism make up for our shortages in agriculture and make full use of advantages in manufacturing development".
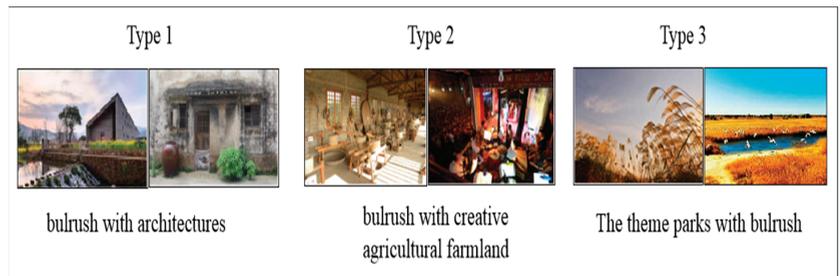
Figure 4. Design of bulrush landscape in Pu'an village.

The approach of strengthening the locality of the landscape reflects local villagers' attitudes and understandings towards local natural and cultural resources. Only with unique local landscapes can rural tourism in villages have a special attraction to compete in the wider tourist industry.

3.2. Strengthen the Interaction of People and Landscape with Different Approaches

Inspired by the concept of "creative tourism" [29–31], the two landscape plans in Heshu and Pu'an villages both stressed the interactions of people and landscape, which not only considered interests of tourists, but also the well-being of local villagers. One "green" way with non-motorized systems and one "blue" with yachts and boats were designed in these two plans, as Figures 5 and 6 show. The difference was the detailed design of landscape along the two ways. In Heshu village, an interactive landscape required more functions in the design of a plank road and platform, while in Pu'an village, an interactive museum and activities were required along the way.
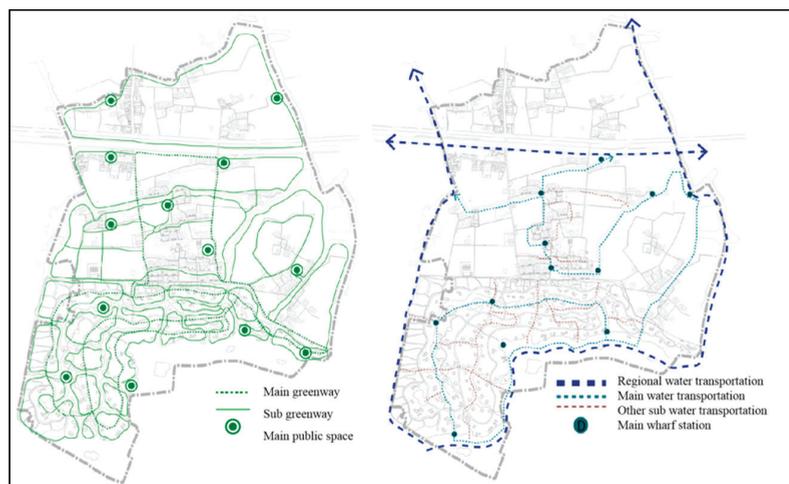
Figure 5. Plans of green-way and blue-way systems in Heshu village.
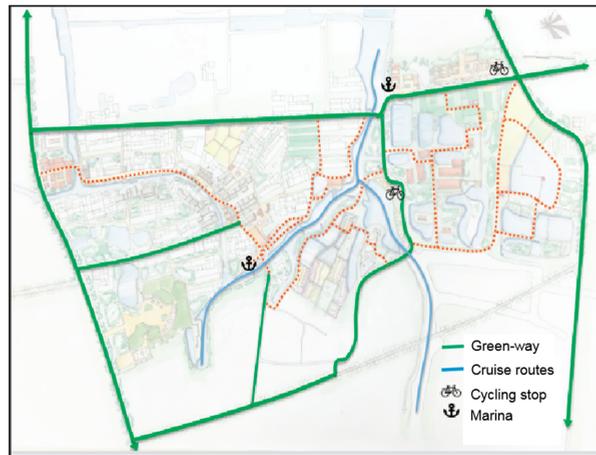
Figure 6. Plans of green-way and blue-way systems in Pu'an village.

First, in the design of the shoreline in Heshu village, the basic concept was people-oriented, which meant the waterfront should be convenient for serving people. As Figure 7 shows, the design of the shoreline followed the natural form and tried to keep the original without breaking the natural rules. Then under the premise of considering ecology and safety, artificial transformation, for example, a concave or convex geometric design, could be added to increase fun. In addition, a concave water shoreline created a hydrophilic feeling of being surrounded by water, which lets people have a sense of freedom. Villagers and tourists have more chances to access the water, transforming it from a passive to an active experience. One villager in Heshu highly praised this design that was more convenient for her to look after her children playing in the water. Tourists can enjoy scenery with special perspectives along the rivers, recalling the famous local poem.
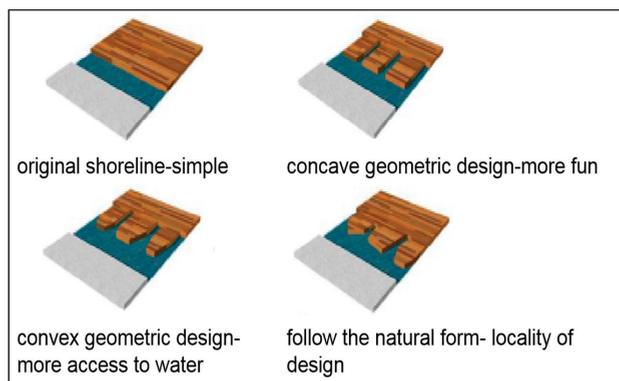
Figure 7. Changes of shoreline design in Heshu village.

Second, in the design of the waterfront in Pu'an village, the starting point was to increase human activities with a landscape of bulrushes, as a kind of experience-oriented attraction. The plan design included a swimming wharf, open water bank, overhanging plank road and pond in the bank to allow people close to bulrushes in rivers and ponds (Figures 8 and 9). Along the waterfront, experiential activities like planting bulrushes, picking bulrushes, eating bulrushes and weaving bulrushes are organized. Tourists can participate, transforming the experience from tangible heritage sightseeing towards greater

involvement with intangible cultural experiences (it is not allowed to pick bulrushes at will along the waterfront). One immigrant in Pu'an, Miss Lin, enjoyed joining the creative activities along the road and said, "I moved to work in Pu'an village and had no time to rush to central town to play. Now the new entertainment equipment is set up, I can relax at weekends just walking on the sightseeing road of bulrushes. Sometimes, I invite my friends from my hometown to visit me and make some new friends with tourists. I feel happy living in the village".
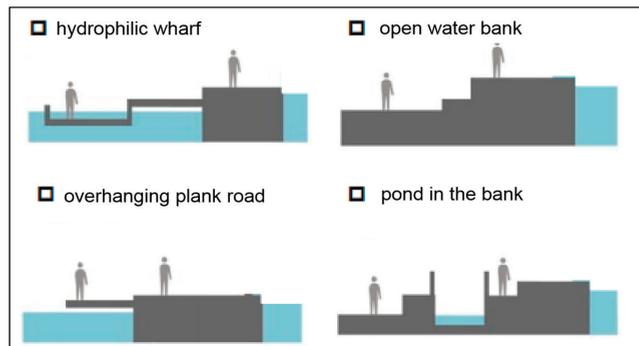
Figure 8. Design of waterfront in Pu'an village.

Figure 9. Example of design in terms of waterfront changes in Pu'an village.

Third, in the design of the green way, the planner in Heshu preferred to locate the cycling stops near gardens or nursery gardens, while the planner in Pu'an preferred to guide people to rest in museums, activity centers or restaurants. Both local governments tried to construct a green-way system to encourage people to be close to nature and to experience rural culture and customs. When tourists walk or cycle on the green way, they enjoy the beauty of the nature and relax instead of glancing over the landscape hurriedly. Local villagers can also take exercise on the green ways, which can be considered as public space in the villages. One villager in Heshu, Mr. Zhu, said that, "Before the design of the green way, the road systems in the village were bad as many roads were not accessible and not friendly to pedestrians. The green-way system is beneficial for creating public space".

4. Discussions

Many countries have implemented landscape plans and management for peri-urban tourist development, and some by standardization [32]. However, landscape plans differ based on the different national, regional and local context. This paper has addressed the importance of locality in landscape design by comparing implementation strategies in

two peri-urban villages in China. Our analysis highlights that the locality of landscape is inherent in the natural and cultural characteristics, which need to be integrated. Against the background of comprehensive development goals in rural planning, we suggest landscape plans should have synergistic effects among economic development, cultural transmission and environmental protection.

In addition, landscape design with creative tourism has become increasingly popular as a strategy of place making in rural tourism [33,34]. Rural cultural resources include literary and artistic assets, myths and legends, traditional festivals and crafts, architecture and heritage [35–38]. Studies of Heshu and Pu'an villages have revealed the possibility of hybrid use of cultural resources encompassing local poems and customs in landscape design.

Finally, this finding complements the specialized case study on the rural clusters of landscape and tourism, and provides comprehensive policy references for other villages, which consider both the interests of tourist and locals towards multiple functions [39,40]. Landscape in peri-urban villages not only serves local residents, but also serves urban tourists [41,42]. Therefore, there are also some places for interaction between tourists and local residents [12,43]. The design and management of these landscapes should consider the features of private and public place and the possibility of the transformation from a private place to a public space or vice versa. For example, some villagers will renovate and transform their house as a folk inn for tourists in peak season. They can still keep some original decorations of rural customs to create authentic experiences for tourists, and even add some special cultural elements, such as bulrush decoration in Pu'an village or poetry decoration in Heshu village to emphasize the local identity of the house. After peak tourist season, when villagers go back to the house, these cultural elements will please them and promote a sense of collective belonging.

However, the discussed landscape plans were designed to guide the villages over the period from years 2016 to year 2021, and the assessment valuing the impact for rural tourist development deserves further investigation. This shortcoming could be addressed by incorporating a time frame and the concept of multi-functionality to evaluate the effects [1,44,45]. Concerning the process of implementation of strategies, the corporations of different stakeholders were discussed insufficiently in this study, as in China, village-level plans are mainly guided by township governments, which brings together experts and planners and local villagers to form a special plan. From our interviews in the two cases, we found dynamic stakeholders were involved during the process of policymaking [26]. The bottom-up initiatives of self-organized actions led by strong leaders in the collective groups play an important role in implementing the government policy. A collaborative approach among governments, residents, tourists and firms in landscape planning is an interesting area to explore further [46].

5. Conclusions

Our research provides a comparative study of two peri-urban villages in China to discuss the comprehensive strategies integrating natural and cultural elements to form distinctive landscapes with local characters for tourist development.

The results firstly show that the unique locality of landscapes could be strengthened from different perspectives in the landscape plans. The plan in Heshu village revived the cultural landscape related to famous local poetry, while the plan in Pu'an village related to the local traditional customs concerning bulrushes. Different dimensions of local cultural resources were chosen due to different local conditions. As Heshu village is agriculture-dominated, the landscape plan tries to combine the natural features and the spiritual dimension of local poems to design eight new scenes for different seasons. In contrast, Pu'an village is manufacturing-dominated and has a large scale of bulrush planting, so the landscape plan tries to upgrade local traditional crafts with creative agriculture and a processing industry.

Secondly, the two landscape plans stress the interactions of people and landscape with the concept of creative tourism. The plan in Heshu village adopted a people-oriented

design to create accessible chances to experience nature, while the plan in Pu'an village applied experience-oriented design with creative activities.

Considering interests of tourists and locals, the landscape plans highlight that the creativity in cultural landscapes needs more research relating to local poetry and the traditional intangible heritage of bulrush craft. For other villages, we suggest that each village has its unique culture and rural resources. It is essential to identify, preserve and enhance the locality of landscape in tourism in both natural and cultural dimensions. Moreover, the process of place making in design needs to consider multiple objectives based on local unique conditions in terms of economic, social, cultural and environmental aspects.

Nevertheless, there are some limitations and weaknesses in the study. For example, the study revealed the results based on the qualitative analysis of historical, cultural and natural conditions. A multivariate assessment of landscape dynamics and impacts of tourism in terms of quantitative approaches could be strengthened in the future. Furthermore, the process of policymaking requires an in-depth study to discuss the governance mode. The comparison improved our understanding of locality in landscape, and each case deserves a more detailed analysis of its landscape transformations and collaborative initiatives.

Appendix A

Table A1. Main interview questions.

No.	Interview Outline for Villagers
1	How many years have you been in the village? Do you like the current development status?
2	What do you expect to change concerning the rural landscapes with tourist development?
3	What do you think of the landscape planning for your village?
4	Which policy impressed you most? Or what changes of landscape impressed you most?
5	What do you know about your village's history?
6	Are you influenced by the implementation of the planning policy (in terms of tourist development)? If yes, describe in detailed please.
7	What do you expect for future development guided by the landscape planning?
No.	**Interview Outline for Leaders of Collective Group**
1	Do you like the current development status of the village?
2	What do you expect to change concerning the rural landscapes with tourist development?
3	What do you think of the landscape planning for your village?
4	How do you participate in the process of the policymaking?
5	What progress has been made guided by the planning policy? Describe in detail please.
No.	**Interview Outline for Immigrants**
1	How many years have you been in the village? Do you like the current development status?
2	What do you expect to change concerning the rural landscapes with tourist development?
3	Are you influenced by the landscape plan (in terms of tourist development and daily life)? If yes, describe in detail please.
4	Which policy impressed you most? Or what changes of landscape impressed you most?
5	What do you expect for future development guided by the landscape planning?

References

1. Zakariya, K.; Ibrahim, P.H.; Wahab, N.A.A. Conceptual Framework of Rural Landscape Character Assessment to Guide Tourism Development in Rural Areas. *J. Constr. Dev. Ctries.* **2019**, *24*, 85–99. [CrossRef]
2. Mastronardi, L.; Giaccio, V.; Giannelli, A.; Stanisci, A. Methodological proposal about the role of landscape in the tourism development process in rural areas:The case of Molise region(Italy). *Eur. Countrys.* **2017**, *9*, 245–262. [CrossRef]
3. Carneiro, M.J.; Lima, J.; Silva, A.L. Landscape and the rural tourism experience: Identifying key elements, addressing potential, and implications for the future. *J. Sustain. Tour.* **2015**, *23*, 1217–1235. [CrossRef]
4. Jia, Z.Y.; Gao, M.Y.; Xu, S.J.; Lyu, Y.P.; Feng, J.C.; Zhou, Z.X.; Yu, T.F.; Wu, W.J. Sociocultural vitality versus regulation policy and tourism development in preservation of traditional rural landscape: A case from Guizhou, China. *Int. J. Sustain. Dev. World Ecol.* **2021**, *28*, 179–192. [CrossRef]
5. Shen, S.; Wang, H.; Quan, Q.; Xu, J. Rurality and rural tourism development in China. *Tour. Manag. Perspect.* **2019**, *30*, 98–106. [CrossRef]
6. Pribadi, D.O.; Pauleit, S. Peri-urban agriculture in Jabodetabek Metropolitan Area and its relationship with the urban socioeconomic system. *Land Use Policy* **2016**, *55*, 265–274. [CrossRef]
7. Tedesco, C.; Petit, C.; Billen, G.; Garnier, J.; Personne, E. Potential for recoupling production and consumption in peri-urban territories: The case-study of the Saclay plateau near Paris, France. *Food Policy* **2017**, *69*, 35–45. [CrossRef]
8. Friedland, W.H. Agriculture and rurality: Beginning the "final separation"? *Rural Sociol.* **2002**, *67*, 350–371. [CrossRef]
9. Cuadrado-Ciuraneta, S.; Dura-Guimera, A.; Salvati, L. Not only tourism: Unravelling suburbanization, second-home expansion and "rural" sprawl in Catalonia, Spain. *Urban Geogr.* **2017**, *38*, 66–89. [CrossRef]
10. Salvati, L.; Moretti, V.; Sabbi, A.; Ippolito, A.; Ferrara, A. A multivariate assessment of fringe landscape dynamics in Rome, Italy, and implications for peri-urban forest conservation. *Rend. Lincei-Sci. Fis. E Nat.* **2015**, *26*, S587–S596. [CrossRef]
11. Hudalah, D.; Winarso, H.; Woltier, J. Peri-urbanisation in East Asia—A new challenge for planning? *Int. Dev. Plan. Rev.* **2007**, *29*, 503–519. [CrossRef]
12. Feng, J.; Xie, S.Y.; Knight, D.W.; Teng, S.N.; Liu, C.Q. Tourism-induced landscape change along China's rural-urban fringe: A case study of Zhangjiazha. *Asia Pac. J. Tour. Res.* **2020**, *25*, 914–930. [CrossRef]
13. Lee, A.K.Y.; Abrahams, R.A. Naturalizing people, ethnicizing landscape: Promoting tourism in China's rural periphery. *Asian Geogr.* **2018**, *35*, 177–196. [CrossRef]
14. Wu, Q.; Zhang, X.; Xu, Y.; Li, T. Dualities of semi-urbanization villages in social-spatial transition: A case study of Zhoucun village in suburban Nanjing, China. *J. Rural Stud.* **2016**, *47*, 657–664. [CrossRef]
15. Perrin, C.; Nougarèdes, B.; Sini, L.; Branduini, P.; Salvati, L. Governance changes in peri-urban farmland protection following decentralisation: A comparison between Montpellier (France) and Rome (Italy). *Land Use Policy* **2018**, *70*, 535–546. [CrossRef]
16. Kizos, T.; Plieninger, T.; Iosifides, T.; García-Martín, M.; Girod, G.; Karro, K.; Palang, H.; Printsmann, A.; Shaw, B.; Nagy, J.; et al. Responding to Landscape Change: Stakeholder Participation and Social Capital in Five European Landscapes. *Land* **2018**, *7*, 14. [CrossRef]
17. Lee, A.H.J.; Wall, G.; Kovacs, J.F. Creative food clusters and rural development through place branding: Culinary tourism initiatives in Stratford and Muskoka, Ontario, Canada. *J. Rural Stud.* **2015**, *39*, 133–144. [CrossRef]
18. Popp, L.; McCole, D. Understanding tourists' itineraries in emerging rural tourism regions: The application of paper-based itinerary mapping methodology to a wine tourism region in Michigan. *Curr. Issues Tour.* **2016**, *19*, 988–1004. [CrossRef]
19. Osti, L.; Cicero, L. Tourists' perception of landscape attributes in rural tourism. *Worldw. Hosp. Tour. Themes* **2018**, *10*, 211–221. [CrossRef]
20. Blapp, M.; Mitas, O. Creative tourism in Balinese rural communities. *Curr. Issues Tour.* **2018**, *21*, 1285–1311. [CrossRef]
21. Lysgård, H.K. The 'actually existing' cultural policy and culture-led strategies of rural places and small towns. *J. Rural Stud.* **2016**, *44*, 1–11. [CrossRef]
22. Willemen, L.; Hein, L.; van Mensvoort, M.E.F.; Verburg, P.H. Space for people, plants, and livestock? Quantifying interactions among multiple landscape functions in a Dutch rural region. *Ecol. Indic.* **2010**, *10*, 62–73. [CrossRef]
23. Vos, W.; Meekes, H. Trends in European cultural landscape development: Perspectives for a sustainable future. *Landsc. Urban Plan.* **1999**, *46*, 3–14. [CrossRef]
24. Kling, K.G.; Dahlberg, A.; Wall-Reinius, S. Negotiating Improved Multifunctional Landscape Use: Trails as Facilitators for Collaboration Among Stakeholders. *Sustainability* **2019**, *11*, 3511. [CrossRef]
25. Chen, M.X.; Liang, L.W.; Wang, Z.B.; Zhang, W.Z.; Yu, J.H.; Liang, Y. Geographical thoughts on the relationship between 'Beautiful China' and land spatial planning. *J. Geogr. Sci.* **2020**, *30*, 705–723. [CrossRef]
26. Li, W.; Zhang, Z.; Zhou, Y. Policy Strategies to Revive Rural Land in Peri-Metropolitan Towns: Resource Identification, Capitalization, and Financialization. *Land* **2021**, *10*, 132. [CrossRef]
27. Zhou, Y.; Xu, H.; Li, W. Identification and evaluation of the renewal of industrial land in master planning: The case of Lijia, China. *Open House Int.* **2020**, *45*, 39–53. [CrossRef]
28. Li, W.; Zhou, Y.; Zhang, Z. Culture-Led Plan for Peri-Urban Agricultural Sustainability: A Case of Pu'an Village in China. *Land* **2021**, *10*, 242. [CrossRef]
29. Richards, G.; Raymond, C. Creative tourism. *Atlas News* **2000**, *23*, 16–20.
30. Richards, G. Creativity and toursim: The state of the art. *Ann. Tour. Res.* **2011**, *38*, 1225–1253. [CrossRef]

31. Tan, S.K.; Kung, S.F.; Luh, D.B. A model of 'creative experience' in creatvie tourism. *Ann. Tour. Res.* **2013**, *41*, 153–174. [CrossRef]
32. Pinto-Correia, T.; Gustavsson, R.; Pirnat, J. Bridging the gap between centrally defined policies and local decisions—Towards more sensitive and creative rural landscape management. *Landsc. Ecol.* **2006**, *21*, 333–346. [CrossRef]
33. Richards, G. Designing creative places: The role of creative tourism. *Ann. Tour. Res.* **2020**, *85*, 11. [CrossRef]
34. Scott, A.J. The Cultural Economy of Landscape and Prospects for Peripheral Development in the Twenty-first Century: The Case of the English Lake District. *Eur. Plan. Stud.* **2010**, *18*, 1567–1589. [CrossRef]
35. Cattaneo, T.; Giorgi, E.; Ni, M.Q. Landscape, Architecture and Environmental Regeneration: A Research by Design Approach for Inclusive Tourism in a Rural Village in China. *Sustainability* **2019**, *11*, 128. [CrossRef]
36. Zavalloni, M.; Raggi, M.; Targetti, S.; Viaggi, D. Agricultural policies and the emergence of voluntary landscape enhancement efforts: An exploratory analysis of rural tourism using an agent-based model. *J. Environ. Plan. Manag.* **2015**, *58*, 2159–2175. [CrossRef]
37. Kuntz, A.F. Battir:creative resistance in a front life-opportunities and dilemmas of tourism development in a conflict zone. *Tour. Cult. Commun.* **2019**, *19*, 265–276. [CrossRef]
38. Bakas, F.E.; Duxbury, N.; Remoaldo, P.C.; Matos, O. The social utility of small-scale art festivals with creative tourism in Portugal. *Int. J. Event Festiv. Manag.* **2019**, *10*, 248–266. [CrossRef]
39. Dramstad, W.E.; Fjellstad, W.J. Landscapes: Bridging the gaps between science, policy and people. *Landsc. Urban Plan.* **2011**, *100*, 330–332. [CrossRef]
40. Jiménez-García, M.; Ruiz-Chico, J.; Peña-Sánchez, A.R. Landscape and Tourism: Evolution of Research Topics. *Land* **2020**, *9*, 488. [CrossRef]
41. Lekic, R.; Blajic, B.; Franjic, T. Interpretation of mythical landscape and holy geography in creative cultural tourism. In *4th International Scientific Conference: Tosee—Tourism in Southern and Eastern Europe 2017*; Markovic, S., Jurdana, D.S., Eds.; Univ Rijeka, Faculty Tourism & Hospitality Management, Opatija: Opatija, Croatia, 2017; Volume 4, pp. 291–306.
42. Daugstad, K. Negotiating landscape in rural tourism. *Ann. Tour. Res.* **2008**, *35*, 402–426. [CrossRef]
43. Tan, S.K.; Luh, D.B.; Kung, S.F. A taxonomy of creative tourists in creative tourism. *Tour. Manag.* **2014**, *42*, 248–259. [CrossRef]
44. Griffiths, G. Transferring Landscape Character Assessment from the UK to the Eastern Mediterranean: Challenges and Perspectives. *Land* **2018**, *7*, 36. [CrossRef]
45. Zhou, D.; Xu, J.; Lin, Z. Conflict or coordination? Assessing land use multi-functionalization using production-living-ecology analysis. *Sci. Total Environ.* **2017**, *577*, 136–147. [CrossRef] [PubMed]
46. Ye, C.; Ma, X.Y.; Cai, Y.L.; Gao, F. The countryside under multiple high-tension lines: A perspective on the rural construction of Heping Village, Shanghai. *J. Rural Stud.* **2018**, *62*, 53–61. [CrossRef]

Article

Landscape and Tourism: European Expert Views on an Intricate Relationship

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Abstract: Although the centrality of landscape to tourism is unquestionable and already a broadly established scientific area of research, much remains to be explored and understood regarding their interrelatedness. The objective of this research was to investigate, analyze and assess notions and perceptions of the reciprocal relationship between the landscape and tourism through an electronic survey among European researchers and scientists of relevant and associated academic fields. This was achieved with the aid of an interview questionnaire survey, focusing on the experts' (a) perceptions/understandings and visions of future optimization of the reciprocal relationship tourism–landscape, (b) their conceptualizations of landscapes of tourism, and 9c) their assessments of the prospects (opportunities) and challenges (threats) coming out of the close tourism–landscape relationship, both for the tourism industry and the local societies involved. Our findings point to an emergence of a definition for "landscapes of tourism". The experts elaborated on the high significance of the tourism–landscape relationship, through well-balanced and realistic opinions vis-à-vis the positive and negative aspects of the researched relationship but leaning towards its negative aspects. Overall, the findings reveal significant social sensitivities, environmental concerns, support for the principles of sustainability, locality, participatory governance and a call for appropriate governmental planning.

Keywords: landscape; tourism; landscapes of tourism; conceptualization; experts; Europe

1. Introduction

In recent decades, along with the dynamic development of the phenomenon of tourism and of tourism studies, much interdisciplinary research has appeared on the subject of landscape and its transformation through tourism [1–4]. At the same time, acknowledgment of the presence and role of the landscape in tourism continues to be scant and tentative overall compared to other fields of tourism-related scientific research, and no adequate organizational framework for analyzing the relationship between landscapes and tourism has so far been developed [1–4].

Thus, although the centrality of the landscape to tourism is unquestionable and is already a broadly established scientific area of research, much remains to be explored and understood regarding their interrelatedness. Landscape and tourism—both highly complex and multifaceted—come together in a variety of ways across time, space, and culture [1,5]. This research was undertaken in this context, and is designed for, and aiming at, collecting and assessing expert knowledge, information and opinions in Europe on basic and significant facets of this intertwined relationship. Specifically, the objective of our research was to investigate, analyze and assess notions and perceptions of the reciprocal relationship between the landscape and tourism through an electronic survey among European researchers and scientists of relevant and associated academic fields.

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For this purpose, our research was carried out via an interview questionnaire with expert respondents focusing on (a) their perceptions, understanding and visions of future optimization of the reciprocal tourism–landscape relationship, (b) their conceptualizations of landscapes of tourism, and (c) their assessments of the prospects (opportunities) and challenges (threats) coming out of the close tourism–landscape relationship for the tourism industry and for the local societies involved.

The aim of this research was mainly to contribute to the scientific understanding of the ways in which tourism destinations function and of tourism-induced changes to the landscape. The obtained results may provide useful input for future planning and management efforts, both in the realm of tourism and in the realm of landscape, as well as aid in the corresponding assessment and stewardship of landscapes in different settings and under different conditions and tourism pressures.

2. The Theoretical Context: A Brief Overview

The significance of the landscape to the variety of experiences sought or unfolding at a visited destination is well-established and considered paramount [3,6–12]. The centrality of sightseeing to tourism and the definition of landscape itself [13], attest to the fact that there can be no tourism without landscape, and no landscape without a viewer or observer in the broad sense of the term. This fact opens up a broad range of possibilities and options for tourism and landscape planning, management and marketing.

All types of landscapes and places may potentially hold interest for some type of visitor, such as for the consumption of goods, services, activities, and experiences. However, certain types of landscapes in certain parts of the world and at certain times, tend to evolve as much more significant visitor attractors than others. This is often due to the landscape's unique, spectacular or otherwise attractive and interesting character. There is also ample scientific evidence pointing to the great variability and cultural contingency in landscape visitor perception, preference and appreciation by viewers, users and visitors [10,14–19]. This variability, character and significance of the landscape–visitor relationship, both geographically and historically, remains largely unexplored, especially regarding the role that the landscape plays in the tourist (and generally leisure or recreational) experience. Different types of landscapes tend to offer visitors different services and experiences, such as tranquillity, excitement, education, solace, seduction, awe, inspiration, sense of well-being, homeliness. Contextualized and overarching leisure and tourism experiences increasingly inform and substantiate new types of landscapes of tourism and leisure. The tourist seeks regeneration in the form of pleasure, dreaming, change, tradition, socialization, arts, sports, wellness, or education, and this is prompted by an on-going quest for novel or simply satisfactory tourism–landscape destinations and activities.

Therefore, rising international rates and patterns of mobility and use require a renewed and more in-depth investigation into the desired types of sites and attractions and into the role of the landscape in the visitor experience [4,10,20,21]. One positive trend in this direction is the enormous proliferation of a broad range of alternative, special-interest and special-purpose forms of tourism, variably (and often, intricately) connected to landscapes. In this context, landscapes are becoming increasingly important as a tourism, recreational or leisure destinations competitively planned, managed and promoted by the supply side. Furthermore, the predominant goals of such endeavors tend to be increasingly compatible with sustainable "green" landscape development for local societies and tourism, while catering to a variety of broadly accessible tourism or leisure pursuits and activities on the demand side [5,22].

On the basis of its mediational nature, the landscape represents the primary and most enduring medium of contact between the tourist and the destination. The tourist sets out on a trip, with images, dreams or ideas of the destination. The tourism industry markets images, discourses, resources and uses of landscapes through representations of their cultural signs (e.g., advertising and promoting attractions, digital destination marketing, or city branding. Through the cultural, performative or affective re-interpretation of these

signs—either deliberately or inadvertently—the tourist or visitor assesses, validates and uses the meanings and identity of the destination in the context of its landscapes [23].

Notwithstanding its constitutive ambivalent and contested processes, a cultural landscape becomes a significant ground for personal, cultural or destination change and identity formation [9]. Furthermore, the connection between landscape and tourism is not restricted to the geographical or physical. It extends also to the performative nature of the travel experience and the pleasure sought in it, as established through theories of emotion, affect, and more-than-representational geographies of human-landscape interaction [15,24–26]. All of these variables come into play when analyzing tourism in the landscape.

Much confusion, however, exists in the scholarly literature around the terms "tourist" and "tourism" in conjunction with the concept of landscape [3,4]. The noun "tourism" is intended to depict the processes through which a landscape or landscape activity or development is shaped to serve tourism and tourism landscapes. As a noun or adjective, "tourist" indicates the means by which activities and landscapes are substantiated or used via the phenomenon of tourism. Accordingly, "landscapes of tourism" or "tourism landscapes' refers to the ways these landscapes are produced, whereas "tourist landscapes" speaks to the ways they are used [23]. The term "visitor" is often alternatively employed to encompass all types of such intended expropriation of points, areas, or sites of appeal, inciting interest from a broad range of parties, such as tourists, excursionists, day-trippers, explorers or recreationists. [27].

Contemporary approaches to the landscape–tourist relationship consciously signal multiple and shifting points of view in the context of leisure-economy production and use [5,10]. This landscape–viewer relationship, as staged and played out in tourist landscapes, has been increasingly explored in the context of tourism and leisure studies during the past two or three decades (e.g., in the analysis of aspects of tourism destinations as cultural landscapes or in the context of sustainable development). The interface between these two broad and complex areas of scientific study, tourism and landscape, has elicited a varied body of research regarding its nature, focus and approach. Nonetheless, there is, so far, no comprehensive and cohesive theoretical framework to support this body of work. This increasingly interdisciplinary area of study is further compounded by the fact that it is often engaged within the broader context of leisure studies. Nevertheless, interest in it has grown, especially in the last decade, as is reflected in the increase of publications in this field and in research topics dealing with landscape and tourism. However, there are few (teams of) researchers specializing and conducting research consistently in this field, while such publications tend to be widely dispersed among relevant publication outlets [28].

Few attempts have been made to study tourism or landscape typologies, in order to combine different landscape features and dimensions with types of tourism and destination development [3,4,29]. Many challenges are involved in this task. From the landscape perspective, they not only represent different cultures but are also comprised of different urban, natural, semi-natural or rural ecosystems and settings, which offer a wide range of recreational possibilities that have positive, negative or other implications for the destination, visitors, and tourism. From the recreation and tourism side, more or less generic or unique attractions and respective recreational infrastructure and amenities range from minimally popular to highly sought-after. The relevant literature also cautions against despoiling the landscape through tourism, with the latter often destroying the very basis of its development.

The development of new types of landscapes as new forms of tourism cater to new social needs, cultural preferences and economic contingencies has been an ongoing practice since the advent of the tourism phenomenon. The novelty of such landscapes in the present age, however, lies in their nature, scale and geographical characteristics that cut across many of the more traditional types of tourist or tourism environments. The separation, for instance, of leisure from home life that modernization has brought becomes more and more tentative and irrelevant in the postmodern western world, turning tourism into a ubiquitous practice in the landscape. What we understand as leisure or tourism

today has merged with spectacle, where specific pleasures are not place-bound and objects of delight proliferate [14,15,30]. This results in a growing spatial de-differentiation between leisure and tourism and activities like shopping, work, culture, satisfaction of basic needs, comfort, play and familiarity. Thus, in the context of this new cultural economy of space [5], the increasing tendency is for all landscapes to assume certain characteristics of leisure and tourism, while the distinction between leisure and tourism also becomes increasingly blurred.

3. Results Design and Implementation

The objective of our research was to investigate, analyze and assess notions and perceptions of the reciprocal relationship between the landscape and tourism by means of an electronic survey among European researchers and scientists of relevant and associated academic fields.

For this purpose, we employed the Survey of Expert's Opinions, an expert (heuristic) method. Such research methods are used in the study of phenomena with a high degree of complexity. They essentially constitute a creative approach to the studied phenomenon, based on creative methods of thinking and problem solving (e.g., detecting new facts and relations) [31]. The effects of using such heuristic methods are, for example, the ability to determine the intensity of the occurrence of a new phenomenon, determine turning points in the course of a given phenomenon, or determine the probability of a given event. The basic assumption is that the accuracy of group judgements is usually higher than that of individual experts. The expert group should be distinguished according to their professional relationship to the field of the phenomenon in question (from both science and practice), personality, comprehensive knowledge, independent thinking, and different views on the phenomenon [32]. Thus, in accordance with the procedure of the adopted method, we made a conscious decision to select the most qualified participants at the outset of our study.

The experts were selected on the assumption that they had extensive knowledge of the structure and functioning of landscape and tourism development and that they had an impact on relevant education or strategic planning regarding tourism management. In accordance with the main objective of our study, the core group of respondents consisted of academics. In addition, the group of experts included practitioners from, or representatives of, public management (local government officials, city officials, employees of tourism organizations) and the tourism industry.

Accordingly, using national and international professional networks, we created a database of more than 150 potential expert respondents and compiled the interview questionnaire (Table 1) to elicit (a) their understanding and visions of future optimization of the reciprocal relationship between the landscape and tourism, (b) their conceptualizations of tourism landscapes, and (c) their assessments of the prospects (opportunities) and challenges (threats) stemming from the close tourism–landscape relationship for the tourism industry and the local societies. The questions were closed-ended (offering multiple choices of responses), except for the first two questions (Q1 and Q2) and the final one (Q11), which were open-ended. For Questions 3 to 10, the respondents could choose more than one answer. Responses to the open-ended questions were de-codified, and all survey results are presented in the following section.

The questionnaire survey was implemented electronically from November 2019 to April 2020, using Google forms on-line. It was sent to all selected experts in landscape and tourism. We received 77 responses, mostly from academics and secondarily from researchers or high-ranking professionals (Table 2). The vast majority of our respondents came from European countries, and their socio-biographical profile is shown in Table 2, below.

Table 1. The online survey questionnaire.

1. According to your opinion, how is landscape significant to tourism?
2. How does tourism affect landscapes (both positively and negatively)?
3. In what ways is landscape significant to tourism?
4. In what ways does tourism affect landscapes?
5. What is a landscape of tourism?
6. What does a landscape of tourism encompass?
7. What prospects (opportunities) do you see coming out of the close relationship tourism–landscape, for the tourism industry (both supply and demand sides)?
8. What prospects (opportunities) do you see coming out of the close relationship tourism–landscape, for the local society of the tourist destination?
9. What challenges (threats) do you see in the future to the relationship tourism–landscape, for the tourism industry (both supply and demand sides)?
10. What challenges (threats) do you see in the future to the relationship tourism–landscape, for the local society of the tourist destination?
11. What do you propose in order to optimize the tourism–landscape relationship for all sides involved?
12. Is there anything else you would like to add?

Table 2. Respondent characteristics.

Features	Characteristics of the Sample			
gender	males	females		no answer
	30	46		1
[%]	39.0	59.7		1.3
age	18–25	26–40	41–60	over 60
	1	23	40	13
[%]	1.3	29.9	51.9	16.9
educational level	tertiary education	post-graduate degree	PhD degree	other
	3	12	62	0
[%]	3.9	15.6	80.5	0

profession	academician/researcher	public sector employee	private sector employee	freelancer	NGO representative	other
	59	4	6	3	1	4
[%]	76.6	5.2	7.8	3.9	1.3	5.2

occupation/specialization	tourism	tourism geography/geography/human geography/education	culture/heritage studies	landscape ecology/landscape research	landscape planning/landscape architecture/urban planning	environment management/ecosystem services	nature conservation	rural studies/rural development	local government
	4	40	4	6	10	5	2	5	1
[%]	5.2	52.0	5.2	7.7	13.0	6.5	2.6	6.5	1.3

regions	Northern Europe	Mediterranean Europe	Western Europe	Eastern Europe	non-European countries
	20	30	8	12	7
[%]	26.0	39.0	10.4	15.6	9.0

Geographical regions assigned by UN [33].

There seemed to be a predominance of females, while the highest percentage for educational profile belonged to Ph.D. holders, as would be expected in such an expert survey. The age distribution more or less also followed an expected normal curve, and, not surprisingly, the vast majority came from the academic world.

4. Results

The main part of our survey included questions that addressed the interconnections between landscape and tourism and their repercussions. The first two questions were open-ended and their answers were decodified, as shown in Tables 3 and 4.

Table 3. Respondents' views on the importance of landscape for tourism.

Q1. According to Your Opinion, How Is Landscape Significant to Tourism?		
	Responses	
	Number	**Share**
landscape is a tourist attraction in itself	17	17.9%
landscape is a scenery and visual image for tourism	10	10.5%
landscape is a container and source of tourism resources and attractions	17	17.9%
landscape is a means of promoting/marketing and managing tourism	9	9.6%
landscape is a tool for studying tourism	8	8.4%
landscape is a medium for developing an understanding and appreciation of a destination	8	8.4%
other (which?) = landscape is a source of feelings/experiences for tourism	10	10.5%
significant without specialization	16	16.8%
Total	95	100.0%

Table 4. Respondents' views on how tourism affects landscapes.

Q2. How Does Tourism Affect Landscapes (Both Positively and Negatively)?		
	Responses	
	Number	**Share**
Tourism creates ("discovers", determines, plans, constructs, develops, stages) landscape attractiveness	14	9.9%
Tourism sells (promotes and manages) landscapes as tourist products	9	6.4%
Tourism alters landscapes and/or landscape elements positively	46	32.6%
landscape protection	22	
regeneration of spaces	6	
development of the destination's economy	12	
residents' and tourists' landscape revaluation (increase the importance)	6	
Tourism alters landscapes and/or landscape elements negatively	60	42.6%
landscape transformations/unauthenticity/commercialization/	18	
damage of landscape and depletion of environmental resources	36	
development of tourist facilities	6	
Other	12	8.5%
Total	141	100%

It was very interesting to note that the distribution of answers among the categories of the decodification was very much in agreement with that of the answers to similar questions that were administered in a subsequent closed-ended form. Specifically, the findings for Q1 (Table 3) were very similar to those for Q3 (Figure 1), whereas the findings for Q2 (Table 4) were very similar to those for Q4 (Figure 2), and will be discussed together further down. We will follow the same strategy in the presentation and analysis of results

pertaining to all similar questions in order to describe and elaborate on the findings in a more comprehensive and relational way.
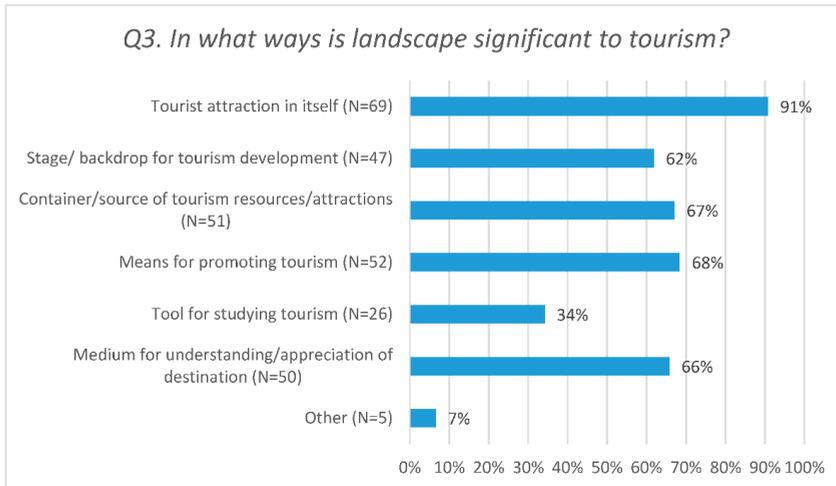
Figure 1. The ways that landscape is significant to tourism.
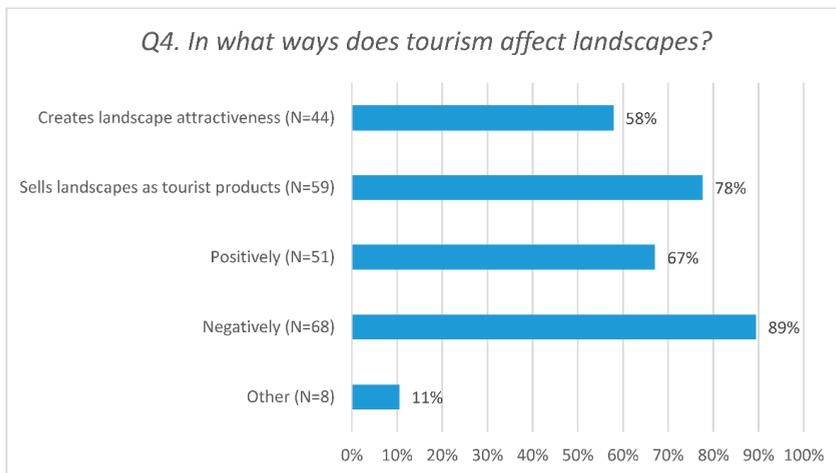
Figure 2. The ways tourism affects landscape.

Concerning the ways in which landscape is significant to tourism (Q1 and Q3) (Table 3 and Figure 1), the experts seemed to assign a pivotal role to its tourism–inducing capacity. First, their answers indicated that they saw landscape as a tourist attraction per se. Secondly, they saw it as a container of tourism resources and attractions and a means for promoting a destination. Other possible responses also appeared in our survey data, the least mentioned one being: "landscape is a tool for studying tourism". For the ways in which tourism affects landscapes (Q2 and Q4), there seemed to be a balance between respondents who said it seems to play a role in creating landscapes and those who said it seems to play a role in selling landscapes (Table 4 and Figure 2). Perhaps the most significant finding here was that, despite the fact that tourism was said to affect landscapes both positively and negatively, the negative opinions exceeded the positive ones in both cases (Q2 and Q4).

Nonetheless, it was especially noteworthy to acknowledge the large number and variety of answers we received to all of these questions, both closed-ended and open-ended, whether given by the experts themselves (Q1 and Q2) or as their responses to choices given by our Questionnaire (Q3 and Q4). In other words, all categories of possible responses seemed to enjoy high agreement among the survey participants.

Question 5 addressed the basic issue of the definition of a landscape of tourism (Figure 3). Despite the fact that the experts' answers were fairly well distributed among the various alternative categories in this closed-ended question, an interesting tendency emerged. Most answers favoured the supply side of tourism and landscape, which refers to the creation and marketing of such landscapes, rather than the demand side, which emphasizes the use of landscape from the tourists' side. The emphasis was thus on aspects of the development of tourism in such landscapes (planning and management) and of the outcome and imprint of such processes on the land, namely, a destination landscape where tourism functions dominate other functions (industry, culture, transportation, or other).
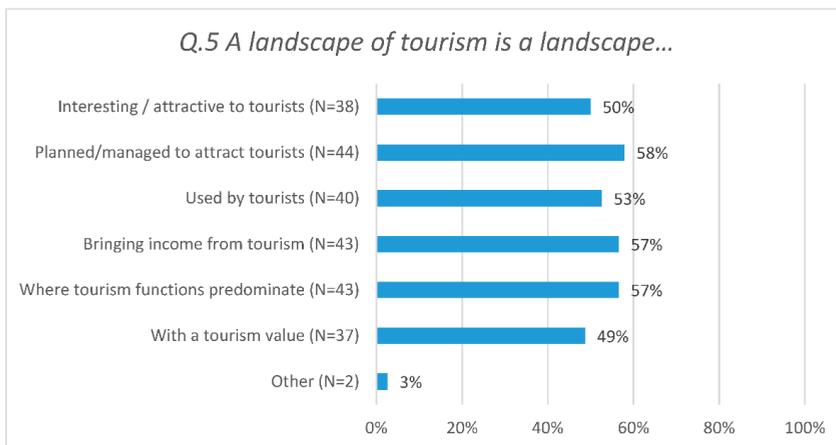
Figure 3. Perceptions on what a landscape of tourism is.

These findings were also reflected in the answers we received to (Q6) (Figure 4). According to our respondents' understanding of the definition of a landscape of tourism, the it encompasses most significantly features relating to the articulation and development of landscapes to cater to tourists (attractions and resources; facilities and infrastructure). Furthermore, features, resources and facilities of landscapes of tourism received a higher number of quotes, and thus seemed to have more significance for the respondents than did the human and managerial counterparts (tourists and tourism professionals and tourism organizational, institutional and management structures and functions). Such a finding may have reflected the predominantly material (if not visual and generally sensory) character of this unit of analysis, which refers to a spatial entity, the landscape. Certainly, there is much more to a landscape than its materiality or sensory character [13]; however, the latter properties generally seemed to predominate in landscape definitions and conceptualizations among lay and "expert" populations [4,34,35].

The opportunities and threats that the relationship of tourism with the landscape presents to both the tourism industry and the local destination society were explored in Q7–10. With regard to the opportunities for tourism (Q7), our survey participants favoured "creating a diversified tourism basis and amenities to combine different forms of tourism with the landscape (alternative or special interest)" (Figure 5). Moreover, they also mentioned two other opportunities to a high degree: "departure from mass tourism and '3S' tourism towards more sustainable, mild, slow or small-scale tourism" and "fostering

sustainable overall destination development". Taking together all three of these types of answers, which comprised the vast majority of answers to Q7, we came to the conclusion that the main opportunities for the tourism side were thought to be the creation of a more diversified and sustainable basis for tourism growth.
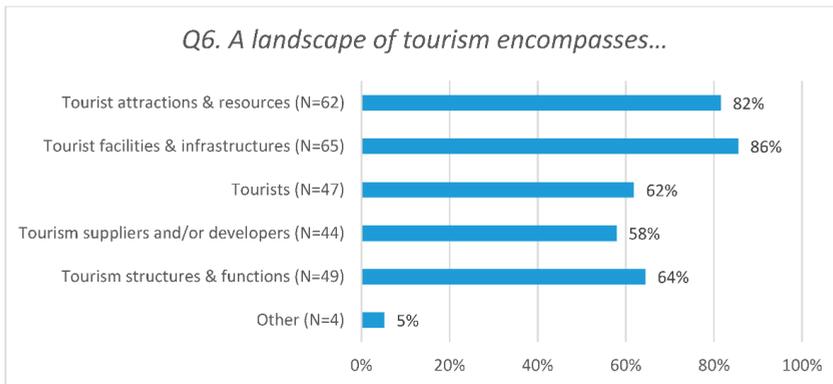
Figure 4. Perceptions of what a landscape of tourism encompasses.
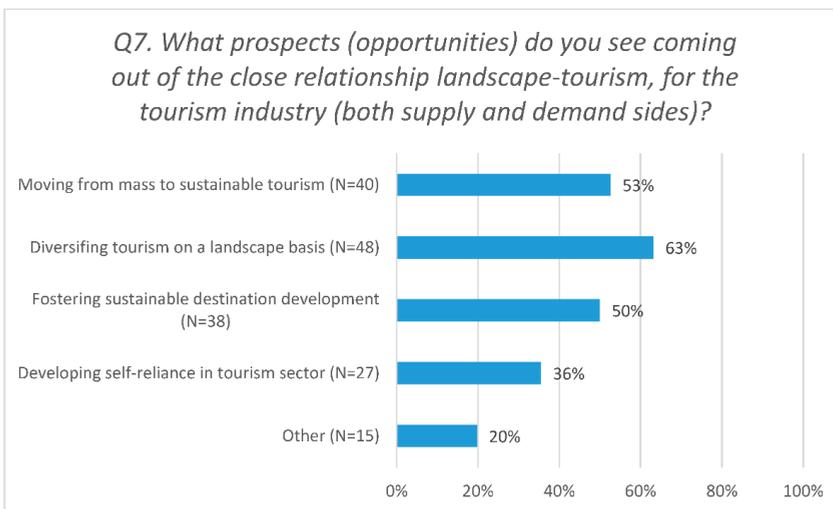
Figure 5. Prospects of the tourism–landscape relationship for the tourism industry.

Interestingly, the respondents' suggestions of opportunities stemmed from the relationship of tourism with the landscape for the local destination side similarly revolved around the same principles and lines of thought. Specifically, the answers we received for Q8 (Figure 6) leaned heavily towards the prospect of furthering all pillars of overall local environmental, social, economic, and cultural sustainability [36,37]. The respective responses (categories of opportunities for the local side) that combined to support this conclusion were, in their stated order of significance: "promotion, protection and sensitization vis-à-vis the natural environment, culture and heritage and the destination place", "offering local societies employment opportunities, local entrepreneurship, financial revenues and other benefits", "cultivation of cultural identity, place pride and social cohesion in local

societies", and "development of and further investment in local economy (e.g., agriculture, craftsmanship)".
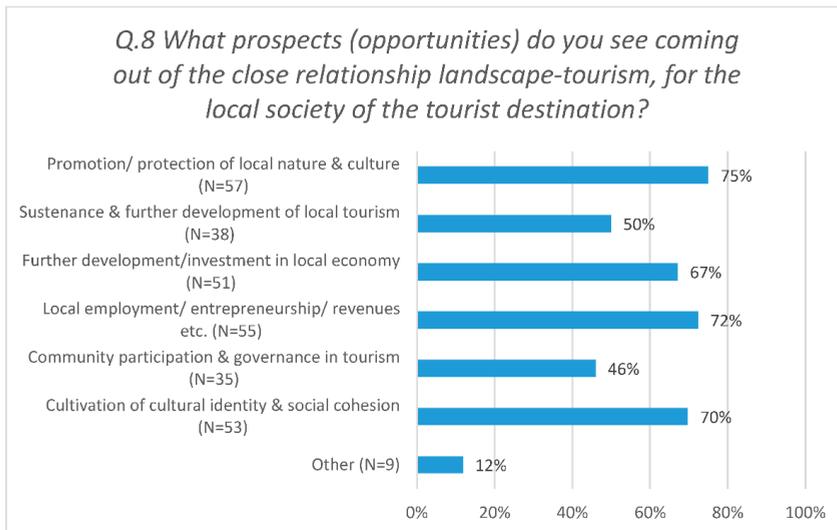
Figure 6. Prospects of the tourism–landscape relationship for the local society of the tourist destination.

Coming to the possible future challenges and threats that the survey participants saw in the tourism–landscape relationship for both sides (Q9 and Q10; Figures 7 and 8, respectively) we again found a high degree of agreement with what we received for the previous two questions (Q7 and Q8). Regarding possible future threats to the tourism industry (Figure 7), our respondents mostly cited risks to the landscape, followed by risks to tourism and specifically "landscape misuse, misconstruction and misrepresentation through new ITCs and other digital technologies, including the proliferation of social media" and "uncontrolled and novel trends, flux and crises in the tourism industry and its global environment". Other threats or challenges were also mentioned but not to the same degree as the previously mentioned ones, which basically referred to the very basis of the continuation and sustenance of the mutually beneficial relationship between tourism and the landscape. In other words, the concern of the experts seemed to focus both on the possible despoliation of the landscape as a source, asset, or resource for tourism, and on landscape deterioration and tourism decline, themselves.

For the local society and destination (Figure 8), the possible future threats and risks to the tourism–landscape relationship that the experts cited seemed to be in accordance with the answers to Q7–9. Specifically, the threats most widely mentioned by percentage referred to local landscapes and their cultural and natural features and attributes ("environmental and cultural damage or incongruous, disrespectful or demeaning tourist behaviour towards the destination place or society" and "landscape homogenization, commercialization and banalization, through globalization and erosion of local cultures"). Consequent relevant concerns about the local society, economy and general development were raised next ("overtourism and 'tourismphobia'" and "tourism dependence and loss of local control over their community and infrastructure"). Finally, but to a lesser degree, the possible future risk of inter-societal strife and instability was expressed, with a significant number of respondents quoting "changes in the ways locals interact with their landscapes and with each other" and "conflicts among various sides involved". Thus, the highest degree of expert concern vis-à-vis risks and challenges, again, was for the landscape itself, followed

by a series of other concerns regarding local overall social and economic sustainability as well as the sustainability of the local tourism industry itself.
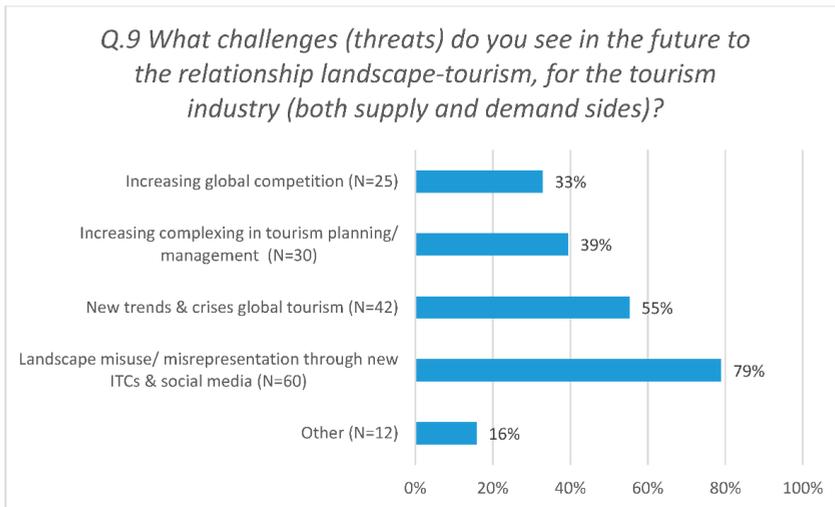
Figure 7. Challenges of the tourism–landscape relationship for the tourism industry.
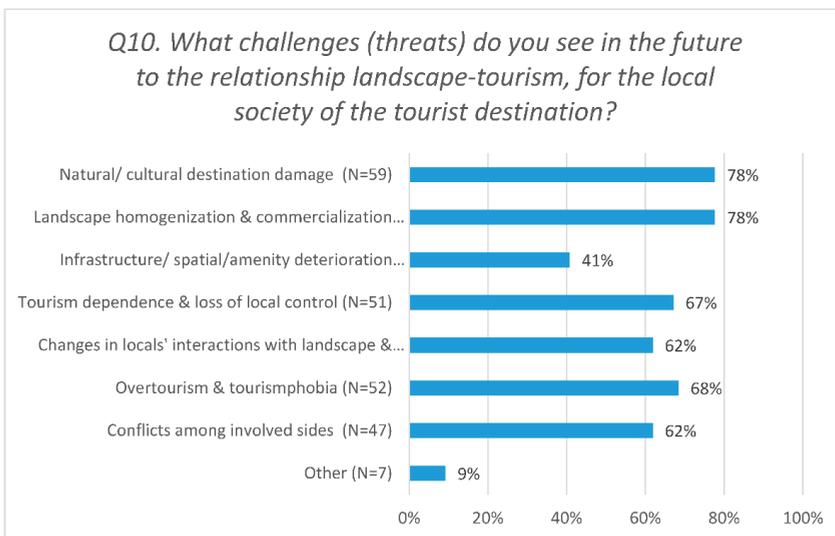
Figure 8. Challenges of the tourism–landscape relationship for the local society of the tourist destination.

As expected, most proposals towards the optimization of the tourism–landscape relationship (Q11) tended to focus on the appropriate management of tourism destinations, which, once again, mainly referred to consideration of and emphasis on principles of overall sustainability (Table 5). Specifically, 34 (A + B = 24 + 10) out of 83 such suggestions put forth by the survey participants were in this line of thought. It is also noteworthy that the remainder of the types of proposals we received in answer to this question (Q11) mainly revolved around bottom-up and participatory community or society and stakeholder involvement, co-management or stewardship of tourist destination landscapes.

The significance of proper management for landscapes of tourism was also especially highlighted in the additional comments that the experts were invited to offer at the end of the questionnaire survey (Q12), as indicated by the majority of such answers (A + B + C = 3 + 3 + 6) out of the total number of comments received (Table 6).

Table 5. Proposals for optimising the tourism–landscape relationship.

Q11. What Do You Propose in Order to Optimize the Tourism–Landscape Relationship for All Sides Involved?		Number of Responses
A	Rational management of the destination (planning, organizing, motivating, controlling)	24
B	Supporting sustainable development of destinations	10
C	Development of research on the subject and social education	16
D	Social responsibility/community involvement	11
E	Cooperation of stakeholders for the tourism development	15
F	Other	7
	Total	83

Table 6. Additional information.

Q12. Is There Anything Else You Would Like to Add?		
	Suggestion for:	**Number of Responses**
A	applying the principles of sustainable development	3
B	protecting of the local landscape and society/its natural and cultural heritage	3
C	proper landscape management with the participation of local communities/building landscape potential of destinations	6
D	continuing research and education into the landscape	5
E	Other	4
F	No	9
	Total	30

5. Discussion

As has been broadly recognized (e.g., [28]), tourism and landscape are both vast and complex fields of scientific research, in which there has been a recent rise in volume, subject matter, approach and methodology from various scientific disciplines. Among them, a growing interest in landscapes of tourism has been especially evident in recent years. Such research efforts have sought to define the concept, analyze its components and perceptions, and evaluate the development of tourism and tourism landscapes and processes related to their creation, reproduction, promotion, and use. However, so far, such efforts have not led to a comprehensive and consistent framework for the conceptual or theoretical analysis of the relationship between tourism and landscape that could significantly support this area of research and study. Accordingly, this study purported to address this shortcoming and aimed to contribute to covering this gap in current knowledge.

Our study findings underlined the fact that the links between tourism and landscape are obvious and inextricable. The fact that tourism may not exist without the landscape and no landscape exists as such without its viewer or tourist opens up a broad range of possibilities and options for tourism and landscape planning, management and marketing. In this context, the question of why some landscapes may be more attractive for tourism than others is relatively open. Not enough in-depth research has yet been published in this area, including studies on various types of landscapes as significant factors for visitor attraction, as well as on the role of landscape the experiences of tourists and visitors. In our

view, this is a promising and very interesting field of interdisciplinary research where big data may also find application [38,39].

Furthermore, there is a great deal of confusion in the scientific literature around "tourist vs. tourism" in conjunction with landscape. In the authors' view, these terms ought to be sorted out and the term "tourism landscapes" ought to be distinguished as that which implies the ways in which these landscapes are produced, whereas "tourist landscapes" rather implies the ways in which these landscapes are used, a position reinforced by the study's findings.

The study employed the expert method, which is recommended for the analysis and interpretation of complex relationships among concepts and variables. As we expected, the expert responses were, for the most part, well thought out, detailed and highly educated on the subject of the tourism–landscape relationship.

The analysis and evaluation of the concepts and perceptions of the interrelation between landscape and tourism received by our experts revealed that, due to the importance of landscape for tourism, they seemed to attribute a key role to landscape for its ability to induce tourism. Primarily, they saw landscape as a tourism attraction, per se, and secondly as a retainer of tourism resources and attractions and as a means for promoting a destination.

On the other hand, concerning the impact of tourism on landscapes, the respondents stated that tourism promotes and manages landscapes as tourism products. Despite the key advantages, their indications emphasized a rather negative aspect of these interrelationships, which is reflected in 21st century trends of mass tourism and overtourism. In their view, tourism affects the landscape by causing significant damage, such as the loss of natural values and resources, despoliation of "authenticity", and degradation or loss of the actual space occupied by tourist facilities for other needs of the destination society.

The above findings were also confirmed by the respondents' answers to the question regarding their understanding of the definition of tourism landscape. In their view, this term expressed the most important features related to the development of such landscapes in order to meet tourism needs like attracting tourists and generating income for the development of tourism functions). The term reportedly included tourist facilities and infrastructure, tourist attractions and resources, but also organizational, institutional or management structures and functions, tourists and tourism suppliers, entrepreneurs, and developers.

In summary, most of the responses from the experts referred to the supply, rather than the demand, side of the relationship between tourism and the landscape. This is indicated by the emphasis they put on aspects of tourism development in such landscapes (planning and management) and the impacts these processes have on the target landscape, where tourism functions dominate.

Respondents' responses regarding the opportunities and threats posed by the close relationship between tourism and landscape for both sides involved, the tourism industry and the local society, showed that respondents agreed that sustainable development created the main opportunities for both groups. As far as the tourism side is concerned, this relationship is the foundation of tourism itself, as it provides perspectives and opportunities to create a more diversified product offering. However, for the local community, it is necessary to sustain the proper functioning of all socio-economic spheres and sectors of the region while tourism develops. Thus, the dominant objectives of both sides increasingly ought to be in line with the sustainable "green" development of landscape, local destination societies and tourism, while satisfying a variety of widely available forms of recreation and tourism and demand-side objectives.

With regard to possible future challenges and threats to the tourism industry that the experts saw in the tourism–landscape relationship, the respondents from both sides (tourism and landscape "experts") mostly mentioned risks to the landscape, followed by risks to tourism. The concern of the experts focused on the possible despoliation of the

landscape as a source, asset or resource for tourism, but also on landscape deterioration and tourism decline, in and of themselves.

As expected, most of the proposals for optimizing the tourism–landscape relationship focused on the appropriate management of tourism destinations, which, once again, included consideration of, and emphasis on, the application of sustainable development principles. In the context of such efforts, experts attributed an important role to local grassroots participation. They emphasized the active presence and involvement of stakeholders in the co-management of tourism destination landscapes. The importance of proper and participatory management of tourism landscapes was repeatedly stressed by the experts in the study and seemed to emerge as a crucial factor in shaping tourism–landscape relations now and in the future.

Finally, we may conclude that another outcome obtained from our questionnaire survey was that our experts' responses were in accordance with the increasing number of good practice cases in the participatory management of tourism landscapes, as evidenced in interdisciplinary research [22].

6. Conclusions

The findings of our study pointed to the emergence of a definition for "tourism landscapes" or "'landscapes of tourism" among those interviewed. Generally speaking, the expert responses were well-balanced and realistic vis-à-vis the positive and negative aspects of the relationship between tourism and landscape with a leaning towards the negative. Accordingly, the respondents attributed great value to this relationship and revealed concern over its challenges, through expressions of social and environmental sensitivity and though support for the principles of sustainability, locality, economic independence, participatory governance, while advocating a call for appropriate governmental planning.

The identification of the experts' insights and opinions, whether researchers, academics or stakeholders, on the tourism–landscape relationship may help to determine and promote landscape functionality and multifunctionality (preferences of various recipient groups), sustainability (natural environmental carrying capacity and preferred forms of tourism) and measurability (demand and supply prices and levels of tourism development). All of the latter issues and sectors or domains are equally important from the point of view of maintaining the long-term balance between landscape and local resources on the one hand, and tourism and hospitality industries on the other. Nonetheless, in this regard, this study was undertaken as an exploratory investigation, which will hopefully pave the way for more in-depth, interdisciplinary and comprehensive research in this field.

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References

1. Terkenli, T.S. Tourism and Landscape. In *Tourism Geographies: A Companion to Tourism*, 1st ed.; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; The Wiley-Blackwell: Oxford, UK, 2004; pp. 339–348.
2. Della Dora, V. Travelling landscape-objects. *Prog. Hum. Geogr.* **2009**, *33*, 334–354. [CrossRef]
3. Skowronek, E.; Tucki, A.; Huijbens, E.; Jóźwik, M. What is the tourist landscape? Aspects and features of the concept. *Acta Geogr. Slov.* **2018**, *58*, 73–85. [CrossRef]

4. Terkenli, T.S.; Skowronek, E.; Tucki, A.; Kounellis, N. Towards understanding tourist landscape. A comparative study of locals' and visitors' perception in selected destinations in Poland and Greece. *Quaest. Geogr.* **2019**, *38*, 81–93. [CrossRef]
5. Terkenli, T.S.; d'Hauteserre, A.M. (Eds.) *Landscapes of a New Cultural Economy of Space*, 1st ed.; Springer: Dordrecht, The Netherlands, 2006; 257p, ISBN 10.1402040954.
6. Urry, J. *Consuming Places*, 1st ed.; Routledge: London, UK, 1995; pp. 1–272.
7. Carmichael, B. *Destinations: Cultural Landscapes of Tourism*; Routledge: London, UK, 1998.
8. Terkenli, T.S. Landscapes of tourism: A cultural geographical perspective. In *Tourism and the Environment: Regional, Economic, Cultural and Policy Issues*, 2nd ed.; Briassoulis, H., van der Straaten, J., Eds.; Kluwer Academic Publishers: Dordrecht, The Netherlands, 2000; pp. 179–202.
9. Terkenli, T.S. Landscapes of Tourism. In *Companion to Tourism*, 1st ed.; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; Wiley-Blackwell: West Sussex, UK, 2014; pp. 282–293. [CrossRef]
10. Cartier, C.; Lew, A.A. (Eds.) *Seductions of Place: Geographical Perspectives on Globalization and Touristed Landscapes*; Routledge: London, UK, 2005; ISBN 9780415192194.
11. Mikulec, J.; Antoušková, M. Landscape and tourism potential in the protected landscape areas. *Agric. Econ.* **2011**, *57*, 272–278. [CrossRef]
12. Kulczyk, S. *Krajobraz i Turystyka. O Wzajemnych Relacjach [Landscape and Tourism. On Mutual Relations]*, 1st ed.; WGISR UW: Warsaw, Poland, 2013; pp. 1–191. ISBN 978-83-63245-84-9.
13. Council of Europe (CoE). *European Landscape Convention. Florence*; CoE: Florence, Italy, 2000; Available online: https://www.coe.int/en/web/landscape (accessed on 12 February 2021).
14. Aitchison, C.; MacLeod, N.E.; Shaw, S.J. *Leisure and Tourism Landscapes: Social and Cultural Geographies*, 1st ed.; Routledge: London, UK, 2000.
15. Crouch, D. (Ed.) *Leisure/Tourism Geographies: Practices and Geographical Knowledge*, 1st ed.; Routledge: London, UK, 1999; ISBN 0-415-18108-9.
16. Díaz, P.; Ruiz-Labourdette, D.; Darias, A.R.; Santana, A.; Schmitz, M.F.; Pineda, F.D. Landscape perception of local population: The relationship between ecological characteristics, local society and visitor preferences. *Sustain. Tour.* **2010**, 309–317. [CrossRef]
17. Korstanje, M.E. The sense, landscape and image. How the tourist destination is replicated in postmodernist times. *Pasos J.* **2013**, *11*, 55–65. [CrossRef]
18. Terkenli, T.S.; Castiglioni, B.M.; Cisani, M. The challenge of tourism in terraced landscapes. In *World Terraced Landscapes: History, Environment, Quality of Life*, 1st ed.; Varotto, M., Bonardi, L., Tarolli, P., Eds.; Springer: Cham, Switzerland, 2019; Volume 9, pp. 295–309. [CrossRef]
19. Nguyen, X.T. Factors That Influence the Intentions to Revisit Korea of Vietnamese Tourists. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 247–258. [CrossRef]
20. Skowronek, E.; Tucki, A.; Jóźwik, M.J. Krajobraz turystyczny jako element kształtowania wizerunku i atrakcyjności obszaru. Percepcja krajobrazu turystycznego na przykładzie Zwierzyńca. [Tourist landscape as an element of image and tourism attractiveness framing. Perception of Zwierzyniec town's tourist landscape. *Zesz. Nauk. Uniw. Szczecińskiego Ekon. Probl. Tur.* **2015**, *2*, 183–198. [CrossRef]
21. Le, H.T.T.; Tong, B.T.; Minh, N.T.; Ho, L.S.; Pham, T.V.; Trinh, H.T.T. Landscape Function and Tourism Industry: A Case Study of Moc Chau Plateau, Vietnam. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 1195–1204. [CrossRef]
22. Pardo Abad, C.J.; Fernández Álvarez, J. Landscape as Digital Content and a Smart Tourism Resource in the Mining Area of Cartagena-La Unión (Spain). *Land* **2020**, *9*, 112. [CrossRef]
23. Terkenli, T.S.; Buhalis, D. (Eds.) *Encyclopedia of Tourism Management and Marketing*. Edward Elgar Publishing. Available online: https://www.e-elgar.com/shop/usd/encyclopedia-of-tourism-management-and-marketing-9781800377479.html (accessed on 10 March 2021).
24. Löfgren, O. *On Holiday: A History of Vacationing*, 1st ed.; University of California Press: Berkeley, CA, USA, 1999; 320p, ISBN 0-520-21767-5.
25. Correia, A.; Pinto, P.; Moço, C. Why People Travel to Exotic Places. *Int. J. Cult. Tour. Hosp.* **2007**, *1*, 45–61. [CrossRef]
26. Fennell, D.A. The Nature of Pleasure in Pleasure Travel. *Tour. Recreat. Res.* **2009**, *34*, 123–134. [CrossRef]
27. Yu, X.; Kim, N.; Chen, C.-C.; Schwartz, Z. Are You a Tourist? Tourism Definition from the Tourist Perspective. *Tour. Anal.* **2012**, *17*, 445–457. [CrossRef]
28. Jiménez-García, M.; Ruiz-Chico, J.; Peña-Sánchez, A.R. Landscape and Tourism: Evolution of Research Topics. *Land* **2020**, *9*, 488. [CrossRef]
29. Gkoltsiou, A.; Terkenli, T.S.; Koukoulas, S. Landscape indicators for the evaluation of tourist landscape structure. *Int. J. Sustain. Dev. World Ecol.* **2013**, *20*, 461–475. [CrossRef]
30. Debord, G. *The Society of the Spectacle*; Zone Books: New York, NY, USA, 1994.
31. Piech, K. "Tradycyjne" metody heurystyczne: Przegląd i zastosowania ["Traditional" Heuristic Methods—A Review and Applications. *Studia Prace Kol. Zarządzania i Finans. Szkoła Główna Handlowa* **2003**, *40*, 91–101.
32. Zmyślony, P. Wykorzystanie metod heurystycznych w analizie strategicznej miasta w zakresie rozwoju funkcji turystycznej [The use of heuristic methods in the strategic analysis of the city in the development of the tourism function. *Zesz. Nauk. Uep* **2012**, *225*, 75–98.

33. Standard Country or Area Codes for Statistical Use (M49)-UNSD. Available online: https://unstats.un.org/unsd/methodology/m49 (accessed on 12 February 2021).
34. Terkenli, T.S.; Daras, T.; Maria, E.-A. Landscape Notions among Greek Engineering Students: Exploring Landscape Perceptions, Knowledge and Participation. *Land* **2019**, *8*, 83. [CrossRef]
35. Conrad, E.; Christie, M.; Fazey, I. Understanding public perceptions of landscape: A case study from Gozo, Malta. *Appl. Geogr.* **2011**, *31*, 159–170. [CrossRef]
36. Buttimer, A. Landscape and life: Appropriate scales for sustainable development. *Ir. Geogr.* **1998**, *31*, 1–33. [CrossRef]
37. Soini, K.; Birkeland, I. Exploring the scientific discourse on cultural sustainability. *Geoforum* **2014**, *51*, 213–223. [CrossRef]
38. Pérez, Y.; Quintáns, D. Using Big Data to Measure Tourist Sustainability: Myth or Reality? *Sustainability* **2019**, *11*, 5641. [CrossRef]
39. Aguiar, A.; Szekut, A. BIG DATA AND TOURISM: Opportunities and applications in tourism destination management. *Appl. Tour.* **2019**, *4*, 36–47. [CrossRef]

The Tourism–Landscape Nexus: Assessment and Insights from a Bibliographic Analysis

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Abstract: Over the last two decades, the awareness about landscape as a common good and the definition of tourism as a relevant driver of territorial development have both increased contributions to contemporary reflections on places and mobilities. From a scientific point of view, the need for structured contributions on the "landscape–tourism" nexus has been stressed. In fact, tourism and landscape studies are fed by many disciplines, often returning sectorial articles, sometimes lacking in organicity. Considering recent literary reviews carried out through bibliometric and content analyses, the present paper intends to map different ways of defining and understanding this complex interrelation as it emerges from the main research areas. From geographical contributions to managerial perspectives addressing destination planning and development, and from sociological non-representational to actor network theories applied to tourism, among others, the nexus is faced by approaches and concepts that are both specific and recurrent. Expressions such as "tourist landscape", "tourism landscape", "touristscape" with their different meanings orient this literary investigation informing a tentative conceptual framework where interrelated spatial, social, and symbolic dimensions emerge with a key definitional role. The general aim was to possibly enrich the reflection on this relationship, providing new definitional contributions and conceptual frameworks able to coherently influence both theory and practice.

Keywords: tourist landscape; bibliographic analyses; bibliometric analysis; content analysis

1. Introduction

Landscape studies and tourism studies are two central fields of investigation defining and understanding contemporary places and mobilities. Over the last two decades, the awareness of landscape as an integrating, holistic concept has increased [1–3]. In the perspective of sustainable development, the European Landscape Convention [4] has strongly contributed in underlying the complexity of landscape as a concept, focusing on economic and ecological components and values in landscape as well as cultural and social ones. Landscapes are increasingly understood as a common resource, constantly changing and in need of continuous assessments on protection, management, and planning [5,6]. The same attention has been parallelly dedicated to the tourism phenomenon [7–10], assessed both as a relevant territorial development driver [11,12] and a potential negative transformative engine [13].

The connection between the two themes is often taken for granted both in theoretical investigations and common discourses. It is precisely for this reason that there is a need to take a closer look at this complex relationship.

On a theoretical level, the fact that tourism studies are fed by multiple disciplines mostly related to social sciences and management [14], and that the concept of landscape is analyzed in landscape studies through multidisciplinary and continually evolving approaches [2] has mainly returned a fragmentation of contributions from which the correlation emerges. The need to place the nexus at the center of a structured, integrated, multidisciplinary reflection has been stressed several times from different scholars [15–17].

Nevertheless, the nexus has been mostly addressed by two research perspectives only apparently in dialogue. On the one hand, from a tourism-centric position, scholars have raised issues of both valuing and impacting landscape [18–20]. Tourism contributions, however, have not always addressed the complexity of the landscape as a concept. On the other hand, a landscape-centric viewpoint has focused mainly on landscape use and preservation with sustainable purposes [21,22] and, while absorbing the diatribe between "physical" and "social" scholars, this second approach has not always addressed the complexity of tourism and the multiple scalarity of its dynamics. The lack of dialogue between the two approaches has also generated consequences at the practical level.

The voices of some authors can be highlighted for their efforts in linking the two sectorial issues in a comprehensive way [15,17,23–26]. Although these reflections are related to different periods, disciplines, and styles, they debated the "landscape–tourism" relationship considering the physical aspect as one among multiple dimensions to be considered. Moreover, all these scholars attempted to address the issue in an innovative way moving towards multidisciplinary perspectives. In 2000, the book *Leisure and Tourism Landscapes: Social and Cultural Geographies* [23] introduced a change in the epistemological perspective, attributing a primary role to socio-cultural reflections on the nexus. In 2002, Terkenli asked for tourist–landscape theory and analysis to begin the exploration of a possible "newly-emerging cultural economy of space" [24] (p. 228). From a distinct cultural geographic perspective, in 2007, Minca wondered, "What does the tourist landscape become when it is performed, put into practice?" [25], (p. 440). Finally, in 2015, Stoffelen and Vanneste proposed to re-interpret the geo-tourism approach as a comprehensive way to focus on "landscape–tourism" interactions [17].

Confirming the evident need for "an adequate organizational framework of analysis" [10] (p. 291) of this complex interrelation, the present research started from the limited number of qualitative and quantitative bibliographic analyses on the nexus to further contribute to this research stream. In particular, results were taken from recent content [27] and bibliometric analyses [28] systematizing the state-of-the-art knowledge on the relationship between the two themes and defining a first theoretical background. While the rising interest in the theme has been evident from a variety of publications, it is worth examining how scholarly interest has evolved in using and selecting specific definitional terms. The conceptualization on the specific expression "tourist landscape" [27,29,30] provides a comprehensive definitional framework and guides the present research in further conceptual efforts to operationalize defining aspects.

The most recent efforts in structuring definitions agree on "tourist landscape" being "the most appropriate and widely used medium of referring to landscapes, organized or transformed mainly through and for purposes of tourism development" [29] (p. 150). According to Skowronek et al. [27] "tourist landscape" is "a significant type of landscape, functionally related to tourists and tourism activity. It is an integrated and complementary whole meeting the needs of tourists and tourism through its operationalizing of natural and cultural elements. A tourist landscape is characterized by the dominant presence of tourists, tourist attractions and tourist facilities. It is characterized by subjective evaluation and a confrontation by tourists, in connection with their perceptions and expectations, which affect its continuous transformation" [27] (p. 81). This conceptualization is embraced in Terkenli et al. [30], where the definition of "tourist landscape" has been proposed to link together the three constituent elements defined in Skowronek et al. [27] "whereby tourist attractions (real, imaginary or other) form the basis of all/any tourist interest, and which, when appropriately developed (infrastructure, services etc.), variably attract tourist interest" [30] (pp. 82–83).

Positioning in this specific research area, the first research question addresses the "landscape–tourism" nexus through its definitional aspects, contextualizing and associating them with the main research tendencies. The second research question addresses the potentiality to further define and describe "tourist landscape", identifying a tourist dimension of landscape. Finally, the third research question verifies the chance for struc-

tured definitional aspects framing the nexus to positively inform both theory and practice. The aim of the present investigation is, thus, to deepen the critical reflection on the different definitions of the "landscape–tourism" nexus starting from the definition of "tourist landscape". Emergent topics, key issues, and themes are interpreted to advance with the conceptualization of this specific definition.

Considering the often-neglected complexity of the "landscape–tourism" relationship, (re)starting from the definitory level can add a theoretical piece to feed balanced strategies addressing local resource maintenance, social needs, and economic goals in an integrated way.

Following Section 1, the implemented methodological design is presented. Subsequently, the paper provides a synthesis of the main findings for each research step followed by a descriptive analysis. From there, the discussion suggests opportunities deriving from the proposed definition of "tourist landscape" for new conceptual frames and practical issues. Conclusions provide a research agenda by underlying research gaps and possible directions for future investigations.

2. Materials and Methods

There is a great variety of publications that—knowingly or, more often, unknowingly, and directly or, more often, indirectly—addresses the "landscape–tourism" relationship using variable definitional expressions [6,8,15,17,23,25,27]. From a methodological point of view, a systematic review of this literature was developed, focusing in particular on a range of frequent definitions regarding the interrelation.

To address the most important research topics and themes concerning the theme, three different methodological phases have been implemented (Table 1).

Table 1. Research design.

Stage	Methodology	Output
I	Data Set Definition	Corpus
II	Bibliometric Analysis	Key Topics
III	Content Analysis	Key Themes

Stage I: Collecting Literature Data

From a first general analysis of scholarly contributions about the nexus and conceptualizations of "tourist landscape", other expressions emerged as recurrent. In particular, four specific key filters were selected: "tourist* landscape*", "tourism landscape*", "touristscape*", and "tourismscape*".

A systematic online search was then conducted using the Web of Science database using the selected definitions in the Title and Abstract fields. The WOS gives access to multiple databases referencing cross-disciplinary research thus allowing for in-depth exploration of specialized sub-fields per scientific discipline. The query of WOS returned a total of 238 publications published from 1985 to 2020 of which 66% were scientific articles, 22% conference proceedings, 10% review articles, and 2% books.

Among the different bibliometric fields provided by the WOS, chronological details, groups by research domain and source titles were examined to understand the features of the emerging corpus.

Stage II: Carrying Out Bibliometric Analysis on the Selected Data Corpus

In order to review systematic literature quantitatively, a bibliometric analysis based on term co-occurrence was implemented through VOSviewer 1.6.16. The software has been developed by Van Eck Nees Jan and Waltman Ludo from the Centre for Science and Technology Studies (CWTS) of Leiden University in the Netherlands [31]. VOSviewer was applied to the WOS selected database. In linguistics, co-occurrence is an above-chance frequency of occurrence of two terms from a text corpus alongside each other in a certain order. Co-occurrence in this linguistic sense can be interpreted as an indicator of semantic proximity.

The software identifies term co-occurrence in titles and abstracts using natural language processing algorithms. The original WOS data source with bibliographic information was extracted in .txt format and used in VOSviewer software. A binary counting method was used to consider only the presence or the absence of selected filters in a document. This software requires a threshold representing the minimum number of occurrences. The threshold was set at 8 for terms analysis. For each term that satisfied the selected threshold, a relevance score was calculated to exclude irrelevant terms giving very few information. Based on this score, 112 out of 5542 relevant terms were selected. The number of terms were calculated with the VOSviewer software using the normalization method of associations strength and a full counting algorithm. The default choice was to select 60% of the most relevant terms with a result of 67 relevant terms, further reduced, for display reasons, to a number of 60 mapped and clustered items.

A bibliometric map supports to improve the knowledge of the field and "makes all kinds of suggestions" confirming or contradicting our own idea on the state of this field [32] (p. 249). With the aim to further verify first personal assumptions deriving from VOSviewer clustered items and emerging research topics, a second methodological approach was adopted based on a qualitative content analysis.

Stage III: Assessing Content Analysis on the Selected Publications

With the aim to ground previous inferences and to identify research issues and themes of the field, a content analysis was implemented on the WOS selected publications. In particular, the ATLAS.ti Software developed by ATLAS.ti Scientific Software Development GmbH in Berlin, Germany was used. The software develops a hierarchy of conceptual group-codes, related codes, and quotations [33] from a given corpus, allowing for the inductive categorization of texts in networked conceptual nodes.

Based on the VOSviewer clusters and related items obtained with the previous bibliometric analysis, a content categorization process was implemented through a top-down coding process. Group-codes corresponding to the defined research topics have been used from the beginning of the coding process. In addition, each group-code has been associated with the codes corresponding to the most significant items of clustering groups. The network view returned by ATLAS.ti software shows the relationships between codes and quotations in hierarchical form.

Later, a second network of codes was built using the selected definitions related to the nexus, i.e., "tourist landscape", "tourism landscape", "tourismscape", and "touristscape". Synthetic overviews have been provided to underline the specific definition positioning in relation to each group-code and code.

By integrating first quantitative outcomes, this qualitative approach favored not only the evidence of first assumptions but also the interpretation of the emerging network of key nodes as the main research issues and themes.

3. Results

3.1. Corpus Description

Web of Science allows for describing the corpus data through bibliographic fields, providing insights into research areas, journal distribution, and evolutionary information. With regard to research areas, it emerges that WOS has assigned the 238 documents to the followings research fields. One third of publications are included in the broad research category named "Hospitality, Leisure, Sport, Tourism" (32%); 21% represents, together, Environmental Studies and Environmental Sciences; 16.7% are under "Geography"; Social Sciences Interdisciplinary and Sociology areas account for the 12.8% of the corpus; Economics and Management accounts for 10.8%. Percentages under 5% represent documents broadly distributed among a variety of other specific fields (Figure 1). Although the intrinsic difficulty to systematically conceive publications on interdisciplinary themes into specific research areas, the WOS categorization helps in inductively starting to define prevalent research topics.

Figure 1. Visualizing Treemap with selected 20 results. Publication count from Web of Science (WOS) Research areas.

The distribution of documents in relation to journal titles confirms the previous results. There is, indeed, a prevalence of contributions deriving from tourism studies rather than landscape studies. The journals *Tourism Geographies, Annals of Tourism Research* and *Tourism Management*, among the most eminent journals in tourism studies, present the greatest number of contributions, while journals hosting reflections on specific landscape issues (*Landscape Research, Landscape and Urban Planning*) have a lesser weight (Figure 2).
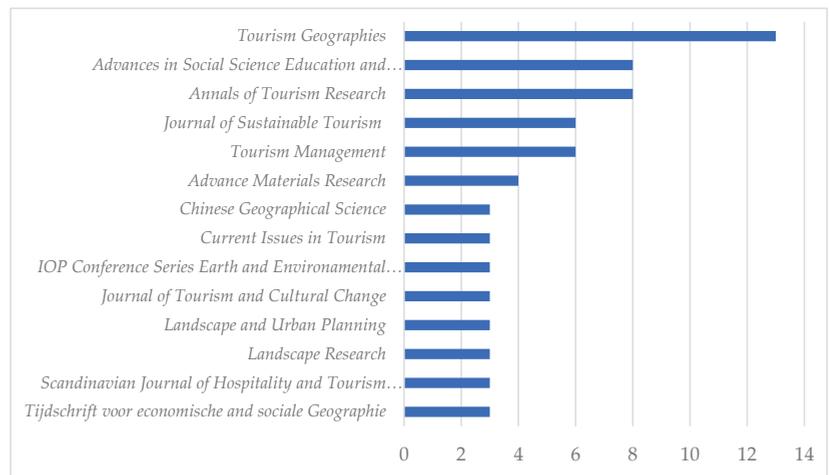
Figure 2. Relevant published journals. Record count by WOS.

Regarding the evolutionary aspect (Figure 3), it emerged that selected terms defining the "landscape–tourism" nexus started to appear in titles and abstracts from the mid-1980s with a publication in the *Annals of Tourism Research* using the expression "tourism landscape" to present a comparative analysis about the changing scenery perceptions and evaluations by tourists and operators concerning Canadian Mountains and the European Alps [34]. Presence and variety of definitions increased progressively around the year 2000 in coincidence with the publication of important theoretical reflections. The volume *Leisure and Tourism Landscapes: Social and Cultural Geographies* [23] was one of the most influential contributions stimulating an increasingly widespread use of the expression "tourism landscape" in subsequent studies [35].
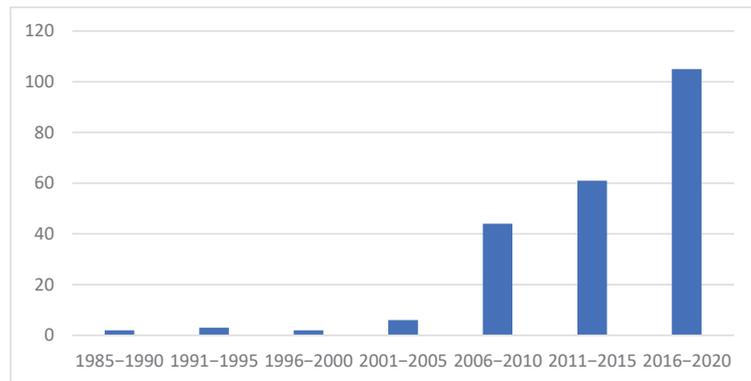
Figure 3. Total publications every 5 years (1985–2020). Author's elaboration from record count by WOS.

The year 2007 was another important year in which publications addressed the "landscape–tourism" relationship using specific definitional terms. The contribution *The tourist landscape paradox* [25] is theoretically relevant and using "tourist landscape" in the title has been able to influence the proliferation of the expression in many other contributions on the topic. From 2010–2011 began a boost that still continues to this today. As shown in Figure 3, almost half of the publications analyzed in this survey were published between 2016 and 2020. One reason for this recent increase could be the expansion and complexification of the tourism phenomenon at the international level, and its transformative role in territorial areas that were previously unaffected by its effects. In the latter period, a few studies in the form of content and bibliometric reviews have also been established and definitional aspects have become a relevant key issue. The most recent literature overviews have assessed "tourist landscape" as the most appropriate definition of the nexus and, over the last two years, most publications, also from social sciences, have adopted this definition. Finally, in order to provide a comprehensive overview, the present investigation has sought the expressions "tourismscape" and "touristscape" as well. Although their use is not frequent, they are characterizing important theoretical reflections in specific research areas. First appearing in 2007, "tourismscape" has been defining the relationship in actor–network theories [36]. Since 2015, the term has become a dense concept used by different perspectives [17,37]. Similarly, over the last 5 years the term "touristscape" has been used with increasing frequency taking often critical approaches to the geography of tourism [38,39].

3.2. Bibliometric Analysis

Based on the WOS corpus data made available to VOSviewer, a co-occurrence term map was returned. The network map, displayed through VOS Viewer Network Visualization, was comprised by a set of items with links between them. The obtained map presented 60 relevant terms (or phrasal terms) related by co-occurrence links. Each term in map had a color to indicate the groupings (clusters) of terms. Cluster aggregate terms tended to be more closely related. The obtained map presents three clusters.

The following table (Table 2) lists the items with their number of occurrences and related clustering group. Clusters are numbered with 1, 2, and 3 according to the numerosity of their items.

Table 2. Items with the number of occurrences in parentheses for each cluster calculated by VOSviewer.

Cluster 1—24 Items	Cluster 2—21 Items	Cluster 3—15 Items
China (24)	Tourist Landscape (40)	Use (25)
Planning (23)	Experience (32)	Change (24)
Management (22)	Space (30)	Impact (21)
Model (22)	Practice (28)	Effect (16)
Government (19)	Time (27)	Quality (16)
Country (19)	City (21)	Growth (15)
Heritage (18)	Construction (21)	Opportunity (15)
Application (17)	Work (20)	Perception (15)
Interest (16)	Island (18)	Year (15)
Problem (16)	Consumption (16)	Tourist Destination (14)
Evaluation (14)	Geography (15)	History (13)
Importance (14)	Context (15)	World (13)
Condition (14)	Project (15)	Advantage (12)
Field (13)	Interaction (14)	Local (8)
Basis (12)	Focus (13)	Light (8)
Object (12)	Location (13)	
Stakeholder (12)	Account (12)	
Sustainable Development (11)	Fact (12)	
Lack (11)	Meaning (11)	
Need (11)	Representation (9)	
Tourism Resource (9)	Addition (8)	
Future (9)		
Rural Tourism (9)		
Natural Resource (8)		

As explained in the VOSViewer Manual, "relevant terms tend to be representative of specific topics" [31] (p. 35). Based on this validation, the three visualized clusters (Figure 4) have been designated with the three following names referring to possible research topics:

- Cluster 1—Planning and governance (red);
- Cluster 2—Spatial–social–symbolic interrelations (green);
- Cluster 3—Impact evaluation (blue).

Items in the clusters are grouped by VOSviewer into different colors. Terms with the same color tend to co-occur with each other more frequently than terms with different colors. The clusters were named by the author.

Some evidence can be illustrated. The first evidence is that the expression "tourist landscape" has obtained the highest ranking (40 occurrences). Although it was expected to naturally impact the formation of clusters, its frequency and variety of use in different research areas confirms that is the most appropriate expression to describe the nexus. As argued, other expressions are more often associated with specific research areas and periods. In fact, "tourism landscape", "tourismscape", and "touristscape" did not exceed the threshold indicated. Another important finding is that "tourist landscape" is included in Cluster 2. The Cluster 2 has been named "Spatial–social–symbolic interrelations", implying the centrality of the expression in reflections describing the interrelation between the phenomenon of tourism and the situated construction, reconstruction and reproduction of landscape though practices and representations.

Since the clusters were suggesting key topics related to the nexus, both general and specific inferences deriving from the observation of the map were made and successively verified through the implementation of the content analysis.
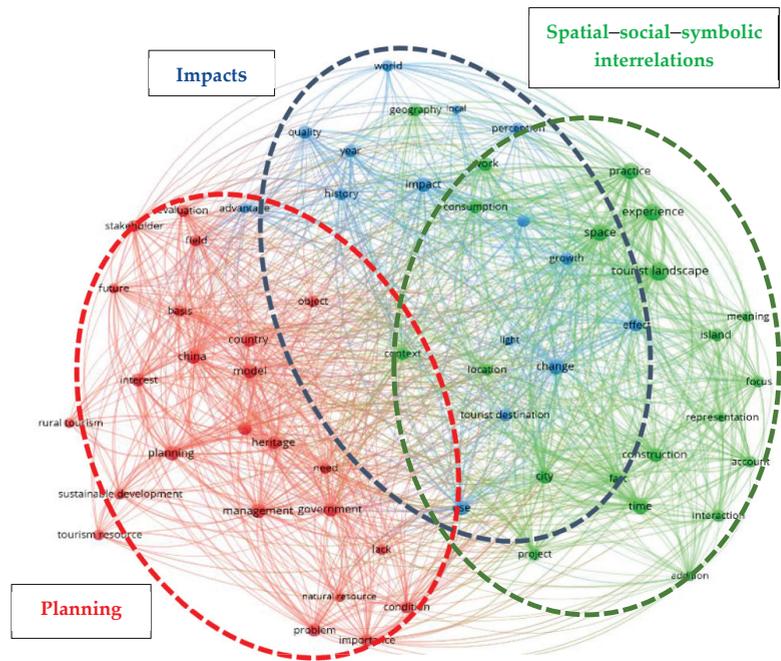
Figure 4. The co-occurrence term map with the three emerged clusters.

3.2.1. Planning and Governance—Key Topic 1

It can be implied that Cluster 1, named "Planning and governance", includes terms co-occurring in publications where landscape is considered a resource with a specific value for the tourism system. In the following sub-map (Figure 5), the co-occurrences of the second most recurrent item "Planning" of Cluster 1 are visualized ("China" is the most recurrent term. Its performance refers to the recent increasing number of Chinese publications investigating specific Chinese contexts).
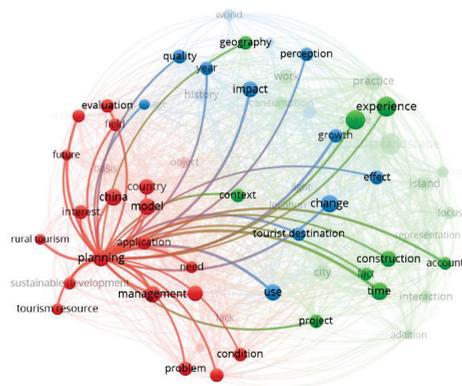
Figure 5. Co-occurrence term map by VOSviewer. Focus on the recurrent keyword: "Planning".

It can be inferred that the most recurrent terms "Planning", "Management", "Governance", and "Stakeholders" are mostly framed within "Sustainable Development" contributions, and terms "Model", "Application", "Problem", "Lack", "Need", "Importance",

"Condition", "Interest", and "Future" redirect to typical vocabularies of destination planning and management processes and their implementation tools, i.e., feasibility studies and "Strengths, Weaknesses, Opportunities and Threats" (SWOT) analyses. Landscape is part of the tourism system ("Object") and can be assessed in research for its physical–environmental components to be protected ("Natural Resource" and "Rural Tourism"), or for its historical–patrimonial values to be safeguarded ("Heritage"), or for its tourist dimension to be enhanced ("Tourism Resource").

3.2.2. Spatial–Social–Symbolic Interrelations—Key Topic 2

Cluster 2 includes the co-occurrences of the terms "Tourist Landscape" (Figure 6), "Experience", and "Practice", among others. They seem to refer to the spatial–social–symbolic dimensions and interrelations describing tourism experiences where the practitioner–landscape relationship is key. The recurrent terms "Space", "Time", "Context", and "Interaction" demonstrate the research interest in specific lived situations. It can be implied that this cluster aggregates publications where landscape is not a mere scenic background to look at but a place to be experienced in a situated and multisensory way.
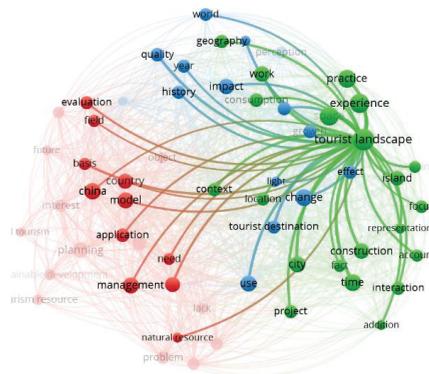
Figure 6. Co-occurrence term map by VOSviewer. Focus on the recurrent keyword: "Tourist landscape".

A specific research position about the "landscape–tourism" nexus can be assumed. It focuses on landscape subjectivity and an active role in tourism experiences. There is a functional, mediatory role of landscape in defining and co-creating spatial, social, and symbolic relations ("Construction", "Consumption"). Even though these contributions tend to overlap the term "Tourist Landscape" with the term "Space" without distinction, they seem to contribute to analyzing tourism practices of landscape and their construction mechanisms. Tourism experiences can be real, virtual and even only imagined "Practices". It can be implied that this cluster also aggregates production on the media-induced landscape as sub-topic with "meaning" and "representation" among recurrent terms.

3.2.3. Impact Evaluation—Key Topic 3

Cluster 3 seems to refer to the transformative aspects of tourism dynamics on landscapes. Therefore, it could broadly represent reflections on positive and negative impacts of tourism planning, management, and experience/representation. Besides "Use" (Figure 7), "Impact", and "Effect", most recurrent terms are "Change", "Growth", possibly referring to the landscape evolutionary process. Other terms, for instance, "Advantage", "Opportunity", and "Quality", redirect to related landscape assessment terminology.

Figure 7. Co-occurrence term map by VOSviewer. Focus on the recurrent keyword: "Use".

The keywords "World", "Local", and "Tourist Destination" could imply both geo-political investigations of the process of globalization and investigations on the role of local entities and practices for the quality of life and well-being of communities.

Finally, Cluster 3 seems to aggregate contributions investigating tourists and residents' perception about landscapes' transformative process though an historical perspectives. The terms "Perception", "Year", and "History" could refer to this sub-topic.

3.3. Content Analysis

To verify first inductive interpretations about the three emerging research topics, a content analysis was implemented. Content analyses allow the investigation of specific research issues and themes through a hierarchical system of group-codes and codes referring to specific conceptual categories and sub-categories in a selected corpus.

The following three group-codes, corresponding to the three previously emerged research topics, were used from the beginning of the categorization process:

- Planning and governance;
- Spatial–social–symbolic interrelations;
- Impact evaluation.

Each group-code was associated with 10 codes corresponding to the most significant items in the clustering groups.

Next, the figure shows the ATLAS.ti hierarchical scheme derived from the selected publications with the three group-codes and the 10 codes assigned to each family (Figure 8). The software assesses groundness and density as main values [33], describing connected nodes emerging from links. Groundness refers to the number of linked quotations and density counts the number of linked codes. The higher the G-count for a node, the more grounded is it in the data set. The higher the D-count for a node, the denser the surrounding network. For example, in Figure 8 the code "Practices" is the node with the highest G-count of its group-code: "Spatial–social–symbolic Interrelations".

Linking literature quotations to the proposed system of conceptual code-families and codes has allowed grouping scholarly production according to the three specific key topics and proving the relationship between publication content and key topics.

In particular, it has allowed for qualitatively exploring: (i) publication content positioning according to the coding system; (ii) publication content features according to investigated issues and related methodologies; (iii) emerging key themes from linkages (Figures 9 and 10). Obtained maps offer interesting insights about the conceptual broadness of different scientific contributions in their capacity to use a specific definition to address key topics.

Figure 8. The hierarchical scheme of group-codes, codes, and quotations with exemplifying publications by ATLAS.ti. To avoid a visual representation with too much overlapping content, only a few linked quotations have been selected to be displayed.

Figure 9. Linkages between publication 1, definitional aspects, and codes by ATLAS.ti. The figure shows a publication where "tourist landscape" was used to embrace different conceptual codes from "Planning" to "Practices" and to "Effect".
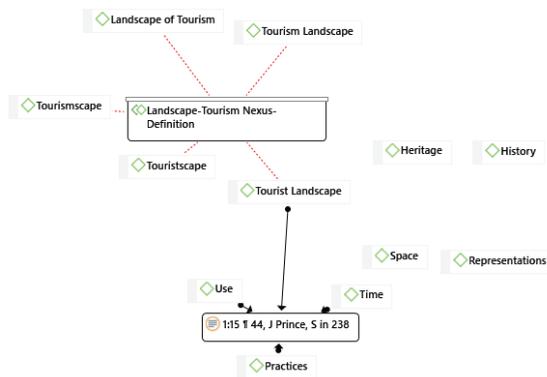
Figure 10. Linkages between publication 2, definitional aspects, and codes by ATLAS.ti. The figure shows a publication where "tourist landscape" is used to investigate themes mostly related to the conceptual code "Practice".

According to the relationship between publications and research topics as well as literature positioning in the coding system, the following paragraphs provide evidence for the first "suggestions" derived from the bibliometric analysis and help to unfold emerging key themes of the field.

3.3.1. Key Research Themes from Group-Code 1—Planning and Governance

The publications with the greatest associations to this family of codes have, as their aim, indicating planning and management strategies for landscapes or tourism systems or unspecified "tourist landscapes". Therefore, the first assumptions deriving from emerging terms in Cluster 1 are supported by evidence.

Two dichotomous research directions emerge. On the one hand, there is a prevailing approach fed mainly by scholars of landscape studies more or less conservative towards landscape management in tourism contexts. They are largely geographical studies applying a systemic approach to landscape [18–20], sometimes considered only in its physical

parts. In this perspective tourism is considered as one of the socio-economic dynamics of the whole geographical system defining and informing the analyzed landscape. Hence, tourism is studied for its being functional to the landscape system. On the other hand, there are studies of destination management and territorial marketing that highlight the attractiveness of the landscape for the positioning of tourist destinations and products [11,12]. Many economics and business studies investigate these topics starting from a systemic approach to the tourism sector. This perspective is totally opposite to the previous one and assesses landscape for its value as potential tourism resource or tourism attraction according to the different phase of the destination life cycle. Many studies on destination management and marketing face the role of local resources in the tourism system defining the different typologies of tourism from both the demand and the supply sides, i.e., ecotourism, cultural tourism, and thermal tourism. Landscape is, therefore, studied as a functional part of the tourism system [40]. More specific research objectives concern the role of different destination stakeholders, institutions and businesses in the planning and governance of landscapes or tourism destinations. The perspective of sustainable development frames most of this literature.

The analyzed case studies are often on a national scale, or the scale refers to the territorial level of the specific tourist destination/landscape. They are often reflections on the physical components of landscapes/destination resources. Therefore, the results are prevalent contributions on specific tourism types, i.e., natural tourism, rural tourism, costal tourism, mountain tourism, cycle tourism.

From a methodological point of view, there is an evident effort in developing descriptive models of economic, socio-economic, and socio-ecological systems, depending on the research field. There is a large use of mixed methods to conceptually define research design, research strategies, survey design, and data collecting. Whereas quantitative surveys based on statistical analysis techniques and structuring questionnaires are frequently used to assess values and behavior of tourists, operators or host communities and similar research issues, modelling is more frequent when different territorial elements need to be mapped [41–50]. Qualitative approaches (i.e., content analyses or guided structured or unstructured interviews) are useful to investigate policy and promotional documents and to collect different point of views concerning specific research issues [51–54]. Most articles demonstrate theoretical argumentations through the analyses of case studies.

The results of the present qualitative content analysis can be found in the following table, listing prevalent emerging key themes from Group-Code 1 with the number of related publications and exemplifying publications by theme (Table 3).

Table 3. Group-Code 1—Number of articles by prevalent key theme and examples of publications.

	Planning and Governance—Key Theme	106 Publications (44.5%) by Prevalent Group-Code 1 and Examples of Publications
1.1.	Processes and methods for land planning and use, mobility planning	Woźniak, E. et al. (2018) [40] Liu, C., 2020 [42]
1.2.	Landscape as resource in tourism contexts, common pool resources (CPR), landscape classification	Healy, R., (1994) [43] Gonzalez Morales, A., Ramon Ojeda, A., (2017) [44]
1.3.	Sustainable development and carrying capacity thresholds	Povilanskas, R. et al. (2016) [45] Yeager, E. et al. (2020) [46]
1.4.	Landscape attractiveness for tourist destinations and tourism products	Di, F. et al. (2010) [47] Sanchez, R. et al. (2017) [48]
1.5.	Maps and assessments of tourism services, infrastructures, and facilities in their relationship with landscapes	Fazia, C., Errigo, M.F., (2017) [49] Zemla-Siesicka, A. et al. (2020) [50]

Table 3. *Cont.*

	Planning and Governance—Key Theme	106 Publications (44.5%) by Prevalent Group-Code 1 and Examples of Publications
1.6.	Rule of institutions and businesses in landscape/destination planning and management	Heslinga, J. et al. (2018) [51] Enzenbacher, D.J., (2020) [52]
1.7.	Stakeholders management	Xue, Y., (2016) [53] Glowka, G., Zehrer, A., (2019) [54]

3.3.2. Spatial–Social–Symbolic Interrelations—Key Research Themes from Group-Code 2

Group-Code 2 mostly aggregates contributions from post-modern and post-structuralist literature on the two themes: landscape and tourism. Investigations on the Spatial–social–symbolic Interrelations defining the nexus is the main key issue. Descriptions of tourist contexts where landscape is the result of negotiated and unnegotiated dynamics among situated and ordinary gazes and encounters is another important key issue [55–57]. Therefore, first considerations of Cluster 2 of the bibliometric analysis can be demonstrated.

The influence of the "new paradigm of mobilities" [58] and the phenomenological turn towards the so-called non-representational [59] and more-than-representational [60,61] approach on the interrelation between tourism phenomenon and landscape construction, reconstruction and consumption is evident in the publications aggregated by Group-Code 2.

The concept of "taskscape" [62], describing space as a social expression of human incessant body movements in ordinary and everyday activities, emphasizes the importance of relating to places not in passive-contemplative terms but in an active-operative way as "participating" vital and involved subjects. Since 2000 this definition has been widely adopted by tourism scholars [63–66]. In tourism studies the concept of "tourism practices" intended as a mode of vital and performative "being", i.e., intersubjective practice in tourist places [67,68] have provided a step beyond the pure landscape gazing [69]. This conceptual leap has opened up a wide field of investigations. In particular, the most influencing contributions have come from human geography, sociology and semiotics. The focus has often been stressed upon the issue of social construction of meaning [70], semiological realization of space [71] with the application of semiotics to tourism [72], and a combination of performative approaches to semiotics [73]. This research field has produced a variety of recurrent expressions with the suffix "-scapes". From the reassuring "touristscapes", derivation of artificial codes of governance and control to more specific and unpredictable "smellscapes" and "soundscapes" [68]. In general, the vocabulary of tourism studies from this research area has been enriched with an innovative and semantically richer language using nouns, such as "interaction", "contextualization", "encounter", "engagements", and "experience", adjectives and adverbs, such as "sensual", "embedded", "entangled", "bodily", "unruly", and "liminal" [74], and verbs, such as "staging" and "performing". Economics and business have also faced a paradigm shift influenced by the different social turns. The book *The Experience Economy* [75] introduced the vocabulary of "performance", "experience", and "corporeality" in business language referring to performative consumers and experiential products. These concepts absorbed then by tourism economics and business [76] have emphasized as key issues the interactions between producer and consumer, the co-creation of tailor-made services, the personalization of tourism products, and the conceptualization of experiential typologies of tourism.

Regarding the territorial level, this broad literature refers mainly to the specificity of the context where the phenomenon of tourism interrelates the construction, reconstruction, and consumption of landscape. It is generally the geographical area of the tourist destination.

From a methodological point of view, extensive ethnographic fieldwork is largely carried out in investigated areas. Fieldwork involves observation, face-to-face interviews, questionnaires, and the collection of audio–visual material [77]. These are preferred techniques to unfold and understand perceptive and affective mechanisms defining and influ-

encing interactions. The researcher's position and reflexivity in this qualitative research is a key issue of the debate [78]. A mixed qualitative and quantitative methodology can be assessed when researching behaviors, perceptions, opinions interviewing tourists, host communities, and stakeholders, also from a psychological and/or marketing perspective. Content analyses can be used to assess and interpret messages from textual, visual, and audio materials, i.e., promotional brochures, websites, user generated content on social media. Economics and business studies have recently developed sentiment analysis to identify customer sentiment toward tourism products, brands, or services in online conversations and feedback. Most articles included in this group-code demonstrate theoretical argumentations addressing the key issues to specific geographical case studies. The following table lists the main key themes, number of related articles from group-code 2, and exemplifying publications by theme (Table 4).

Table 4. Group-Code 2—Number of articles by prevalent key theme and examples of publications.

Spatial–Social–Symbolic Interrelations—Key Research Themes from Group-Code 2	45 Publications (18.9%) by Prevalent Group-Code 2 and Examples of Publications
2.1. Landscape construction and re-construction through tourism practices	Sonnichsen T., (2017) [79] Prince, S., (2018, 2019) [80,81]
2.2. Social construction of meaning in Landscapes	Prasad, P., (2012) [82] Winter, C., (2016) [39]
2.3. Landscape meaning and tourism representations	Li, Y. et al. (2006) [83] Soica, S., (2016) [73]
2.4. Role of spatial, social and symbolic interrelations in landscape definition and transformations	Dominguez, A.Q., Russo, A.P., (2010) [84] Miller J.C., Del Casino, V.D., Jr. (2020) [57]
2.5. Role of mediating agents in the interrelation landscape–tourism	Leung, M.W.H., (2019) [85] Chakraborty, A., (2020) [86]
2.6. Experience economy and tourism experiential products	Zhang, J.J., (2010) [87] MacLeod, N., (2017) [88]

3.3.3. Impact Evaluation—Key Research Themes from Group-Code 3

Group-code 3 refers to the transformative aspects of tourism phenomenon for the landscape. The key issue is the investigation on the positive or negative impacts generating by the interrelations of the tourism phenomenon with spatial, social, and symbolic components of landscape. Most studies are framed in the perspectives of sustainable development [89]. The first inferences deriving from the bibliometric analysis can also be confirmed for Cluster 3.

A wide group of critical research, mostly referring to urban contexts deals with the issue of globalization processes and the role of multi-scalar global entities impacting and often depowering the role of national and local entities. Large cities, global commodity chains, and technological platforms are broadly investigated for their being simultaneously local actors and part of global dynamics. Urban movements struggling to contain geopolitical processes of physical and symbolic transformations of landscapes over time is also a key research issue. Other critical research areas analyze the enclavisation process on a destination scale leading to the definition of artificial "touristed landscapes". Case studies largely refer to rural, coastal, and mountain landscapes turned to "tourist bubbles" [90–92] and relevant key issues are investigation on land use [93], depletion of local communities and related injustices, and power inequalities in labor relations [94].

Impact assessments also study the positive effects of tourism as a driver of socialeconomic sustainable development. Publications underline the relation between tourism impacts and the quality of life of residents [95,96]; the role of tourism in fostering fishing, agriculture, and other economic activities [97]; a stronger awareness of landscape and heritage values in terms of preservation and management.

The two main research fields are economics and geography. The economics and business perspective investigates economic impacts, whereas socio-geographical studies focus on environmental, social, and symbolic impacts. Interdisciplinary approaches are also evident from the intersection with historical, sociological and political disciplines.

Quantitative methods have a primary role in economics and business literature where indicator and index construction represent most contributions. Geographical studies often map the spatial dimension of landscape though modern information technology. Examples of innovative studies can be found under GIScience [98]. Relevant contributions come also from geo-tourism, in which recent literature contributes to shifting from a restricted focus on physical elements to a broader concept of "tourist landscape" where investigation on heritage interpretation and actors' engagement address political ecology issues [99–102]. The following table lists the main key themes, number of related articles from group-code 3, and exemplifying publications by theme (Table 5).

Table 5. Group-code 3—Number of articles by prevalent key theme and examples of publications.

Impact Evaluation—Key Research Themes from Group-Code 3	81 Publications (34%) by Prevalent Group-Code 3 and Examples of Publications
3.1. Evaluation of economic, environmental, and social impacts	Saarinen, Jakko, (2016) [103] Hof, A., Blazquez-Salom, M., (2015) [93]
3.2. Local conflicts and development disputes	McCabe, H., (1998) [104] Devine, J.A., (2017) [105]
3.3. Geopolitical critical inquiry on destination planning and management	Jacobs J., (2012) [106] Segeur, S., (2015) [107]
3.4. Heritage and patrimonialization process, national identity, and memory historical construction	Dearborn, L. M., Stallmeyer, J.C., (2009) [108] Masri, G., (2010) [109]
3.5. Process of place-making and destination branding	Inwood, J. F. J., (2010) [110] Ana, M. I.; Andrei, A.G., (2017) [111]
3.6. Tourists and residents' perception on landscape transformation	Fyhri, A., Jacobsen, J.K.S., (2009) [112] Uusitalo, M., (2010) [19]
3.7. Historical investigation on landscape definition and transformation	Booth, R., (2014) [113] Winslow M., (2020) [114]

3.4. Focus on Definitional Aspects of the Nexus as Emerged from Content Analysis

This paragraph intends to deepen what was anticipated in Section 3.1 on the use of specific definitions of the "landscape–tourism" nexus. The aim here is to focus on the differences in adopted definitions according to the emerged key topics and themes.

Concerning the research topic "Planning and Governance", it can be highlighted that, until 2010, the terms "tourism landscape" and "tourist landscape" were used indistinctly. Since 2010 the use of "tourist landscape" was prevalent in systemic landscape studies [30]. Literature from AN Theories applied to tourism provides in 2007 [36], the first definition of "tourismscape" as a network of actors that transcends the individual society and region and connects transport systems, accommodation, services, tourism resources, environments, tech-nologies, people and organizations [36,115]. In 2015, sectorial research fields, such as geo-tourism, use the term "tourismscape" to open towards innovative contributions attempting to bridge conflicts in tourism landscape research [17].

Regarding the research topic "Spatial–social–symbolic Interrelations", as already stated, the book *Leisure and Tourism Landscapes: Social and Cultural Geographies* [23] stimulated an increasingly widespread use of the expression "tourism landscape". The book highlighted the primary role of socio-cultural reflections to investigate tourism practices. This volume, reviewed in 2004 in *Tourism Management* by Hall [116], contributed to shifting the reflection on the relationship between landscape and tourism towards a more radi-

cal epistemological perspective revolving around the material production, reproduction, and consumption of landscapes. In 2007, the publication *The tourist landscape paradox* by Minca [25] represented another boost in this research field. From a performative perspective [65] and influenced by Cosgrove's lecture [117], Minca focused on the practices of the gaze within the framework of the "tourist landscape". This definition is still evident in social sciences, mostly in publications where the transformation of ordinary places due to tourism's dynamics is the focus. Non-representational approaches [80] and reflections on the performativity of tourist practices in and out of the context of everyday life [57] largely use the definition of "tourist landscape".

Finally, since the 1980s, the broad field of literature investigating the research topic "Effects" inaugurated the use of specific definitions to describe interrelations between landscape and tourism. The term "tourism landscape" was used to describe the variety of territorial transformative aspects [118]. From an epistemological point of view, this definitional phase can be described, as stated by Terkenli [15] as "a large body of work largely apolitical, informed more by economic concern for landscape development" (p. 342). As previously described, it was from 2010 that many publications started the use of the term "tourist landscape" in social sciences. Many contributions on the specific topic have been referred to as the evaluation of aesthetic values attributed to the landscape or the landscape perception by tourists, stakeholders, and host communities. With reference to the specific thematic topic, the use of both terms "touristscape" and "tourismscape" is recent and mostly supports critical reflections on geopolitical processes of globalization and tourism consumption research [37].

4. Discussion

4.1. Towards an Integrative Conceptual Framework Defining Tourist Landscape

The following paragraphs suggest a discussion about a tentative conceptual framework defining "tourist landscape" as result of the whole bibliographic study.

In particular, the bibliometric analysis has returned through VOSviewer three clusters indicating possible research topics addressing the "landscape–tourism" nexus. They are planning and governance, situated spatial–social–symbolic interrelations, and impact evaluation. The subsequent cluster analysis has confirmed the research topics pointing out a series of thematic categories helping to describe prevalent research fields.

Upon observing the results of the overall bibliographic analysis, the coincidence with Terkenli's reflections on research strands about the nexus as described in her enlightening article *Tourism and landscape* [15] becomes evident. Terkenli argued that the increasing focus on the relationship of tourism with the landscape has been the result of three distinctive tendencies: an international, largely European, interest in landscape values, landscape planning and policy, and assessment/analytical methodologies; the dominant role of structuralist, post-modern, and post-structuralist perspectives on landscape in social and cultural geographies of tourism focusing on the complex interrelationships between the phenomenon of tourism and the construction, reconstruction, and consumption of landscape; finally, a more evident process of tourism development transforming different landscapes (p. 341). This coincidence has been further deepened to inform the following discussion.

The centrality of "tourist landscape" as both a relevant research item and orienting code has decisively influenced throughout the investigation the indication of key research topics, issues, and emerging themes. Both quantitative and qualitative approaches have unfolded the importance of this definition in investigating the "landscape–tourism" nexus in a comprehensive way. In particular, the bibliometric analysis assigning to the expression a primary role in investigating the "Spatial–social–symbolic Interrelations" key topic has revealed its possible function in defining tourist contexts where the positions of people (the observer/practitioner) define types of places and practices [119]. Similarly, by assuming the role of "tourist landscape" as a possible significant group-code connecting different sub-codes, the content analysis has attributed to the definition a functional role in position-

ing scientific contributions on the basis of their multidisciplinary and inclusivity versus sectoriality and exclusivity.

Starting from the scholarly definitions of "tourist landscape", the overall hypothesis emerging from the described research outcomes is that "tourist landscape" can be broadly defined as the interrelations among three components of the tourism phenomenon, i.e., tourism people, places and practices where the primary role of the concept of "Practice" needs to be stressed. In more detail, this tentative definition indicates practice as situated tourism experience including services and other facilitating aspects, places as physical destinations wherever experiences occur including non-human [86], material and immaterial resources and the way they can be encountered, and people as both internal and external human actors involved in tourism dynamics.

In particular, in tourism contexts the relation between place and practice defines a material–spatial dimension, the relation between practice and people defines a social–experiential dimension, the relation between people and place defines a cultural–symbolic dimension (Figure 11). The present hypothesis originates from the research relevance of spatial, social, and symbolic interrelations as both a key topic and group-code. Besides, the concept of "trilogy" in Terkenli, naming the "landscape–tourism" nexus through the "interrelations between material, experiential, and symbolic properties" [24] (p. 234) could sustain this possible definition.
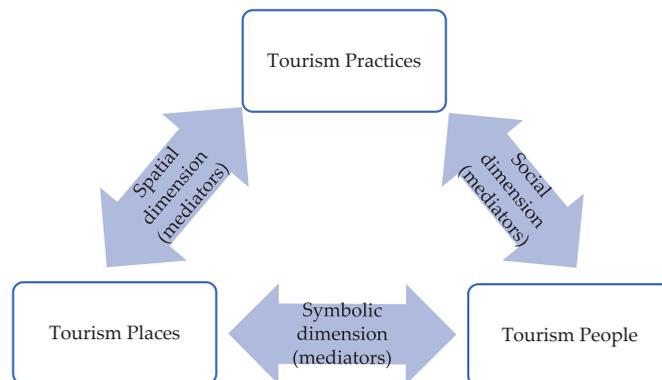
Figure 11. "Tourist landscape": components, dimensions, and mediators.

The second and consequent conceptual hypothesis concerns the role of "mediators" in describing "tourist landscapes". More specifically, three types of mediators could act in "tourist landscape". These mediators can act on the three described dimensions. Accordingly, spatial–material mediators, social–experiential mediators, and cultural–symbolic mediators can be recognized. In particular, the relation between tourism practices and places could be facilitated by spatial mediators [81,120]. Second, the relation between tourism practices and actors could be facilitated by social mediators or switchers [66]. Finally, the relation between tourism places and actors could be facilitated by symbolic-cultural representations [73,121]. They can have a role in structuring, shaping, strengthening, and facilitating the three dimensions. Examples of spatial mediators can be represented by specific forms of mobilities and/or multi-sensory devices (bike, app for sound itineraries) which can favorite landscape entanglements. Examples of social mediators can be represented by specific actors, such as incoming travel agencies, tour guides, artisans, and residents, which can favorite mutual interactions [122]. Finally, example of symbolic mediators can be expressed by specific representations of real practices [123]. In the end, mediators' typology and *modus operandi* can contribute to describing different typologies of "tourist landscapes". The agent role of "mediators" in tourist contexts and dynamics can open a wide field of investigation embracing various research areas from sociology to

management, such as agency theory and stakeholder management, among others. Being aware of this issue, it seems important, in any respect, to report this embryonal hypothesis here to stimulate further questions and discussions about mediators' possible roles in defining and describing "tourist landscapes".

4.2. Implications for Theory and Policy

The first implication deriving from the research outcomes for both theory and practice is that the proposed definition of "tourist landscape" as spatial–social–symbolic interrelations among tourism place, people, practice, and possible mediators can arise awareness about the complexity of the nexus and foster a more evident contamination from analyses concentrating on contextualized "tourist landscape" in their inner dynamics and components to planning and governance or evaluation insights.

The second implication derives from the three key research topics. They have stimulated the definition of the proposed definition of "tourist landscape" as well as the following conceptual framework (Figure 12). It is the representation of a tentative epistemological process possibly able to further support integrated theoretical and practical reflections on the nexus. In particular, it could help in circumscribing investigated objects in their processual stage, regardless the scientific field or the specific territorial questions.

Figure 12. A tentative processual scheme addressing different research topics.

In order to investigate, plan, governance, and evaluate, the individuation of the processual phase is as important as the assessment of the specific "tourist landscape". Accordingly, the proposed framework can help in identifying also adequate methods and tools to face the specific theoretical or operational needs.

Finally, the discussion leads to possible policy implications. Ultimately, highlighting the complexity of "tourist landscapes", overall research outcomes, proposed frameworks, and definitional aspects force landscape plans to confront tourism plans and vice versa in comparing and sharing objectives and strategies on the nexus. Whereas some of the superficialities found at the practical level could derive from both the limited dialogue between the different theoretical approaches and a broad inadequate understanding of the complexity of the nexus, the concreteness and strength of landscape as political instruments for stakeholders in orienting decisions and actions emerge. Moreover, landscape as a tool can play a primary social mediating part in educating, informing, sharing collective perceptions, and guiding on the different issues [124,125]. This is one of the possible ways to give substance to the indications of the European Landscape Convention.

5. Conclusions

The "landscape–tourism" nexus has been analyzed in the literature, assessing the prevailing definitions used to describe it and investigating the specific research issues.

The implemented bibliometric analysis has returned three main research topics: planning and governance, situated spatial-social-symbolic interrelations, and impact evaluation. Moreover, the defined cluster analysis has pointed out a series of thematic categories under the emerged topics helping in describing the prevalent research fields, the consistency of the production per topic, and the use of different definitions of the nexus in relation to the thematic category.

According to emerged topics and themes, the two main research fields are physical and human geography and economics and business. The prevailing approaches to the nexus highlight a diversity in perspective. Whereas geographic studies consider landscape

mainly as a system of which tourism dynamics are a part, economic investigations assess tourism phenomena as a system where landscape is often considered one of its resources.

The selected literature refers mostly to Planning and Governance themes, such as landscape as a valuable resource, landscape attractivity, destination infrastructures, services and facilities, role of institutions, business and society, and destination sustainable development. This comprised 44.5% of analyzed publications, i.e., the oldest approach to the nexus dated back to the 1980s. This consistency is also explained by the intense scientific production from China that, over the last decade, has seen an increase in the number of investigations on the specific research topic. Selected contributions on impact evaluation count for the 34% and investigate largely economic, environmental, and social impacts with a focus on land use and consumption, effects of place making and transformation and image construction, patrimonialization of cultural resources, national identity, and memory, and historical changes in local and tourist perceptions. Starting from the 2000s, the scientific production on these topics has shown a steady distribution over the years. Finally, the literature on the situated spatial–social–symbolic interrelations between the tourism phenomenon and landscape included 18.9% of the corpus. The main thematic concerns were the types of practices and representations in landscape spatial definition and meaning, role of spatial, social, and symbolic interrelations in tourism experiences, function of tangible and intangible, and human and non-human mediating agents. These approaches are the most recent ones. Reflections on the relational dimension of landscape matured in tourism studies around 2010 and only in the following years have begun to consolidate and guide more frequently theoretical investigations.

Concerning the definitional aspect, a general lack of attention to the use of specific terms has emerged. Since the 1980s, the term "tourism landscape" has been mostly used in contributions of physical geography and economics, considering landscape as a potential tourism resource or attraction, whereas "tourist landscape" has mainly been dominant where scholars investigate the conceptual complexity of landscape from its relational dimension. From 2010, the prevalence of "tourist landscape" has been noted in all disciplines. Recently, thanks to a few but precise definitional efforts (2.5% of the analyzed corpus), awareness of terminological issues seems to have increased. Definitions, such as "touristed landscape" and "touristic landscape", often contain a negative connotation that refers to the critical impact evaluations from geographical inquiries through political and sociological lenses. Finally, the research underlines the recent emergence of the terms "touristscape" and "tourismscape", referring to interesting multidisciplinary reflections on the nexus.

The outputs of the whole bibliographic analysis stimulate the proposal of a tentative definition of "tourist landscape" as the interrelation of tourism places, people, practices, and mediators. This definition is explained by the presence of specific aspects referring to a tourist dimension of the landscape. In addition, the proposed definition considers the variety of conceptual and operational fields in which it might be used.

From the described research outcomes are derived both theoretical and practical implications. The application of specific and thoughtful definitions forces scholars and stakeholders to start inquiries considering the complexity of the nexus and the possibility to draw from a broad set of approaches according to the circumscribed research or political needs. In the end, it is necessary to describe the specific "tourist landscape" but also to position the investigated issue in order to clearly define objectives, tools and approaches.

Although the research has analyzed a selected literature corpus based on prevalent definitions of the nexus, both quantitative and qualitative methodologies have returned a variety of results and raised some hypotheses that need to be further explored. The proposed definition of "tourist landscape" needs to be additionally thought and explored by also applying it to specific research issues and case studies. In particular, the assessment of tourist practices in relation to the spatial, social, and symbolic specificities and the role of mediating agents in "tourist landscape" require both deeper and more detailed theoretical analyses.

Ultimately, the assessment of shared integrative conceptual frameworks and definitional aspects on the "landscape–tourism" nexus should definitely orient future investigations in a more evident way to animate theoretical confrontations feeding new geographies of tourism and to influence contemporary territorial debates and policies. The health emergency has led to the questioning of many interpretative schemes and operational solutions regarding both the landscape and the tourist phenomenon. The urgent need for new theoretical reflections and political agenda on the two themes could be addressed to focus more specifically on their nexus in order to hopefully find innovative and sustainable ways to interpret contemporary places, mobility and human beings in places.

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References

1. Antrop, M. Sustainable landscapes: Contradiction, fiction or utopia? *Landsc. Urban Plan.* **2006**, *75*, 187–197. [CrossRef]
2. Antrop, M.; Van Eetvelde, V. *Landscape Perspectives*; Landscape Series; Springer: Dordrecht, The Netherlands, 2017; Volume 23. [CrossRef]
3. Kühne, O. *Landscape Theories: A Brief. Introduction*; RaumFragen: Stadt-Region-Landschaft; Springer: Wiesbaden, Germany, 2019. [CrossRef]
4. Council of Europe. European landscape convention. In *Report and Convention*; Council of Europe: Saint Strasbourg, France, 2000.
5. Howard, P.; Thompson, I.; Waterton, E.; Atha, M. (Eds.) *The Routledge Companion to Landscape Studies*; Routledge: London, UK, 2013. [CrossRef]
6. Howard, P.; Thompson, I.; Waterton, E.; Atha, M. (Eds.) *The Routledge Companion to Landscape Studies*, 2nd ed.; Routledge: London, UK; Abingdon, UK; New York, NY, USA, 2018. [CrossRef]
7. Hall, C.M.; Williams, A.M.; Lew, A.A. (Eds.) Tourism: Conceptualizations, institutions, and issues. In *A Companion to Tourism*; Blackwell Publishing Ltd.: Malden, MA, USA, 2004; pp. 1–22. [CrossRef]
8. Jamal, T.; Robinson, M. *The SAGE Handbook of Tourism Studies*; Sage Publications: Thousand Oaks, CA, USA, 2009.
9. Wilson, J. *The Routledge Handbook of Tourism Geographies*, 1st ed.; Routledge: London, UK, 2012. [CrossRef]
10. Lew, A.A.; Hall, C.M.; Williams, A.M. (Eds.) *The Wiley Blackwell Companion to Tourism*; John Wiley & Sons, Ltd.: Oxford, UK, 2014. [CrossRef]
11. Swarbrooke, J. *Sustainable Tourism Management*; CABI: Wallingford, UK, 1999. [CrossRef]
12. Page, S. *Tourism Management*, 5th ed.; Routledge: London, UK, 2014. [CrossRef]
13. Ateljevic, I. *The Critical Turn in Tourism Studies: Creating an Academy of Hope*, 1st ed.; Routledge: London, UK, 2013. [CrossRef]
14. Minca, C.; Colombino, A. *Breve Manuale di Geografia Umana*; CEDAM: Padua, Italy, 2012.
15. Terkenli, T.S. Tourism and landscape. In *A Companion to Tourism*; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; Blackwell Publishing Ltd.: Malden, MA, USA, 2004; pp. 337–348. [CrossRef]
16. Mavric, M.; Urry, J. Tourism studies and the new mobilities paradigm. In *The SAGE Handbook of Tourism Studies*; SAGE Publications Ltd.: London, UK, 2009; pp. 646–658. [CrossRef]
17. Stoffelen, A.; Vanneste, D. An integrative geotourism approach: Bridging conflicts in tourism landscape research. *Tour. Geogr.* **2015**, *17*, 544–560. [CrossRef]
18. Buckley, R.; Ollenburg, C.; Zhong, L. Cultural landscape in mongolian tourism. *Ann. Tour. Res.* **2008**, *35*, 47–61. [CrossRef]
19. Uusitalo, M. Differences in tourists' and local residents' perceptions of tourism landscapes: A case study from Ylläs, Finnish lapland. *Scand. J. Hosp. Tour.* **2010**, *10*, 310–333. [CrossRef]
20. Almeida, J.; Costa, C.; da Silva, F.N. A framework for conflict analysis in spatial planning for tourism. *Tour. Manag. Perspect.* **2017**, *24*, 94–106. [CrossRef]
21. Murphy, P. Tourism as an agent for landscape conservation: An assessment. *Sci. Total Environ.* **1986**, *55*, 387–395. [CrossRef]
22. Krüger, O. The role of ecotourism in conservation: Panacea or Pandora's box? *Biodivers. Conserv.* **2005**, *14*, 579–600. [CrossRef]

23. Aitchison, C.; MacLeod, N.E.; Shaw, S.J. *Leisure and Tourism Landscapes: Social and Cultural Geographies*; Routledge: London, UK, 2000.
24. Terkenli, T.S. Landscapes of tourism: Towards a global cultural economy of space? *Tour. Geogr.* **2002**, *4*, 227–254. [CrossRef]
25. Minca, C. The tourist landscape paradox. *Soc. Cult. Geogr.* **2007**, *8*, 433–453. [CrossRef]
26. Metro-Roland, M. Interpreting meaning: An application of Peircean semiotics to tourism. *Tour. Geogr.* **2009**, *11*, 270–279. [CrossRef]
27. Skowronek, E.; Tucki, A.; Huijbens, E.; Jóźwik, M. What is the tourist landscape? Aspects and features of the concept. *Acta Geogr. Slov.* **2018**, *58*. [CrossRef]
28. Jiménez-García, M.; Ruiz-Chico, J.; Peña-Sánchez, A.R. Landscape and tourism: Evolution of research topics. *Land* **2020**, *9*, 488. [CrossRef]
29. Gkoltsiou, A.; Terkenli, T.S. An interdisciplinary analysis of tourist landscape structure. *Tour. Int. Multidiscip. J. Tour.* **2012**, *7*, 145–164.
30. Terkenli, T.S.; Skowronek, E.; Tucki, A.; Kounellis, N. Toward understanding tourist landscape. a comparative study of locals' and visitors' perception in selected destinations in Poland and Greece. *Quaest. Geogr.* **2019**, *38*, 81–93. [CrossRef]
31. Van Eck, N.J.; Waltman, L. *VOSviewer Manual*; University of Leiden: Leiden, The Netherlands, 2019; pp. 1–52.
32. Heersmink, R.; Hoven, J.V.D.; Van Eck, N.J.; Berg, J.V.D. Bibliometric mapping of computer and information ethics. *Ethic. Inf. Technol.* **2011**, *13*, 241–249. [CrossRef]
33. Friese, S. *Qualitative Data Analysis with ATLAS. Ti*; Sage: Thousand Oaks, CA, USA, 2019.
34. Marsh, J. The Rocky and Selkirk mountains and the Swiss connection 1885–1914. *Ann. Tour. Res.* **1985**, *12*, 417–433. [CrossRef]
35. Pritchard, A.; Morgan, N.J. Privileging the male gaze. *Ann. Tour. Res.* **2000**, *27*, 884–905. [CrossRef]
36. Van Der Duim, R. Tourismscapes an actor-network perspective. *Ann. Tour. Res.* **2007**, *34*, 961–976. [CrossRef]
37. Rabbiosi, C. Itineraries of consumption: Co-producing leisure shopping sites in Rimini. *J. Consum. Cult.* **2016**, *16*, 412–431. [CrossRef]
38. Demovic, A.R. "Quaint creatures": Public discourse and the role of B-girls in the heritage of Bourbon Street. *J. Herit. Tour.* **2015**, *11*, 336–348. [CrossRef]
39. Winter, C. Tourism and making the places after war: The Somme and Ground Zero. *Almatourism J. Tour. Cult. Territ. Dev.* **2016**, *7*, 26–43.
40. Woźniak, E.; Kulczyk, S.; Derek, M. From intrinsic to service potential: An approach to assess tourism landscape potential. *Landsc. Urban Plan.* **2018**, *170*, 209–220. [CrossRef]
41. Russo, A.P.; Bertelle, S. Mobilising memoryscapes: Tourist entanglements at two Catalan Civil War sites. *J. Herit. Tour.* **2019**, *15*, 312–327. [CrossRef]
42. Liu, C. Research on planning and design of rural characteristic landscape from the perspective of sustainable development. *IOP Conf. Ser. Earth Environ. Sci.* **2020**, *440*, 052051. [CrossRef]
43. Healy, R.G. The "common pool" problem in tourism landscapes. *Ann. Tour. Res.* **1994**, *21*, 596–611. [CrossRef]
44. Morales, A.G.; Ojeda, A.R. Hacia una nueva propuesta de interpretación del paisaje agrario canario. *Estud. Geogr.* **2017**, *78*, 579–604. [CrossRef]
45. Povilanskas, R.; Armaitienė, A.; Dyack, B.; Jurkus, E. Islands of prescription and islands of negotiation. *J. Destin. Mark. Manag.* **2016**, *5*, 260–274. [CrossRef]
46. Yeager, E.; Boley, B.B.; Goetcheus, C. Conceptualizing peer-to-peer accommodations as disruptions in the urban tourism system. *J. Sustain. Tour.* **2020**, 1–16. [CrossRef]
47. Di, F.; Yang, Z.; Liu, X.; Wu, J.; Ma, Z. Estimation on aesthetic value of tourist landscapes in a natural heritage site: Kanas National Nature Reserve, Xinjiang, China. *Chin. Geogr. Sci.* **2010**, *20*, 59–65. [CrossRef]
48. Sánchez-Pérez, M.; Illescas-Manzano, M.D.; Martínez-Puertas, S. Modeling hotel room pricing: A multi-country analysis. *Int. J. Hosp. Manag.* **2019**, *79*, 89–99. [CrossRef]
49. Fazia, C.; Errigo, M.F. The coastal port landscape: New opportunities for tourism and challenges for clean energy. *Tria-Territ. Della Ric. SU Insediamenti Ambient.* **2017**, *10*, 57–73.
50. Żemła-Siesicka, A.; Andreychouk, V.; Myga-Piątek, U. Spatial diversity of tourist facilities in the Silesian Beskid mountains in Poland. *Geogr. Pol.* **2020**, *93*, 399–421. [CrossRef]
51. Heslinga, J.; Groote, P.; Vanclay, F. Understanding the historical institutional context by using content analysis of local policy and planning documents: Assessing the interactions between tourism and landscape on the Island of Terschelling in the Wadden Sea Region. *Tour. Manag.* **2018**, *66*, 180–190. [CrossRef]
52. Enzenbacher, D.J. Exploring the food tourism landscape and sustainable economic development goals in Dhofar Governorate, Oman. *Br. Food J.* **2019**, *122*, 1897–1918. [CrossRef]
53. Xue, Y. Research on tourism resources development pattern effect evaluation based on regression analysis and neural network. *DEStech Trans. Soc. Sci. Educ. Hum. Sci.* **2016**. [CrossRef]
54. Glowka, G.; Zehrer, A. Tourism family-business owners' risk perception: Its impact on destination development. *Sustainability* **2019**, *11*, 6992. [CrossRef]
55. Gibson, C. Geographies of tourism: (Un)ethical encounters. *Prog. Hum. Geogr.* **2009**, *34*, 521–527. [CrossRef]
56. Zara, C. Rethinking the tourist gaze through the Hindu eyes: The Ganga Aarti celebration in Varanasi, India. *Tour. Stud.* **2015**, *15*, 27–45. [CrossRef]

57. Miller, J.C.; Del Casino, J.V.J. Negative simulation, spectacle and the embodied geopolitics of tourism. *Trans. Inst. Br. Geogr.* **2018**, *43*, 661–673. [CrossRef]
58. Sheller, M.; Urry, J. The new mobilities paradigm. *Environ. Plan A* **2006**, *38*, 207–226. [CrossRef]
59. Thrift, N. *Non-Representational Theory: Space, Politics, Affect*; Routledge: London, UK, 2008. [CrossRef]
60. Ingold, T. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*; Routledge: London, UK, 2000.
61. Lorimer, H. Cultural geography: The busyness of being 'more-than-representational'. *Prog. Hum. Geogr.* **2005**, *29*, 83–94. [CrossRef]
62. Ingold, T. The temporality of the landscape. *World Archaeol.* **1993**, *25*, 152–174. [CrossRef]
63. Crouch, D. *Leisure/Tourism Geographies: Practices and Geographical Knowledge*; Routledge: London, UK, 1999.
64. Edensor, T. Performing tourism, staging tourism. *Tour. Stud.* **2001**, *1*, 59–81. [CrossRef]
65. Coleman, S.; Crang, M. *Tourism: Between Place and Performance*; Berghahn Books: New York, NY, USA, 2002.
66. Russo, A.P.; Richards, G. (Eds.) *Reinventing the Local in Tourism: Producing, Consuming and Negotiating Place*; Multilingual Matters; Bristol Blue Ridge Summit: Bristol, UK, 2016. [CrossRef]
67. Crouch, D. Flirting with space-tourism geographies as sensuous/expressive practice. In *Seductions of Place: Geographical Perspectives on Globalization and Touristed Landscapes*; Cartier, C., Lew, A.A., Eds.; Routledge: London, UK, 2005; pp. 18–29.
68. Edensor, T. Tourism and Performance. In *The SAGE Handbook of Tourism Studies*; SAGE Publications Ltd.: London, UK, 2009; pp. 544–558. [CrossRef]
69. Urry, J. *The Tourist Gaze: Leisure and Travel in Contemporary Societies*; Sage: London, UK, 1990.
70. Knudsen, D.; Metro-Roland, M.M.; Soper, A.K.; Greer, C.E. *Landscape, Tourism, and Meaning*; Ashgate: Surrey, UK, 2008.
71. Ringer, G. *Destinations-Cultural Landscapes for Tourism*; Routledge: London, UK, 1998.
72. Metro-Roland, M.M.; Soica, S. Landscape and tourism. In *The Routledge Companion to Landscape Studies*, 2nd ed.; Howard, P., Thompson, I., Waterton, E., Atha, M., Eds.; Routledge: London, UK, 2018; pp. 354–365. [CrossRef]
73. Soica, S. Tourism as practice of making meaning. *Ann. Tour. Res.* **2016**, *61*, 96–110. [CrossRef]
74. Bristow, R.S.; Jenkins, I.S. Spatial and temporal tourism considerations in liminal landscapes. *Tour. Geogr.* **2020**, *22*, 219–228. [CrossRef]
75. Pine, B.J.; Gilmore, J.H. *The Experience Economy. Work Is Theatre and Every Business a Stage Boston*; Harvard Business School Press: Cambridge, MA, USA, 1999.
76. Campos, A.C.; Mendes, J.; Valle, P.O.D.; Scott, N. Co-creation of tourist experiences: A literature review. *Curr. Issues Tour.* **2015**, *21*, 369–400. [CrossRef]
77. Rakić, T.A. *Introduction to Visual Research Methods in Tourism*, 1st ed.; Routledge: London, UK, 2011. [CrossRef]
78. Berger, R. Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qual. Res.* **2013**, *15*, 219–234. [CrossRef]
79. Sonnichsen, T. Vinyl tourism: Records as souvenirs of underground musical landscapes. *Arts Mark.* **2017**, *7*, 235–248. [CrossRef]
80. Prince, S. Dwelling in the tourist landscape: Embodiment and everyday life among the craft-artists of Bornholm. *Tour. Stud.* **2018**, *18*, 63–82. [CrossRef]
81. Prince, S. Dwelling and tourism: Embracing the non-representational in the tourist landscape. *Landsc. Res.* **2019**, *44*, 731–742. [CrossRef]
82. Prasad, P. Thebabaand thepatrao: Negotiating localness in the tourist village. *Crit. Arts* **2012**, *26*, 353–374. [CrossRef]
83. Li, Y.; Zhang, J.; Chen, Y. Image of landscapes in ancient water towns—Case study on Zhouzhuang and Tongli of Jiangsu Province. *Chin. Geogr. Sci.* **2006**, *16*, 371–377. [CrossRef]
84. Dominguez, A.Q.; Russo, A.P. Urban landscapes in the post-tourist age. Towards an analytic framework. *Scr. Nova-Rev. Electro. Ge. Ciencias Soc.* **2010**, *14*. Available online: https://www.raco.cat/index.php/ScriptaNova/article/view/187740 (accessed on 14 January 2021).
85. Leung, M.W. Power of borders and spatiality of transnationalism: A study of Chinese-operated tourism businesses in Europe. *Tijdschr. Voor Econ. Soc. Geogr.* **2009**, *100*, 646–661. [CrossRef]
86. Chakraborty, A. Emplacing non-human voices in tourism research: The role of dissensus as a qualitative method. *Tour. Geogr.* **2021**, *23*, 118–143. [CrossRef]
87. Zhang, J.J. Of kaoliang, bullets and knives: Local entrepreneurs and the battlefield tourism enterprise in Kinmen (Quemoy), Taiwan. *Tour. Geogr.* **2010**, *12*, 395–411. [CrossRef]
88. MacLeod, N. The role of trails in the creation of tourist space. *J. Herit. Tour.* **2016**, *12*, 423–430. [CrossRef]
89. Sarantakou, E.; Terkenli, T.S. Non-institutionalized forms of tourism accommodation and overtourism impacts on the landscape: The case of Santorini, Greece. *Tour. Plan. Dev.* **2019**, *16*, 411–433. [CrossRef]
90. Müller, H. Quality offensive in Swiss tourism. *Tour. Rev.* **1998**, *53*, 35–41. [CrossRef]
91. Minca, C. The island: Work, tourism and the biopolitical. *Tour. Stud.* **2009**, *9*, 88–108. [CrossRef]
92. Saarinen, J.; Wall-Reinius, S. (Eds.) *Tourism Enclaves: Geographies of Exclusive Spaces in Tourism*, 1st ed.; Routledge: London, UK, 2021. [CrossRef]
93. Hof, A.; Blázquez-Salom, M. Changing tourism patterns, capital accumulation, and urban water consumption in Mallorca, Spain: A sustainability fix? *J. Sustain. Tour.* **2015**, *23*, 770–796. [CrossRef]

94. Ioannides, D.; Zampoukos, K. Tourism's labour geographies: Bringing tourism into work and work into tourism. *Tour. Geogr.* **2017**, *20*, 1–10. [CrossRef]

95. Tampakis, S.; Panagopoulos, T.; Karanikola, P.; Papadopoulos, A. Development, pollution and stake-holders activities for protection of coastal and marine environment. *J. Environ. Protect. Ecol.* **2018**, *19*, 1130–1137.

96. Santos-Júnior, A.; Almeida-García, F.; Morgado, P.; Mendes-Filho, L. Residents' quality of life in smart tourism destinations: A theoretical approach. *Sustainability* **2020**, *12*, 8445. [CrossRef]

97. Meneghello, S.; Mingotto, E. Promoting sustainable development through fisheries-related tourism experiences. Benefits from the integration between fisheries and tourism in venetian coastal areas. *Int. J. Sustain. Dev. Plan.* **2016**, *11*, 447–457. [CrossRef]

98. Pristeri, G.; Pappalardo, S.; Codato, D.; Gianoli, F.; De Marchi, M. An open multi-user platform in support of urban development: The data webgis. In Proceedings of the Real CORP Conference 2018 Expanding Cities, Diminishing Space, Vienna, Austria, 4–6 April 2018; Schrenk, M., Popovich, V.V., Zeile, P., Elisei, P., Beyer, C., Navratil, G., Eds.; Planum Publisher: Roma, Italy, 2018; pp. 67–74.

99. Dowling, R.K. Geotourism's Global Growth. *Geoheritage* **2011**, *3*, 1–13. [CrossRef]

100. Gordon, J.E. Geoheritage, geotourism and the cultural landscape: Enhancing the visitor experience and promoting geoconservation. *Geoscience* **2018**, *8*, 136. [CrossRef]

101. Meini, M.; Di Felice, G.; Petrella, M. Geotourism perspectives for transhumance routes. Analysis, requalification and virtual tools for the geoconservation management of the drove roads in southern Italy. *Geosciences* **2018**, *8*, 368. [CrossRef]

102. Ólafsdóttir, R.; Sæþórsdóttir, A.D. Wind farms in the Icelandic highlands: Attitudes of local residents and tourism service providers. *Land Use Policy* **2019**, *88*, 104173. [CrossRef]

103. Saarinen, J. Cultural tourism and the role of crafts in Southern Africa: The case of craft markets in Windhoek, Namibia. *Tour. Int. Interdiscip. J.* **2016**, *64*, 409–418.

104. McCabe, H. Contesting home: Tourism, memory, and identity in Sackville, New Brunswick. *Can. Geogr. Géogr. Can.* **2009**, *42*, 231–245. [CrossRef]

105. Devine, J.A. Colonizing space and commodifying place: Tourism's violent geographies. *J. Sustain. Tour.* **2016**, *25*, 634–650. [CrossRef]

106. Jacobs, J. *Sex, Tourism and the Postcolonial Encounter: Landscapes of Longing in Egypt*; Ashgate Publishing, Ltd.: Surrey, UK, 2012.

107. Segeur, S. New coastal estates, tourist gentrification in Coquimbo bay? *Rev. Urbanism.* **2015**, *32*, 18–31.

108. Dearborn, L.M.; Stallmeyer, J.C. Re-visiting Luang Prabang: Transformations under the influence of world heritage designation. *J. Tour. Cult. Chang.* **2009**, *7*, 247–269. [CrossRef]

109. Masri, G. Resurrecting Phoenicia: Tourist landscapes and national identity in the heart of the Lebanese capital. In *City Tourism: National Capital Perspectives*; Maitland, R., Ritchie, B., Eds.; CABI: Wallingford, UK, 2009; pp. 225–238. [CrossRef]

110. Inwood, J.F.J. Sweet Auburn: Constructing Atlanta's Auburn avenue as a heritage tourist destination. *Urban. Geogr.* **2010**, *31*, 573–594. [CrossRef]

111. Ana, M.I.; Andrei, A.G.; Nation Branding and Tourism. Case Study: Croatia. In Proceedings of the International E-Conference: Enterprises in the Global Economy, 21 June 2017; Available online: https://www.researchgate.net/publication/324063013_Nation_Branding_and_Tourism_Case_Study_Croatia (accessed on 14 January 2021).

112. Fyhri, A.; Jacobsen, J.K.S.; Tømmervik, H. Tourists' landscape perceptions and preferences in a Scandinavian coastal region. *Landsc. Urban Plan.* **2009**, *91*, 202–211. [CrossRef]

113. Booth, R. Turismo, panamericanismo e ingeniería civil: La construcción del camino escénico entre viña del mar y concón (1917–1931). *Historia (Santiago)* **2014**, *47*, 277–311. [CrossRef]

114. Winslow, M. Cultivating leisure: Tourism, progressive agriculture, and technologies of landscape at Pinehurst, North Carolina, 1895–1935. *Agric. Hist.* **2020**, *94*, 61–83. [CrossRef]

115. Van Der Duim, R.; Ren, C.B.; Jóhannesson, G.T. ANT: A decade of interfering with tourism. *Ann. Tour. Res.* **2017**, *64*, 139–149. [CrossRef]

116. Hall, C.M. Leisure and tourism landscapes: Social and cultural geographies. *Tour. Manag.* **2004**, *25*, 811–812. [CrossRef]

117. Rees, R.; Cosgrove, D.E. Social formation and symbolic landscape. *Geogr. Rev.* **1986**, *76*, 119. [CrossRef]

118. Weaver, D.B. The evolution of a 'plantation' tourism landscape on the caribbean island of Antigua. *Tijdschr. Voor Econ. Soc. Geogr.* **1988**, *79*, 319–331. [CrossRef]

119. Hannam, K.; Butler, G.; Paris, C.M. Developments and key issues in tourism mobilities. *Ann. Tour. Res.* **2014**, *44*, 171–185. [CrossRef]

120. Tussyadiah, I.P.; Jung, T.H.; Dieck, M.C.T. Embodiment of wearable augmented reality technology in tourism experiences. *J. Travel Res.* **2018**, *57*, 597–611. [CrossRef]

121. Alcázar, M.D.C.H.; Piñero, M.S.; de Maya, S.R. The effect of user-generated content on tourist behavior: The mediating role of destination image. *Tour. Manag. Stud.* **2014**, *10*, 158–164.

122. Pappalepore, I.; Smith, A. The co-creation of urban tourism experiences. In *Reinventing the Local in Tourism*; Russo, A.P., Richards, G., Eds.; Channel View Publications: Bristol, UK, 2016; pp. 87–100. [CrossRef]

123. Lester, J.-A.; Scarles, C. (Eds.) *Mediating the Tourist Experience: From Brochures to Virtual Encounters*, 1st ed.; Routledge: London, UK, 2016. [CrossRef]

124. Castiglioni, B.; Ferrario, V. Exploring the concept of 'Democratic landscape'. In *Defining Landscape Democracy*; Edward Elagr Publishing: Cheltenham, UK; Northampton, MA, USA, 2018; pp. 39–49. [CrossRef]
125. Castiglioni, B.; Cisani, M. The complexity of landscape ideas and the issue of landscape democracy in school and non-formal education: Exploring pedagogical practices in Italy. *Landsc. Res.* **2020**, 1–13. [CrossRef]

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Tourism Imaginary and Landscape at Heritage Site: A Case in Honghe Hani Rice Terraces, China

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Abstract: The relationship between tourism and landscape has been extensively studied, but a conceptual framework to study cultural relationships between tourism and landscape is not specified in the literature. On the basis of the theory of social imaginary, this article takes China's Honghe Hani Terraces as an example to study how the landscape is imagined in tourism and the potential cultural conflicts. Content analysis on tourist discourses and images in social media was conducted in order to identify tourist imaginaries about the landscape. A gap between tourism imaginaries and the Hani landscape was found: the latter was imagined as an overlooking view of stereotyped terraced imagery, a schema separated and independent from other landscape components. In-depth interviews on stakeholders and participant observations were used to study the production process of tourism imaginaries. Findings show that the viewing platforms and roads provided an enclave space from local contexts, wherein the Hani landscape was staged for gazing. The tourism company's strategies dominated the process, leading to local communities' marginalization and threats to the landscape. We suggest that tourism planning and marketing should maintain the integrity of landscape in tourism imaginaries and empower the local communities, thereby reducing cultural tensions between tourism and the landscape.

Keywords: tourism; landscape; imaginary; cultural heritage site; cultural conflict; local communities

1. Introduction

The relationship between tourism and landscape has been extensively studied [1–7]. As an image and representation of a place and the medium of contact between the tourist and place of travel [3], the landscape satisfies tourists' needs for pleasure sought and is the core of tourism planning and marketing. Many studies have explored the way in which to develop landscape resources in tourism planning for successful tourism business [4,8–10]. However, the pursuit of economic value in these efforts often causes conflicts between tourism development and the landscape. Some studies have therefore explored the impact of tourism on landscapes [11,12]. Influenced by post-modern sociological methods, recent studies on the relationship between tourism and landscape in geography have begun to explore deeper cultural conflicts [7,13], including identity and symbolics [14–17], exploring the newly emerging cultural economy of space [2], especially the cultural landscape [18–20]. However, a conceptual framework to study the relationships between tourism and landscape is not specified in the literature [3]. In the contemporary world, tourism has become a major industry and one of the most important forces shaping landscapes. From a cultural perspective, tourism essentially involves the production of culture and, more specifically, the production of imaginaries.

The term "imaginary" is used in cultural studies to refer to the ability to see in a thing what it is not [21], a kind of fantasy [22] (p. 35), and a cultural model [23,24]. The study of the social imaginary has only entered the field of tourism research in recent years [25–29]. Hughes [25] studied the way that tourists see places, and Salazar [26] proposed the concept of the tourism imaginary, which is a shared imaginary about the Other. Tourism imaginaries

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are features of modern human cultural systems that describe places that we might like to visit or worlds that we might like to inhabit [29] (p. 1). Tourism imaginaries are essential, since they "allow concerned individuals to approach the tourist destination in its various dimensions, without their getting physically and symbolically lost" [30]. Tourism imaginaries are closely related to geopolitics and power [31,32]. For certain social groups, tourism imaginaries forge their own frame of meaning and identity expressions [33]. From a political ecology perspective, Mostafanezhad and Norum [34] pointed out that tourism circulates an "anthropocenic imaginary" of the Humanity/Nature dualism, such as the expectations and impressions of culture/nature, alienation/authenticity binaries; these social imaginaries about the Anthropocene, in turn, develop new tourism space, reshaping the tourism industry itself. It is hard to think of tourism without imaginaries [26]; it is perhaps the largest conceptual frame within which tourism operates [35].

However, the relationship between tourism in terms of imaginary and landscape has been insufficiently discussed in literature. The concept of tourism imaginary provides a new framework for understanding the cultural conflicts between tourism and landscape. When a tourism imaginary is created for tourists, it focuses more on their needs and aesthetics, and the landscape is thus staged for gazing [11] (p. 132), [36]. The dialectical relationship between landscape and tourism imaginaries may add a new theoretical perspective for solving the potential cultural conflicts in this process.

The focus of the empirical research in this article is cultural heritage sites, especially the landscape and tourism imaginary of agricultural cultural heritage sites. The Honghe Hani Terraces (Honghe) studied in this paper were listed as a cultural landscape in terms of the world cultural heritage, representing the combined work of human beings and nature [37]. The landscape of the agricultural cultural heritage site is closely connected to the economic, social, and cultural system of the local people. As an important shaping force, tourism should be included in the discourse of cultural landscapes, in which the power relations between stakeholders should be analyzed. Cultural landscapes are not only the product of collaboration between people and nature, but also the product of the collaborative practice of people [20].

On the basis of the theory of the social imaginary and tourism imaginary, this article aimed to understand how the imagery is seen by the tourists in cultural heritage tourism through the case study of Honghe. The research objectives of this article also involve understanding how the tourism imaginary is produced by stakeholders, what impact it has on landscape and tourism, and the role of power relations. Through a content analysis of user-generated content (UGC) posted by tourists on social media, as well as in-depth interviews and participant observations on site, this article studied the following research questions: What is the tourism imaginary about the landscape in the tourist discourse and images on social media? How is the tourism imaginary of the landscape produced, and what are the effects? What is the role of power relations in the production of the tourism imaginary?

Through a literature review, this paper proposed a conceptual framework of tourism imaginary for empirical research. The study found a gap between tourism imaginaries and the actual landscape in the tourism of Honghe, which has marginalized essential elements in the landscape, such as communities, in tourism development, thus posing a threat to the landscape. The tourism company's strategy dominated the production of the tourism imaginary, yet the community is less involved in decision making. However, a broader partnership is also emerging, adding new representations to the landscape's tourism imaginary.

2. Literature Review

2.1. Theories of the Social Imaginary and Tourism Imaginary

The term "imaginary" has appeared widely in scholarly work in philosophy [21]; psychoanalysis [22]; political science [23,24,38]; anthropology [31]; and, most recently, tourism studies [25,26]. In *The Imaginary Institution of Society* [21], Castoriadis proposed

the concept of the "imaginary" as an essential and decisive component of every symbol: something "invented". The imaginary is a kind of capacity "to see in a thing what it is not, to see other than it is" [21] (p. 127). "The social imaginary" in Castoriadis's sense refers to the actual imaginary of a society, the ethos of a group [38] (p. 4) in the sense of a society's shared, unifying core conceptions, as well as a society's imaginings rather than ideas about society [39]. For Castoriadis, there is a one-to-one correspondence between societies and imaginaries. In other words, he treats the culture of a (bounded) society as a unified and homogenized abstraction [39]. For a society, an imaginary is "an original investment by society of the world and itself with meanings" [21] (p. 128). Though "the social imaginary" is mystifying and believed to be invisible in Castoriadis's concept, which may be a major problem in his conception [39], it has real effects on people's social practice [21] (p. 129).

Unlike Castoriadis, Lacan refers to the imaginary as a fantasy, an illusion created in response to a psychological need [22] (p. 35). In Lacanian psychoanalysis, the imaginary, the symbolic, and the real are three registers of the human mind or self-consciousness. For Lacan, the subject of the imaginary is a person rather than an abstracted society.

The use of the term "imaginary" in social science is cited most from Anderson [23] and Taylor [24]. Anderson studied the origin of the nation state by analyzing "imagined communities". Imaginaries in Anderson's sense are similar to cultural models, which are similarly shared, implicit schemas of interpretation [40]. Taylor referred to the "social imaginary" as the ways in which people imagine their social existence: it incorporates "a sense of the normal expectations that we have of one another, the kind of common understanding which enables us to carry out the collective practices that make up our social life, and how we fit together in carrying out the common practice" [24]. For Taylor, the social imaginary is both factual and "normative", and it is carried in images, stories, and legends. The social imaginary is shared by "average people" or large groups of people, if not the whole society. This imaginary may be initially held by a few people, e.g., elites, then extend to society; thus, at any given time, it is complex. The social imaginary is significant because it makes social practice possible and makes sense to common practice. Taylor's conception of the social imaginary differs from the abstract culture by Castoriadis and is more similar to shared cognitive or cultural models [39].

From a person-centered ethnographic approach, Strauss pointed out that imaginaries can only belong to real people rather than the imagined people of Castoriadis or the individual person of Lacan, and he thus framed the analysis of social imaginaries using cultural models, which are cognitive schemas or combinations of schemas [39]. For Strauss, imaginaries cannot be fixed or homogeneous. There are three levels from the earlier discussions of the imaginary: the inner life of individuals (e.g., Lacan), manifestations of people's inner lives and social constraints in their publicly observable behaviors, and widely available public culture productions.

It is hard to think of tourism without imaginaries [26]. Tourism refers to the activity of visitors, who are travelers taking a trip to a main destination outside their usual environment for less than a year for any main purpose other than to be employed by a resident entity in the country or place visited [41]. Tourists seek an authentic experience when visiting a destination [42]. Hence, the most fundamental imaginary in tourism refers to that in the tourist's experience. Salazar refers to "tourism imaginaries" as shared imaginaries about the Other [26]. Here, tourists are the subjects of tourism imaginaries; other people and other places are the objects of imagination.

> "Prospective tourists are invited to imagine themselves in a paradisiacal environment, a vanished Eden, where the local landscape and population are to be consumed through observation, embodied sensation, and imagination." [26]

Salazar's idea of the imaginary is closer to the fantasy of Lacan, and the imaginary of otherness is of particular interest. However, the tourism imaginary in Lacan's sense can also be tourists themselves, supporting them in making sense of the experience. This "self-imaginary" of tourists is reflected in Wang's notion of "existential authenticity", which refers to a potential existential state of being that is to be activated by tourist activities [42].

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"Tourists are not merely searching for authenticity of the Other. They also search for authenticity of, and between, themselves. The toured objects or tourism can be just a means or medium by which tourist are called together, and then, an authentic interpersonal relationship between themselves is experience subsequently." [43] (p. 364)

The tourism imaginaries of the other and the self may exist in the whole process of tourist gazing [44], whereas the object of gazing is often staged [36]. Hughes noticed that the fusion of tourist representations and marketing philosophy blurs the boundaries between reality and fiction through the commodification of the place imaginary [25]. These tourist ways of "seeing" places often "differ from other presentations because places are being fashioned in the image of tourism". In other words, tourism imaginaries are socially produced. From this perspective, tourism is part of the "image production industry" [45], in which identities of destinations and their inhabitants are endlessly (re)invented, (re)produced, (re)captured, and (re)created in a bid to obtain a piece of the lucrative tourism pie [26].

Tourism imaginaries do not only exist in the minds of tourists: their production and circulation involve a group of people who are "stakeholders" in tourism. This imaginary on the supply side of tourism is similar to the social imaginaries in Taylor's sense, which are shared imaginaries of real stakeholders: they are tourists, local communities, companies, and governments. Tourism spaces, set apart from the mundane world for tourists, are in part spaces of the imaginary, fantasy, and dreaming [26].

For the purpose of this paper, tourism imaginaries of the landscape are of special interest. Landscape is a particular concern in the placemaking of tourism destinations and thus an important component in tourism imaginaries. Instead of focusing on the imaginaries of a tourist, we examined how social imaginaries of landscape are produced, consumed, and distributed. In this study, "tourism imaginary" refers to a socially shared imaginary of tourism stakeholders about other places and people. This definition adopts Taylor's concept of social imaginaries, Salazar's notion of "the other" in the tourism imaginary, and Strass's "people-centered" approach. It is compatible with Lacan's notion of "the imaginary", as a shared imaginary is evident through the careful analysis of tourism imaginaries of individual tourists, local community members, tourism enterprises, and governmental officials. Tourism imaginaries about landscape can be operationalized by analyzing what Salazar called "channels", including the visual and textual content, e.g., art, photographs, literature, and advertising.

We combined the ideas of Taylor, Strauss, and Salazar [24,26,31], and Figure 1 shows the conceptual framework used in this study for tourism imaginaries about landscape. Because of the intangible nature of tourism imaginaries, "the only way to study them is by focusing on the multiple conduits through which they pass and become visible in the form of images and discourses" [26]. These social imaginaries can be viewed as including three types of knowledge: a prototype, exemplars, and background understandings [39]. A prototype is a real or constructed good example of a category [46]. Exemplars are specific examples. Background understandings include other information that is part of the concept, such as how and why features of the prototype are present, how they are related, and when variations of the prototype would be expected. As long as tourism imaginaries about landscape are recognized, it is important to realize that they are dynamic rather than fixed. The movement process of tourism imaginaries can be framed by "the circuit of culture" model [47], which places imaginaries in the circulation of culture. According to Du Gay et al., five moments can be identified in the circuit of tourism imaginaries: representation, circulating production, consumption, regulation, and identity. The imaginaries circulate unevenly and non-linearly [26], and the movement is embedded in the social practice of tourism stakeholders. Power relations influence this process, strengthening or restricting certain imaginaries.
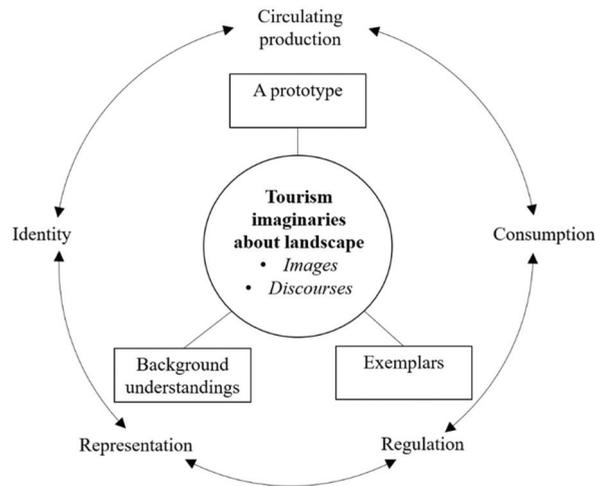
Figure 1. A conceptual framework for tourism imaginaries about landscape.

2.2. The Hani Landscape

The Hani moved to Ailao Mountain 1300 years ago and began to construct terraced fields and plant rice on the mountain slopes of the Red River Valley. As a result of inconvenient transportation and little communication with the outside world, the Hani people living in mountainous areas have developed and maintained unique agricultural traditions and lifestyles. The Hani's agricultural planting is dominated by red rice, and the terraces are mostly cultivated on slopes of 900–2000 m. There is abundant rainfall due to water vapor from the Red River Valley, and the annual precipitation is more than 1400 mm. Because the climate on the hillside is colder than the Red River Valley, water vapor often forms a lot of clouds at this altitude. The Hani people use the abundant precipitation to build layers of paddy fields with rocks and soil along the hillside contours. Additionally, they built a sophisticated irrigation system to distribute water between plots. Most of the Hani's villages are located on the upper edge of terraces between 1400 and 2000 m. Above the village is the forest (Figure 2).
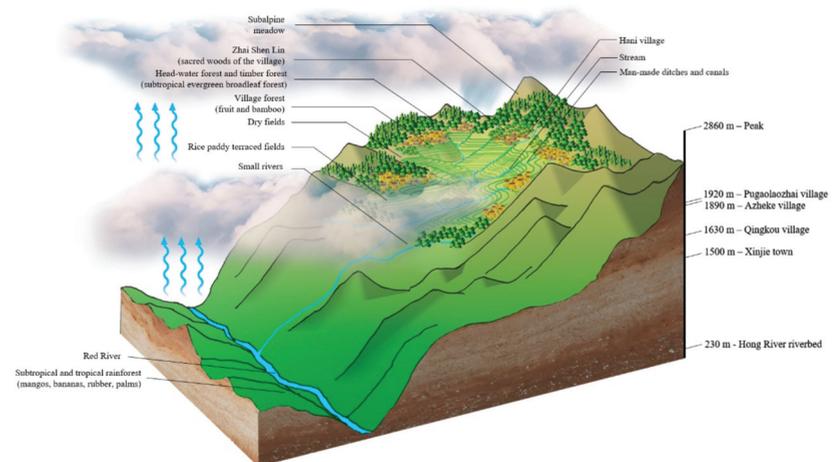
Figure 2. The Hani landscapes.

The integrated fourfold system of Hani terraces has been extensively studied as a representative of an ecosystem where people and nature coexist harmoniously [48–50]. The four parts of this complex system include terraces, villages, water system, and forests [48]. The various parts of the human–nature system that support this have different functions.

The terraced fields include paddy fields and dry fields. The paddy fields are mainly planted with red rice, which is the source of food for the Hani people. The slopes of the terraces range from 10 to 25, and the steepest terrace exceeds 60 [48]. In addition to growing rice, the terraces are also a place for collecting vegetables and keeping ducks and fish, which enrich the food of the Hani people.

The forest is located above or around the village. These sub-tropical evergreen broadleaved forests are composed of head-water forest, Zhai Shen Lin, village forest, and timber forest [48]. The head-water forest is the water source for the Hani people's drinking water and terraces. Zhai Shen Lin is the sacred woods of the village, the place where the gods live in the hearts of the Hani people and the place where they worship. Village forests are usually fruit forests and other forests planted in and around the village. The timber forests, assigned and maintained by the village committee, provide fuel and construction materials for the Hani people. Forests also serve the functions of maintaining soil and water and strengthening hillsides, which are very important for the safety of Hani villages and terraces.

The village is where the Hani and other ethnic minority people live. Since cultivating, maintaining, and irrigating terraces require heavy human labor and labor's full cooperation, people have to settle together in a village to cope with complicated farm work [51]. A village usually has one significant ethnic minority, which makes up the majority of the population. They cultivate terraced area adjacent to the village. For example, Pugaolaozhai village is a typical Hani village, while Mengpin village is a Yi village on the other side of the hillside. The settlement of such ethnic villages allows the unique social organization and culture of each ethnic group to be preserved and continued. As the population grows, new villages will form near the original village; thus, the terraces system can expand spatially. In the Hani village, the traditional "mushroom house" consists of walls made of soil, stone, and wood and a roof made of rice straw. The bottom layer is often for raising livestock, the top layer is a barn for storing rice, and the middle layer is for people. This mushroom house can withstand the cold well, and the middle-level Huo Tang (fire pond for cooking) also keeps the house and barn dry. In addition, there are shared water mills and waterwheels in the village. The village is also a place for water worship and holding animal sacrifices. These religious facilities can be found beside the canal and in the lower part of the village.

Hani terraces have a special water system that combines nature and man-made elements. Precipitation is stored in forests and soil, and water flows from springs in the forests into the canals of the village for people to use and then flows further down into the terraced fields. Water is allocated to terraces through irrigation ditches. Finally, the water runs into a stream and flows into the river at the bottom of the valley. The Hani manage a huge irrigation system, accurately allocating water resources to match cultivation seasons. This imparts Hani terraces with a high resilience against droughts and floods [51].

In addition to the functions of the ecosystem, the operation and maintenance of the Hani landscape system also rely on the unique livelihood system, social organization, and cultural beliefs of the Hani people. The leader of the Hani village is Zhai Lao, who is the most prestigious person in the village. These leaders are the officiants of religious ceremonies and decision-makers who direct villagers' agricultural activities, such as the distribution of water, and they are also the supervisors of the Hani's regulations.

The Hani people worship nature. Trees and water are regarded as spiritual and are worshipped. This belief has influenced the Hani society's norms regarding access to natural resources, for example, deforestation. Anyone who illegally enters the Zhai Shen Lin and cuts down the trees inside will be punished. The worship of the Hani is also reflected in the fact that they set up altars in the village. Every year during the Angma Tu Festival and the Kuzhaza Festival, they sacrifice cattle at the altar for a good harvest.

In 2010, the First World Conference on Terraced Landscapes was held in Mengzi, Yunnan, focusing on the Hani landscape of rice terraces. The terraces have scientific, cultural, historical philosophical religious, ecological, and aesthetic value [52]. The "Forest–Village–Terrace–River" system was identified as the historical values of Hani landscape [52]. Meanwhile, the conference raised concern on the dilemma between conservation of the historical landscape and tourism development. In 2013, the Hani rice terraces were designated as a World Cultural Heritage Site for their universal values, both as a reflection of finely tuned agricultural, forestry, and water distribution systems reinforced by their socioeconomic-religious systems and as an exceptional landscape of the complex system [51].

3. Materials and Methods

This study was conducted in the Honghe Hani Terraces in Yuanyang County, Yunnan, China (Figure 3). It investigated seven villages in three terraced areas, which cover the main areas visited by tourists. Sightseeing started in Honghe in 2006, and now Honghe is a major domestic and international tourism destination.
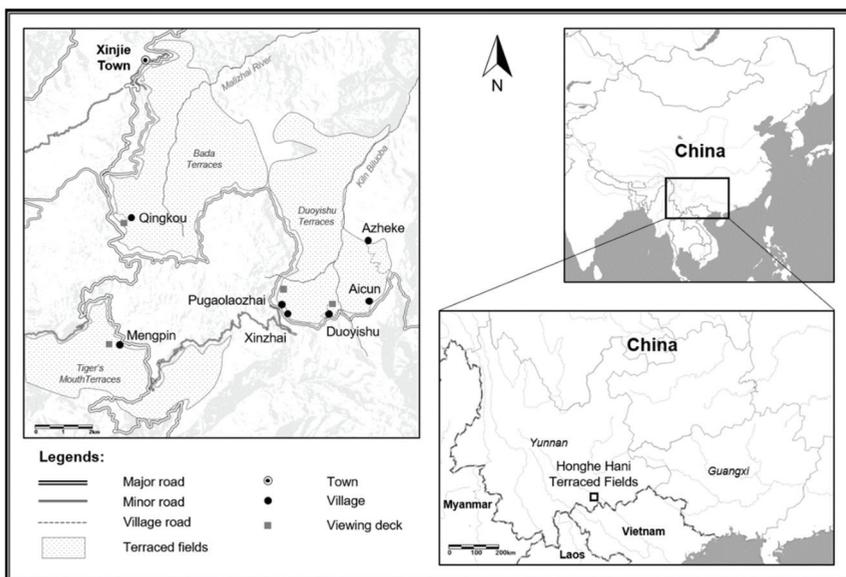
Figure 3. Map of the study area.

A mixed research method was used in this study. Content analysis was used to identify and systematically study tourists' imaginaries of the Hani landscape. In-depth interviews and participant observations were used to study the production of imaginaries in tourism development and to understand the influence of different stakeholders in this process.

The main target of the content analysis was user-generated content (UGC) by domestic tourists who had visited Honghe. UGC has been widely used in the recent study of tourism and hospitality for analyzing tourist perceptions and behaviors [53–55], but it has not been used to analyze tourism imaginaries. The UGC data in this study were collected from Mafengwo.cn, a major Chinese travel guide and review website. The website had more than 100 million active users in China in 2019, and it includes both domestic and international destinations. Comments from tourists who visited Honghe Hani Terraces in 2018–2019 were collected. These comments, including text and images, were posted by visitors who intended to portray their experience or recommend that other people visit.

The content analysis of tourists' discourses in their comments explicitly revealed their imaginaries about the landscapes in Honghe. After removing irrelevant words and coding to combine similar words, we summarized the frequency of words (more than 1 Chinese character) mentioned in the comments. According to the meanings and implied objects, we grouped these words into themes to reflect different aspects of tourism imaginaries.

The analysis of tourist photography was used to identify tourism imaginaries about the Hani landscape. Compared to other non-visual techniques, photography has the richness to convey multi-layered meanings, and it readily facilitates comparison among places [56]. What is captured in tourist images reflects their preferences and is embedded with meaning. Therefore, tourism imaginaries of landscapes can be carefully recognized by identifying what landscape patterns tourists believe are meaningful and why. The photographs in tourist comments reveal more than imagined landscape patterns: they post photos to show readers examples of the landscape. In other words, tourist photographs in this case contain imaginary exemplars that are more likely to be circulated in the circulating production of the imaginary. The UGC data in 2018–2019 from Mafengwo.cn were collected in 2020. Due to the impact of COVID-19, tourist comments in 2020 were unavailable. In total, 75 comments and 195 photos posted from 2018 to 2019 were collected.

For the purpose of understanding the production process of tourism imaginaries, in-depth interviews and participant observations obtained during field studies were used to collect information about tourism development, stakeholders, landscape changes, and power relations. Specifically, semi-structured in-depth interviews were carried out to understand local tourism development, landscape changes and policies, the government system, and major events. For example, when inquiring about tourism development, stakeholders were asked "can you talk about how tourism has started in Honghe and in this village?" and "Can you describe the process of tourism development in this village and the whole Honghe?" The snowball method was used to select interviewees and identify stakeholders. Participatory observation was used to understand the characteristics of the Hani landscape and understand the development of tourism. Two field studies were carried out in April and July 2017. In total, 22 interviews were conducted, including 15 local Hani villagers, 4 village heads, a Tourism Company official, a governmental official, and a landscape architect. The average time for an interview was approximately 30–45 min. The conversations were transcribed into text for identifying themes and further analysis.

The interview record and the UGC data were coded and analyzed using a qualitative data analysis software Nvivo 12.

4. Results

4.1. Tourism Imaginaries in Tourist Discourses and Images

4.1.1. Discourse Analysis

The content analysis of tourists' comments identified 12 themes from the mentioned words, reflecting different aspects of tourist discourses relating to the Honghe landscape. Words related to the tourist experience were mentioned 970 times in 75 comments (Table 1). The percentage of each theme shows how frequently the landscape is imagined as a particular representation (Figure 4).

<p style="text-align:center">Table 1. Frequency of words mentioned [1] in tourists' comments about Honghe on Mafengwo.cn (2018–2019).</p>

Themes/Words	Frequency of Mention	Percentage	Themes/Words	Frequency of Mention	Percentage
TERRACED FIELDS	**254**	**100%**	Life	9	6.25%
Pattern	224	88.19%	History	4	2.78%
Terraces	178	70.08%	Yi people	3	2.08%
Layers	13	5.12%	Custom	2	1.39%
Rice fields	13	5.12%	Folklore	2	1.39%
Curves	5	1.97%	Language	2	1.39%
Continuous	4	1.57%	Local customs	2	1.39%
Shape	4	1.57%	**CLIMATE/ATMOSPHERIC CHARACTERISTICS**	**89**	**100.00%**
Steep	4	1.57%	Sun/sunshine/light and shadow	48	53.93%
Color	3	1.18%	Cloud/mist	21	23.60%
Soil/landform	18	7.09%	Weather	10	11.24%
Rice	12	4.72%	Sky	7	7.87%
PANORAMIC LANDSCAPE	**240**	**100%**	Wind	2	2.25%
Aesthetics	118	49.17%	**BUILDING ENVIRONMENT**	**50**	**100.00%**
Scenery	31	12.92%	Trails and roads	27	54.00%
Colorful	19	7.92%	Village	13	26.00%
Masterpiece	18	7.50%	Vehicle	3	6.00%
Beautiful	14	5.83%	**TOURISM**	**39**	**100.00%**
Dynamic	13	5.42%	Tourists	9	23.08%
Chinese ink painting	8	3.33%	Food	8	20.51%
Boundless	5	2.08%	Accessibility	6	15.38%
Misty	2	0.83%	Accommodation	4	10.26%
Strange	2	0.83%	Seasonality	3	7.69%
Vibrant	2	0.83%	Service	3	7.69%
Vivid	2	0.83%	Tourism	3	7.69%
Spatial features	40	16.67%	Tour guide	2	5.13%
Grand/vast view	22	9.17%	**HIGHLAND TERRAIN**	**36**	**100.00%**
Shock	8	3.33%	Mountainous terrain	18	50.00%
Remote	6	2.50%	Mountain locations	9	25.00%
Deep	3	1.25%	Altitude	4	11.11%
Authenticity	31	12.92%	Natural hazard	3	8.33%
Unique	18	7.50%	Valley	2	5.56%
Genuine	5	2.08%	**HERITAGE**	**33**	**100.00%**
Local	4	1.67%	Heritage	15	45.45%
Original	3	1.25%	Culture	8	24.24%
Illusion	19	7.92%	Core zone	3	9.09%
Hidden paradise/wonderland	10	4.17%	Maintenance/sustain	3	9.09%
Illusion	4	1.67%	Bells	2	6.06%
Magical	2	0.83%	Historical stories	2	6.06%
Simple	2	0.83%	**TEMPORAL CHANGES**	**30**	**100.00%**
Famous	10	4.17%	Season/time of day	30	100.00%
History	7	2.92%	**WATERS**	**24**	**100.00%**
History	3	1.25%	Water reflection	16	66.67%
Old	3	1.25%	Pool	2	8.33%
Hygiene	7	2.92%	Spring	2	8.33%
Dirty and messy/poverty	4	1.67%	Water resource	2	8.33%
Dirty/poverty	2	0.83%	**PHOTOGRAPHY**	**18**	**100.00%**
Countryside	7	2.92%	Photography	7	38.89%
Feeling	5	2.08%	Photos	6	33.33%
Mood	2	0.83%	Photographer	3	16.67%
Safe	2	0.83%	Media	2	11.11%
Tranquil	5	2.08%	**ECOLOGY**	**13**	**100.00%**
LOCAL PEOPLE	**144**	**100.00%**	Animals	2	15.38%
Hani people	61	42.36%	Forest	2	15.38%
Agricultural activities	37	25.69%	Nature	6	46.15%
Generations	16	11.11%			

<p style="text-align:center">[1] This table only shows words mentioned more than once.</p>
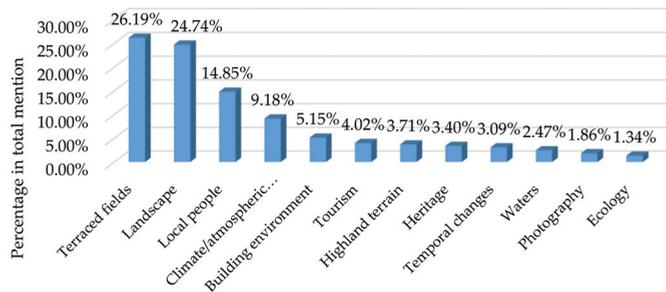
Figure 4. Themes in tourists' comments about Honghe on Mafengwo.com (2018–2019).

The tourist imaginary in Honghe was most frequently connected to terraced fields and the panoramic landscape, followed by the impression of local people and climate/atmospheric characteristics. The rest of the themes were less frequently mentioned, including some important intrinsic elements of the Hani landscape, e.g., the building environment, including roads and villages; waters; and ecology. This implies that scenic beauty—terraced field views with featured atmospheric imagery and local people—constituted tourism imaginaries of the Hani landscape. Although the function of terraced fields, as places where rice is grown and water is contained, is important in the Hani system that their tangible representations are mostly observed and emphasized by tourists. Other components, including the Hani village, irrigation system, and ecology, are equally important for the landscape but were marginal in the tourism imaginary. This gap between the tourism imaginary of the place and the actual Hani landscape is evident and understandable: the tourism imaginary may have its own life in tourism institutions.

Next, we revealed the imaginary of each themed object by looking at the frequency of mentioned words under each theme, together with analyzing the corresponding comments (Table 1). The results show that tourists had mixed imaginaries about the landscape that they saw. Some imaginaries appeared more frequently than others.

For the theme "terraced fields", their layered "pattern" was the primary tourist imaginary, while the crop in the terraces—rice—was secondary.

Another main theme of the tourism imaginary was the "panoramic landscape". This panoramic perspective presented tourists' overall impression of the Hani landscape. The imaginary of the beauty of the Hani landscape (aesthetic and spatial characteristics) constituted the primary tourist imaginary in the panoramic landscape. The following tourist comments show how these elements were mixed to constitute the tourist imaginary of the place.

> "Climbing to the top of the terraced fields to see the erratic sea of clouds, the looming half-mountain villages, the majestic terraces, the scenery will change with the ethereal light and fog, forming a beautiful landscape and countryside scenery. It is a paradise of light and shadow for photography lovers. But what you see now is 1300 years of the Hani!" (Tourist comment, 2019)

> "Most of the beautiful pictures of Hani terraces we saw were from the same perspective: looking down. It is an ink painting drawn by a large number of curves that are never repeated on the edge of the terraces, and it is better to be supplemented with colorful rays of the sky. This turns the terraces into a simple flat object. But you can only realize the greatness of Hani people when standing on the side of terraces, seeing the level and height of terraced fields with the naked eye." (Tourist comment, 2019)

These comments show that the pre-visiting experience, background knowledge, and the original cultures of tourists influenced the tourism imaginary of landscape. Tourists imagined the Hani landscape as a "heaven on earth", an ideal place for human life, although

this interpretation is separate from the Hani's notion of the world that the spirituality of natural objects should be worshiped. In Chinese culture, heaven is often imagined as a kind of Taoist wonderland, a blissful world [57]. These Chinese imaginaries of the landscape were used by tourists to make sense of what they saw. In this case, the tourism imaginary and the local landscape were separate in tourist discourses, adding to the further distribution of this landscape interpretation. In this way, the tourism imaginary has imparted new meanings to the observed landscape.

In addition, the tourist comment analysis revealed how a certain tourism imaginary can imply and influence the visiting behaviors of tourists and the type of landscape that they value. This is clearly shown in the tourist discourse on photography.

> "During the Chinese New Year, rice fields are filled with water. It is the best moment of light and shadow. In the early morning or at dusk, there are different visual effects under different refraction. This is a paradise for photography." (Tourist comment, 2019)

> "Among them, Bada and Tiger's Mouth are the best places to watch the sunset, and Duoyishu is the best place to watch the sunrise. The best time to shoot Yuanyang terraced fields is from November to April of the following year, because the terraced fields will be filled with water after the autumn harvest until the seedlings are planted in the following year. At this time, the terraced fields have a strong sense of hierarchy, sparkling under the sunlight. Many of the photos of terraced fields we saw on the Internet were taken during this time." (Tourist comment, 2019)

It can be seen from these texts that photography, as a major tourist activity, has been influenced by tourist imaginaries of the landscape. Tourists expected to take pictures that they see on the Internet or in travel guides. This expectation determines the season in which they should travel and how they arrange their own itinerary (when and where to see what), because only in this way can they seize the moment of the expected and replicate what is considered the best photo. Since the Hani landscape is seen as composed of abstract lines and colors presented in water-filled fields, for many photographers, the meaning of the landscape lies in this abstracted beauty. It is not difficult to comprehend how the various chains of the tourism industry are organized around the production, distribution, consumption, and reproduction of this tourism imaginary.

Moreover, "local people" are frequently mentioned in tourist comments. When referring to "Hani people", except for a few who called them as such in terms of the ethnic group, tourists often call them "people", "locals", "folks", "villagers", or more specifically described as "older brothers", "women", "children", and "the elderly" in their encounter. The tourism imaginary about the Hani people focuses more on their agricultural activities, inheritance from generation to generation, and virtues. The tourist discourse shows that Chinese tourists' imaginary about Hani people does not focus on ethnicity or indigeneity in western terms, which relates to underdevelopment, but a secular view: they are imagined as simple, hardworking, or kind hosts, rather than objects of seeing. Tourists imagined the terraced field landscape as the product of hardworking farming and inheritance-like many other rural areas in China, rather than the components of a specific ecological-sociocultural system. In addition, this imaginary may contain such a risk: that the bonds between Hani people's unique social organization and cultural beliefs and the terraced landscape are neglected.

4.1.2. Image Analysis

Figure 5 shows the themes and proportion of the tourist photos. The vast majority of captured landscapes are terraced fields, accounting for 79.92% of all photos. Other inherent elements of the Hani landscape, including local people and village buildings, have attracted less attention from tourists. This again supports the findings from the discourse

analysis: there is a gap between the tourism imaginary of the place and the actual Hani landscape, and the imaginary primarily contributes to the tourist experience.
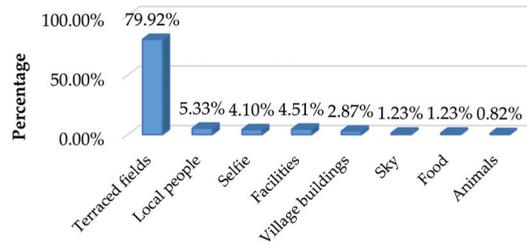
Figure 5. Themes of tourist photos in tourists' comments about Honghe on Mafengwo.cn (2018–2019).

For tourists, the terraces are the center of the tourism imaginary of the landscape, and the place is imagined as a stereotyped overlooking scene of terraces, a schema, separated and independent from other components of the Hani landscape. Table 2 shows patterns of image formations in tourist photos related to terraced fields. We identified seven image compositions. Among the photos, more than half used the entire picture to show the layered pattern of the terraces (32.31%) or the panorama taken from the viewing deck (23.08%) (Figure 6a,b). "Sunrise" (14.87%), "terraced fields amid fog/sea of clouds" (11.28%), "sunset" (10.26%), and "blue terraces" (4.62%) were also frequently used patterns by tourists who took photos of terraced fields (Figure 6c–f).

Table 2. Image formation analysis on "terraced field" photos in tourists' comments about Honghe on Mafengwo.cn (2018–2019).

Image Composition	Duoyishu		Bada		Tiger's Mouth		Aicun		Grand Total	Percentage
	F [2]	P [3]	F	P	F	P	F	P		
LAYER PATTERN	31	36.90%	9	17.31%	19	45.24%	4	23.53%	63	32.31%
Overlook of TF [1] + Layer/curve pattern	31	36.90%	9	17.31%	19	45.24%	4	23.53%	63	32.31%
VIEWING DECK PANORAMA	9	10.71%	31	59.62%	5	11.90%			45	23.08%
Overlook of TF + Mountain + Villages + Sky	9	10.71%	27	51.92%	1	2.38%			37	18.97%
Overlook of TF + Mountain			4	7.69%	4	9.52%			8	4.10%
SUNRISE	28	33.33%	1	1.92%					29	14.87%
Overlook of TF + Sunrise + Mountain + Sky	12	14.29%	1	1.92%					13	6.67%
Overlook of TF + Reflection of sunshine	10	11.90%							10	5.13%
Overlook of TF + Sunshine refraction + Fog	7	8.33%							7	3.59%
TERRACED FIELDS AMID FOG/SEA OF CLOUDS	14	16.67%	2	3.85%	2	4.76%	4	23.53%	22	11.28%
Overlook of TF + Fog	12	14.29%	2	3.85%	2	4.76%	4	23.53%	20	10.26%
Overlook of TF + Sea of clouds + Sky	3	3.57%							3	1.54%
SUNSET			4	7.69%	16	38.10%			20	10.26%
Overlook of TF + Sunset + Mountain + Sky			4	7.69%	8	19.05%			12	6.15%
Overlook of TF + Reflection of sunshine					8	19.05%			8	4.10%
BLUE TERRACES							9	52.94%	9	4.62%
Overview of TF + Blue water surface + mountain + sky							9	52.94%	9	4.62%
CLOSE-UP VIEW OF RICE FIELDS			7	13.46%					7	3.59%
Close-up view of TF			7	13.46%					7	3.59%
Grand Total	84	100.00%	52	100.00%	42	100.00%	17	100.00%	195	100.00%
Percentage	43.08%		26.67%		21.54%		8.72%		100.00%	

[1] TF = terraced fields. [2] F = frequency. [3] P = percentage.
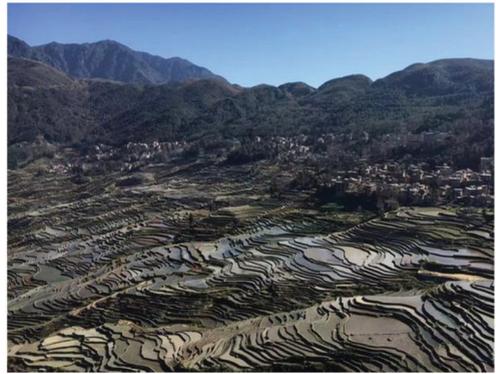
Figure 6. Examples of image composition patterns in tourist photography: (**a**) layer pattern; (**b**) viewing deck panorama; (**c**) sunrise; (**d**) terraced fields amid fog/sea of clouds; (**e**) sunset; (**f**) blue terraces.

The "overlook perspective" of seeing terraced fields is again proved in the image analysis. Only 3.59% of analyzed photos had adopted a close-up view, and no tourist image has a looking-up perspective. Moreover, we found that tourism imaginaries are geographical related. "Sunrise" was prominently found in the photos of Duoyishu, whereas

"sunset" was specifically found in Tiger's Mouth. Most photos in Bada were panorama from the viewing deck, while Aicun was the only place with "blue terraces". This shows again how tourism imaginary can influence tourist's travelling behaviors and their interpretation of the landscape.

Both discourse analysis and image analysis on the tourist comments identified several exemplars of tourism imaginaries on the Hani landscape. Tourists have mixed imaginaries about the seen landscape, reflecting consumed tourism imaginaries of the place. However, some imaginary appears as frequent schemas in interpreting the landscape. Tourism imaginary of Hani landscape showed an overlooking view of stereotyped terraced field imagery with irregular curves of field edges, and mirror-like appearance (filled with water and reflecting colorful lights). Some essential elements of the Hani landscape are marginalized in this imaginary. Tourism imaginary is thus alienated from the local landscape, implying and influencing potential tourist behaviors.

4.2. Tourism Development and the Shaping of Landscape Imaginaries

4.2.1. Production of Tourism Imaginaries about the Hani Landscape

In-depth interviews with local people, the Tourism Company officials, and the village heads revealed the tourism development process in Yuanyang, which showed how the production of tourism imaginaries was carried out. The unique landscape created by the Hani people has not been attracting international attention for a long time. When asking how tourism started in Yuanyang, interviewees all mentioned that photographers first visited the place and spread the beauty of terraces to the outside world. According to the interviewees, the first person who introduced the landscape of Hani terraces to the international public was French photographer Yann Layma. In 1993, he stayed in Honghe and published a photo album and film called "*Les Sculpteurs de montagnes*", which quickly attracted international attention and introduced the landscape of Hani terraces to the world. This collection of photography created early prototypes of imaginaries about the Hani landscape, especially the terraced fields. Most of these photos were taken from an overlooking perspective, with layers of terraces filled with water (Figure 7). After that, more domestic and foreign tourists began to visit Honghe.

(**a**)   (**b**)
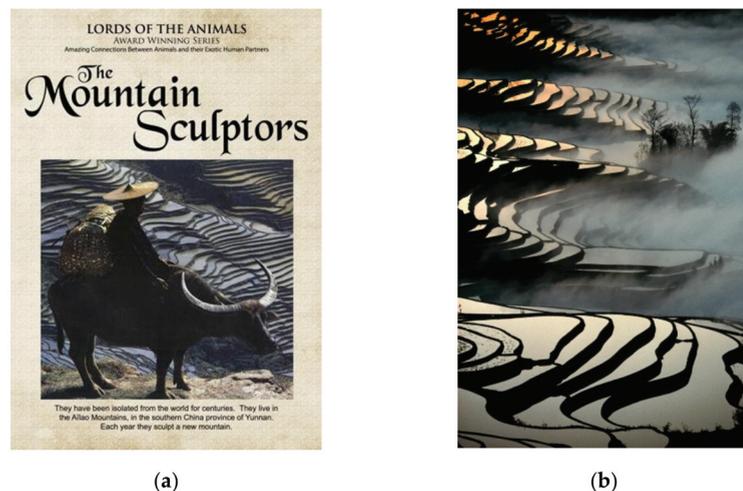
Figure 7. The mountain sculptors: (**a**) cover of the photo album; (**b**) a photo of Hani terraces by Yann Layma.

However, early visitors had to overcome extremely poor traffic conditions, as only dangerous dirt roads could reach deeper villages to see the terraced fields. The earliest

tourism development was carried out in Qingkou Village, which is closer to Honghe County (Figure 3). The interviews to Qingkou villagers showed how tourism was developed in Qingkou. In 2001, the village started selling tickets as a closed scenic spot. The tourism plan of Qingkou has positioned this village as an ethnic cultural village. Tourists were guided to watch ethnic performances by villagers, experience ethnic culture in the stone-paved alleys, and visit an ethnic museum, not to watch terraces. At that time, although the Duoyishu terraces have not yet been developed for tourism, some foreign investors and photographers have built inns on the edge of the terraces. Interviews with local people revealed that most of the original sites and angles suitable for viewing terraces were discovered by photographers. These photography spots provided ideas for subsequent tourism development.

Early photographic works created rich prototypes for the imaginaries of the Hani landscape and also unearthed attractions for sightseeing. In 2006, the Honghe County Government contracted the tourism development of Honghe terraces to the private Yuanyang Shibo Tourism Company (Tourism Company). Qingkou Village, originally operated by the County Tourism Bureau, was involved in the new scenic area. The new scenic area includes three scenic spots, Bada, Duoyishu, and Tiger's Mouth, covering the main parts of the Hani terraces. The Tourism Company employed terraced field sightseeing as its strategy for tourism and built four viewing platforms in popular terrace viewing spots. These viewing platforms are located on the upper edge of the terraces so that they can overlook the whole view of the terraces from the best angles. The local government also supported tourism development by repairing roads from the entrance of the scenic area to the various viewing platforms.

The tourism development strategies in Yuanyang were mentioned by the Tourism Company. After the sightseeing facilities were completed, the Tourism Company focused on promoting a number of terrace field landscapes to the tourists: "Watch the sunrise at Duoyishu, watch the sunset at Tiger's Mouth, and watch the blue terraces at Aicun." This way of seeing the Hani landscape was recommended by travel agents, local tour guides, and travel guidebooks. Tourists must buy tickets to enter the viewing platforms and arrive at the "best" spot for viewing and photographing terraces. At the same time, activities such as visiting the villages, e.g., Qingkou, were downplayed because the Tourism Company believed that "the sanitary condition of the village is a big problem."

The sightseeing imaginaries have also influenced tourism development and tourist behaviors. The desire for sightseeing the terraces has led to the concentration of hotel and inn development in the villages closest to the viewing platform. For example, the hospitality industry has boomed in Pugaolaozhai and Huangcaoling. Tourists choose to live in these two villages, which are closest to the viewing platform, to watch the sunrise the next morning. In contrast, there is no hotel in Aicun, because tourists usually make a short stop in this village after watching the sunrise to see the blue terraced fields that only appear from 9 to 10 in the morning. In addition, as tourists spend most of their time visiting viewing platforms along the road, periphery villages in the scenic area have had few visits. Many adults have migrated to the outside cities for their livelihoods, leaving abandoned terraced fields uncultivated, which has threatened the sustainability of the Hani landscape.

In order to maintain the promoted tourism imaginaries, the Tourism Company signed agreements with some farmers to stop planting rice in their terraces and fill them with water in all seasons to show the reflection of lights during sunrise and sunset. The Tourism Company also hired local people to maintain abandoned fields to avoid negatively affecting the landscape. These measures have helped maintain tourism imaginaries but have quietly changed the traditional Hani landscape system.

In the development of sightseeing tourism dominated by the Tourism Company, the Hani landscape was staged by creating tourism imaginaries of terraced field sceneries. The tourism imaginary was produced through marketing, tourism planning, landscaping, and the provision of tourism facilities. The development of the tourism industry, including

travel agencies and hotels, has further strengthened these imaginaries. By promoting a special way to view the Hani landscape and monopolizing the best viewing spots, tourism companies could continue making profits from selling tickets. The photography activities of tourists at these viewing platforms have reproduced tourism imaginaries and attracted potential tourists on travelogues, photo albums, and social media sites.

4.2.2. Power Relations, Community Resistance, and New Landscape Representations

Although the tourism imaginary was given its own life in tourism institutions, the role of the local community was diluted in the promoted imaginaries. The viewing platforms and the roads provided an enclave space from the local context, staging the prepared Hani landscape for tourists. In this process, the community was marginalized and disempowered. In fact, our interviews with the villagers showed that local communities rarely had the opportunity to participate in the decision making of tourism development; more often, they had to obey the policies and regulations specified by tourism companies. Tourism companies have dominated tourism development in Honghe, but they have not subsidized local villagers for cultivating the terraced fields. This uneven company–community power relation has been a root of the separation between tourism imaginaries and the Hani landscape.

Although we do not have direct evidence that proves how this sightseeing tourism based on tourism imaginaries affects the identity of Hani communities, we can derive some clues from the conflicts between the company and the villagers. We learned from interviews that tourism companies have repeatedly acquired terraced fields from villagers for the construction of viewing platforms. The latter were dissatisfied but dared not fight against government-supported tourism companies. In the end, most of the villagers sold land to the Tourism Company at very low prices. In another case, the villagers succeeded in protecting their identity. In this conflict, the Tourism Company tried to cut down the sacred woods in a village for road construction and was confronted by villagers. Eventually, the Tourism Company succumbed and changed the plan, and the sacred place of the Hani people was preserved. These conflicts indicate that the sightseeing tourism in Honghe was superficial, as it neglected the integrity of the Hani landscape and could threaten the Hani people's identity. A worrying fact is that when a tourism imaginary is produced, value is defined at the same time. Honghe's tourism imaginaries emphasized the "photographic value" in order to please tourists, while other values of the landscape, e.g., the value to the lives of the Hani people, were ignored in tourism.

In addition, forces of resistance against superficial sightseeing tourism have also been noted. Recently, some scholars and landscape architects have come to Honghe from cities. These are people with more knowledge about the Hani landscape, usually with purposes of cultural conservation and poverty alleviation. They are committed to protecting the habitat of the Hani people, consequently adding to new tourism imaginaries about the Hani landscape. The "Red Rice Project" in Azheke is an example. The plan, jointly led by some scholars and local government officials, focuses on protecting the traditional village. The Hani traditional houses, roads, and religious ceremonies in the village have been preserved or revitalized. Since then, Azheke has become a new tourist destination, but the livelihoods of villagers have not been improved. A more recent plan proposed by scholars is to allow villagers to invest in shares and jointly establish a company with the government to develop tourism in the village. The effectiveness of this approach remains to be seen. However, a broader partnership is emerging in tourism development, reflecting scholars' knowledge of the Hani landscape and new demands of the urban capital. These new social forces have helped empower the community and regulate tourism development; landscape knowledge has been incorporated in producing new representations for tourism imaginaries. Although the dilemma between tourism development and protecting the Hani landscape still exists, tourism imaginaries may provide an insightful framework to examine cultural processes and understand the effects of power relations.

5. Discussion

Tourism imaginaries showed a schema of viewing the Hani landscape: overlooking terraces from above. More importantly, this analysis reveals a gap between tourism imaginaries and the actual landscape, reflecting tourist "ways of seeing" places that differ from other representations [25]. This separation is determined by the nature of imaginaries: they are essentially different from the seen objects [21] (p. 127). The production of tourism imaginary lies in the "circuit of culture", a dynamic process [47] in which different stakeholders participate in the production and dissemination. Our findings confirm that commercial logics played a significant role in producing tourism imaginary led by the Tourism Company [25].
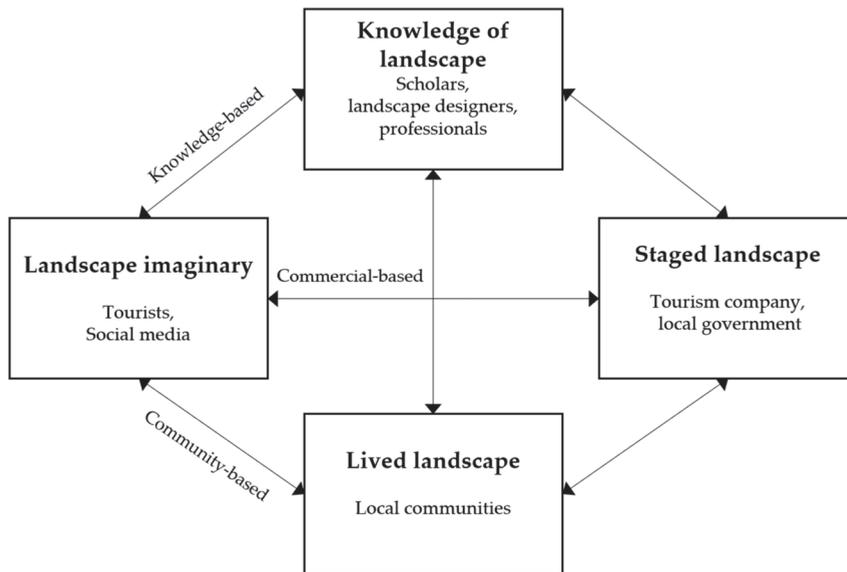
The production of tourism imaginary, in this case, has revealed such relationship between tourism and landscape: for tourism, the landscape is the raw material for creating tourism imaginaries that meets the needs of the mass public, rather than the opposite, the production of tourism imaginary that is based on a deep understanding of the landscape. In other words, the production of tourism imaginary is a vessel of cultural changes that tourism exerts on the landscape, reflecting how cultural and semiotic elements of landscape is commodified in tourism [58], and thus alienated from original meanings [36]. In Marx's sense, it reflects the capitalist cultural production [59] and how the principles defined by domestic and global market [60] extends to remote areas through tourism. In addition, the production of imaginaries forms what Lefebvre [61] calls social space, a political-economic arena [33], or according to Bourdieu [62], a tourism field, where the tourism company is the dominating agent, defining the use of resources and landscapes, and the connection between local communities and landscapes has been weakened. Similar uneven power relations in tourism destinations were found in the Kanas, China, where the minority peoples had little power in politics [63].

According to Lefebvre [61] (p. 33), the social space is produced within the interactions among spatial practice, representations of space and representational space. In this regard, the production of landscape space in tourism can be conceptualized as the result of interactions of "staged landscape", "knowledge of landscape", and "lived landscape" (Figure 8). The staged landscape represents the landscape experienced by tourists and is the landscape staged for gazing by the tourism industry for commercial goals. Knowledge of landscape is the concepts of landscape, constructed by experts such as scholars, landscape architects, and professionals. Lived landscape is the landscape created by residents or users in their daily activities, in this case, the Hani landscape as cultural heritage. The "landscape imaginary" of tourists is generated from the three elements, including commercial-based, knowledge-based, or community-based imaginaries.

In this case of Honghe, the tourism company represents a spatial practice about the staged landscape that dominates the imaginaries about the landscape. However, lived landscape of the Hani people has been being eroded in the process. The selective use of the landscape based on uneven power relations forms a kind of spatial violence, which normalizes tourism's exploitation of the landscape [58] and breaks the landscape's integrity.

This study's findings imply that imaginaries' production should also be based on knowledge and communities to keep the integrity of the landscape, as it is important that tourism stakeholders can "carefully attune the narratives emanating from tourism attractions that are founded on heritage, so that conflicts can be minimized" [32]. The staged landscape in the tourism industry should not only consider commercial factors, but also be based on the knowledge of the landscape and allow the communities' creation of lived landscape. Therefore, tourism in cultural heritage should be developed through a partnership among different stakeholders in tourism. Local communities should be empowered and allowed to decide what of their landscape to show in tourism. Scholars and professionals' role is important, as the knowledge of the landscape will help the tourism industry understand the landscape and avoid destructions. For cultural heritage sites, in addition to formulating resource management policies to protect the physical landscape, attention should also be paid to the preservation of the cultural significance

of the landscape, the empowerment of communities, and promoting knowledge-based and community-based tourism. Sustainable tourism development policies should balance the power of various stakeholders, especially empowering fragile local communities and enhancing their identity in the landscape, so that the environment value and the intrinsic value of the traditional landscape are recognized and maintained in tourism [64]. Tourism planning and marketing should focus on maintaining the integrity of landscape elements and their intrinsic connections in the production of tourism imaginaries, thereby reducing conflicts between tourism and the landscape, reducing vulnerability [65] and enhancing sustainability.

Figure 8. Landscape imaginary and the production of new landscape space.

This research contributes to the understanding of tourism imaginaries about landscape, providing insights into cultural processes in tourism. This study proves that tourism imaginary can provide a useful conceptual framework for further research on the interactions between tourism and landscape. However, due to the limited time and budget given, only the tourism imaginaries of domestic tourists were studied, and therefore the effects of international markets and globalization in the production of tourism imagination cannot be identified. Moreover, as a limitation of using UGC data, only tourists who are social media users have been surveyed. Tourism imaginary is a relatively new concept. Future theoretical research can also focus on the relationship between tourism imaginary and authentic experience, tourism imaginary and globalization, and the relationship between tourism imaginary and tourists' sustainable behavior.

6. Conclusions

This research studied how the landscape is imagined in tourism using a cultural heritage site as an example. The Hani terraced landscape of Honghe is an integrated fourfold system, including terraces, forests, villages, and water system. However, our analysis of tourists' discourses and images found a gap between the tourism imaginaries and the real landscape. Hani landscape was imagined as an overlooking view of stereotyped terraced imagery, a schema, separated and independent from other landscape components. Tourist imaginary about the Hani landscape is more frequently connected with terrace patterns and

panoramic landscapes, yet villages, water, and ecological elements are rarely mentioned. This implies that tourism imaginary has its own vitality in tourism institutions.

This tourism imaginary was produced and circulated in the tourism development process. The photo collection created an early prototype of Hani's landscape imagination, providing ideas for subsequent sightseeing tourism development. The company's strategies had dominated the production of tourism imaginary. The viewing platforms and roads provided an enclave space for sightseeing from the local context, where the Hani landscape was staged for creating tourism imaginaries. The uneven company–community power relation aggravated the separation between tourism imaginary and the actual Hani landscape. Local communities were marginalized in the process. However, the recently emerging tourism partnerships reflected the scholars' knowledge of the Hani landscape and the new demands of the urban capital, empowering communities and creating new representations of tourism imaginaries.

The findings imply that for cultural heritage sites, in addition to formulating resource management policies to protect the physical landscape, attention should also be paid to the preservation of the cultural significance of the landscape, the empowerment of communities, and promoting knowledge-based and community-based tourism.

This research contributes to understanding the relationship between tourism imaginaries and landscape, providing insights into cultural conflicts in tourism. For further studies, tourism imaginary can be used to frame the study of tourism and landscape from a cultural perspective.

References

1. Terkenli, T.S. Towards a theory of the landscape: The Aegean landscape as a cultural image. *Landsc. Urban Plan.* **2001**, *57*, 197–208. [CrossRef]
2. Terkenli, T.S. Landscapes of tourism: Towards a global cultural economy of space? *Tour. Geogr.* **2002**, *4*, 227–254. [CrossRef]
3. Terkenli, T.S. Tourism and landscape. In *A Companion to Tourism*; Lew, A.A., Hall, C.M., Williams, A.M., Eds.; Blackwell: Oxford, UK, 2004; pp. 339–348.
4. Buckley, R.; Ollenburg, C.; Zhong, L. Cultural landscape in Mongolian tourism. *Ann. Tour. Res.* **2008**, *35*, 47–61. [CrossRef]
5. Daugstad, K. Negotiating landscape in rural tourism. *Ann. Tour. Res.* **2008**, *35*, 402–426. [CrossRef]
6. Heslinga, J.; Groote, P.; Vanclay, F. Understanding the historical institutional context by using content analysis of local policy and planning documents: Assessing the interactions between tourism and landscape on the Island of Terschelling in the Wadden Sea Region. *Tour. Manag.* **2018**, *66*, 180–190. [CrossRef]
7. Heslinga, J.; Groote, P.; Vanclay, F. Towards resilient regions: Policy recommendations for stimulating synergy between tourism and landscape. *Land* **2020**, *9*, 44. [CrossRef]
8. Brush, R.; Chenoweth, R.E.; Barman, T. Group differences in the enjoyability of driving through rural landscapes. *Landsc. Urban Plan.* **2000**, *47*, 39–45. [CrossRef]
9. Hagerhall, C.M. Clustering predictors of landscape preference in the traditional Swedish cultural landscape: Prospect-refuge, mystery, age and management. *J. Environ. Psychol.* **2000**, *20*, 83–90. [CrossRef]
10. Pérez, J.G. Ascertaining landscape perceptions and preferences with pair-wise photographs: Planning rural tourism in Extremadura, Spain. *Landsc. Res.* **2002**, *27*, 297–308. [CrossRef]

11.   Urry, J. *Consuming Places*; Psychology Press: Hove, UK, 1995.

12.   Aitchison, C.; MacLeod, N.E.; Shaw, S.J. *Leisure and Tourism Landscapes: Social and Cultural Geographies*; Routledge: Abingdon, UK, 2014.

13.   Winter, T. *Post-Conflict Heritage, Postcolonial Tourism: Tourism, Politics and Development at Angkor*; Routledge: Abingdon, UK, 2007.

14.   Palmer, C. Tourism and the symbols of identity. *Tour. Manag.* **1999**, *20*, 313–321. [CrossRef]

15.   Pritchard, A.; Morgan, N.J. Privileging the male gaze: Gendered tourism landscapes. *Ann. Tour. Res.* **2000**, *27*, 884–905. [CrossRef]

16.   Bell, C.; Lyall, J. *The Accelerated Sublime: Landscape, Tourism, and Identity*; Greenwood Publishing Group: Santa Barbara, CA, USA, 2002.

17.   Godis, N.; Nilsson, J.H. Memory tourism in a contested landscape: Exploring identity discourses in Lviv, Ukraine. *Curr. Issues Tour.* **2018**, *21*, 1690–1709. [CrossRef]

18.   Ringer, G. (Ed.) *Destinations: Cultural Landscapes of Tourism*; Routledge: Abingdon, UK, 2013; Volume 4.

19.   Jewell, B.; McKinnon, S. Movie tourism—A new form of cultural landscape? *J. Travel Tour. Mark.* **2008**, *24*, 153–162. [CrossRef]

20.   Wang, Z.; Graburn, N. Tourism and cultural landscapes in Southern China's highlands. *Via. Tour. Rev.* **2020**, *17*. [CrossRef]

21.   Castoriadis, C. *The Imaginary Institution of Society*; MIT Press: Boston, MA, USA, 1997.

22.   Lacan, J. The function and field of speech and language in psychoanalysis. In *Écrits: A Selection*; WW Norton & Company: New York, NY, USA, 1977; pp. 30–113.

23.   Anderson, B. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*; Verso: London, UK, 1983.

24.   Taylor, C. Modern social imaginaries. *Public Cult.* **2002**, *14*, 91–124. [CrossRef]

25.   Hughes, G. Tourism and the geographical imagination. *Leis. Stud.* **1992**, *11*, 31–42. [CrossRef]

26.   Salazar, N.B. Tourism imaginaries: A conceptual approach. *Ann. Tour. Res.* **2012**, *39*, 863–882. [CrossRef]

27.   Salazar, N.B.; Graburn, N.H. *Tourism Imaginaries: Anthropological Approaches*; Berghahn Books: New York, NY, USA, 2014.

28.   Ce, Q.; Tian, M. Tourism situation: Between imaginary and place. *J. Beijing Int. Stud. Univ.* **2015**, *37*, 14.

29.   Gravari-Barbas, M.; Graburn, N. *Tourism Imaginaries at the Disciplinary Crossroads: Place, Practice, Media*; Routledge: Abingdon, UK, 2016; p. 1.

30.   Gravari-Barbas, M.; Graburn, N. Tourist imaginaries. *Via. Tour. Rev.* **2012**, *1*. [CrossRef]

31.   Hall, D.R. *Tourism and Geopolitics: Issues and Concepts from Central and Eastern Europe*; CABI: Egham, UK, 2017.

32.   Bhandari, K. Tourism and the geopolitics of Buddhist heritage in Nepal. *Ann. Tour. Res.* **2019**, *75*, 58–69. [CrossRef]

33.   Nogués-Pedregal, A.M. Anthropological contributions to tourism studies. *Ann. Tour. Res.* **2019**, *75*, 227–237. [CrossRef]

34.   Mostafanezhad, M.; Norum, R. The anthropocenic imaginary: Political ecologies of tourism in a geological epoch. *J. Sustain. Tour.* **2019**, *27*, 421–435. [CrossRef]

35.   Bruner, E.M. *Culture on Tour: Ethnographies of Travel*; University of Chicago Press: Chicago, IL, USA, 2005.

36.   MacCannell, D. Staged authenticity: Arrangements of social space in tourist settings. *Am. J. Sociol.* **1973**, *79*, 589–603. [CrossRef]

37.   UNESCO World Heritage Centre. *Operational Guidelines for the Implementation of the World Heritage Conventio*; UNESCO: Paris, France, 1999.

38.   Ivy, M. *Discourses of the Vanishing: Modernity, Phantasm, Japan*; University of Chicago Press: Chicago, IL, USA, 1995.

39.   Strauss, C. The imaginary. *Anthropol. Theory* **2006**, *6*, 322–344. [CrossRef]

40.   Linde, C. *Life Stories: The Creation of Coherence*; Oxford University Press: New York, NY, USA, 1993.

41.   United Nations Statistical Division. *International Recommendations for Tourism Statistics 2008*; (No. 83); United Nations Publications: New York, NY, USA, 2010.

42.   MacCannell, D. *The Tourist: A New Theory of the Leisure Class*; University of California Press: Oakland, CA, USA, 2013.

43.   Wang, N. Rethinking authenticity in tourism experience. *Ann. Tour. Res.* **1999**, *26*, 349–370. [CrossRef]

44.   Urry, J.; Larsen, J. *The Tourist Gaze 3.0*; Sage: London, UK, 2011.

45.   Harvey, D. *The Condition of Postmodernity*; Blackwell: Oxford, UK, 1990; Volume 14.

46.   Rosch, E. In principles of categorization. In *Cognition and Categorization*; Rosch, E., Lloyd, B., Eds.; Lawrence Erlbaum Associates: Hillsdale, NJ, USA, 1978; pp. 27–48.

47.   Du Gay, P.; du Du Gay, P. (Eds.) *Production of Culture/Cultures of Production*; Sage: London, UK, 1997.

48.   Guo, Z.; Zhang, J. Hani rice terraces of Honghe—The harmonious landscape of nature and humans. *Landsc. Res.* **2015**, *40*, 655–667.

49.   Hua, H.; Zhou, S. Human-environment system boundaries: A case study of the Honghe hani rice terraces as a world heritage cultural landscape. *Sustainability* **2015**, *7*, 10733–10755. [CrossRef]

50.   Yang, L.; Liu, M.; Lun, F.; Yuan, Z.; Zhang, Y.; Min, Q. An analysis on crops choice and its driving factors in agricultural heritage systems—A case of Honghe hani rice terraces system. *Sustainability* **2017**, *9*, 1162. [CrossRef]

51.   UNESCO Nomination form of Cultural Landscape of Honghe Hani Rice Terraces. 2013. Available online: https://whc.unesco.org/uploads/nominations/1111.pdf (accessed on 20 December 2020).

52.   Shi, J. Honghe Declaration Global Declaration on Protection and Development of Terraces. 2010. Available online: http://www.paesaggiterrazzati.it/wp-content/uploads/2016/12/Honghe-Declaration_English_2010l.pdf (accessed on 20 January 2021).

53.   Lu, W.; Stepchenkova, S. User-generated content as a research mode in tourism and hospitality applications: Topics, methods, and software. *J. Hosp. Mark. Manag.* **2015**, *24*, 119–154. [CrossRef]

54. Burgess, S.; Sellitto, C.; Cox, C.; Buultjens, J. User-generated content (UGC) in tourism: Benefits and concerns of online consumers. In Proceedings of the 17th European Conference on Information Systems, Verona, Italy, 8–10 June 2009; pp. 417–429.
55. Marchiori, E.; Cantoni, L. The role of prior experience in the perception of a tourism destination in user-generated content. *J. Destin. Mark. Manag.* **2015**, *4*, 194–201. [CrossRef]
56. Garrod, B. Exploring place perception a photo-based analysis. *Ann. Tour. Res.* **2008**, *35*, 381–401. [CrossRef]
57. Han, F. The Chinese View of Nature: Tourism in China's Scenic and Historic Interest Areas. Ph.D. Thesis, Queensland University of Technology, Brisbane, Australia, 2006.
58. Grimwood, B.S.; Yudina, O.; Muldoon, M.; Qiu, J. Responsibility in tourism: A discursive analysis. *Ann. Tour. Res.* **2015**, *50*, 22–38. [CrossRef]
59. Richards, G. Production and consumption of European cultural tourism. *Ann. Tour. Res.* **1996**, *23*, 261–283. [CrossRef]
60. Salazar, N.B. The glocalisation of heritage through tourism. In *Heritage and Globalisation*; Routledge: Abingdon, UK, 2010; pp. 131–145.
61. Lefebvre, H.; Nicholson-Smith, D. *The Production of Space*; Blackwell: Oxford, UK, 1991; Volume 142, pp. 32–33.
62. Bourdieu, P. *Distinction: A Social Critique of the Judgement of Taste*; Harvard University Press: Cambridge, MA, USA, 1984.
63. Yang, J.; Ryan, C.; Zhang, L. Social conflict in communities impacted by tourism. *Tour. Manag.* **2013**, *35*, 82–93. [CrossRef]
64. Esparon, M.; Stoeckl, N.; Farr, M.; Larson, S. The significance of environmental values for destination competitiveness and sustainable tourism strategy making: Insights from Australia's Great Barrier Reef World Heritage Area. *J. Sustain. Tour.* **2015**, *23*, 706–725. [CrossRef]
65. Calgaro, E.; Lloyd, K.; Dominey-Howes, D. From vulnerability to transformation: A framework for assessing the vulnerability and resilience of tourism destinations. *J. Sustain. Tour.* **2014**, *22*, 341–360. [CrossRef]

The Scenic Beauty of Geosites and Its Relation to Their Scientific Value and Geoscience Knowledge of Tourists: A Case Study from Southeastern Spain

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Abstract: Scenic beauty is one of the most-commonly used indicators in the inventory and assessment of geosites for geoconservation, geoheritage management and geotourism development. It is an important driver of tourists to visit natural areas and it also provides support for the protection of natural heritage. Previous studies on scenic beauty mainly focused on landscape preference and physical characteristics of geosites that affect scenic beauty appreciation. The relationships between the scenic beauty of geosites, their scientific value and the geoscience knowledge of tourists has not been empirically investigated in detail. Hence, this study investigates this relationship using 34 geosites from southeastern Spain. For this purpose, 29 respondents with a geoscience background and who all visited the 34 geosites, 43 respondents with a geoscience background but who did not visit the geosites, and 104 respondents with no geoscience background and who did not visit the geosites, participated in a survey. The first group rated the scenic beauty and the scientific value of the geosites based on a direct field visit during which the scientific background of these geosites was given. On the other hand, the latter two groups rated scenic beauty using representative photos of the geosites. A five-point Likert scale was used to rate the scenic beauty and the scientific value of the geosites. We found a significant relationship between the scenic beauty of geosites and their scientific value, and this relationship becomes more significant if the geoscientific knowledge of the respondents increases. One-way ANOVA results indicated that a geoscience background contributed to higher perceived scenic beauty, especially for those geosites that in general were considered as more scenic by all the respondent groups. It was also found that geosites with viewpoints received in general higher scenic beauty and scientific value ratings.

Keywords: assessment; geo-interpretation; geosite value; geosite cluster; geotourism

1. Introduction

Geodiversity, which has been recognized as a concept worth investigating from the 1990s onwards, is in recent times more frequently introduced into scientific nomenclature. It has aroused a strong interest of researchers from geology, geography, biology, spatial planning, general tourism as well as national geotourism and cultural heritage [1]. Geodiversity refers to the "natural range (diversity) of geological (rocks, minerals, fossils), geomorphological (landforms, topography, physical processes), soil (pedological) and hydrological features. It includes their assemblages, structures, systems and contributions to landscapes" ([2], p. 14). Geodiversity is the "abiotic equivalent" or "natural twin" of the term "biodiversity" [3,4]. It provides an important resource for human development, and it also influences the distribution of flora and fauna and ecosystem functioning [5,6].

In addition to its scientific value, geodiversity is also an important resource for education, tourism and cultural identity of local communities [7].

Geosites are part of geodiversity with a certain value and hence identified as worthy of geoheritage and geoconservation [8]. Geosites are defined as "geological or geomorphological (geodiversity) objects that have acquired a scientific, cultural/historical, aesthetic and/or social/economic values" ([9], p. 440). A geosite can take different forms, including a "landscape, a group of landforms, a single landform, a rock outcrop, a fossil bed or a fossil" ([10], p. 6). Geosites are valuable assets for science and education [11–14] as well as for geotourism development [5,13–16]. For example, a study of gullies in twelve representative gully regions in nine European countries, including Spain, indicated that these geosites offer unique educational lessons about present-day geomorphological processes, stages of historical gully erosion reflecting past human–environment interactions and function as a geological window [17].

Assessing the potential of geosites is necessary for geoconservation, geoheritage management and geotourism development [18], and one of the most common criteria for such purposes is scenic beauty [7,16–23]. Scenic beauty is also used by UNESCO as a criterion to register natural sites in its World Heritage Site list [24]. UNESCO uses "exceptional natural beauty and aesthetic importance" as a criterion to register natural World Heritage Sites.

Scenic beauty contributes to the overall value of nature, providing a reason for its protection and preservation [23–29]. Additionally, beautiful scenery is an important component for tourism [30] and tourists' emotional satisfaction [31]. Furthermore, it has been found that people's happiness is greater in more scenic locations [32], and people living in more scenic environments report better health [33]. As a result, their assessment helps for successful destination development and management [34]. Quantification and empirical studies on scenic beauty shed light and provide support for the management of geosites [35].

There are two approaches to scenic beauty assessment: the objectivist and subjectivist approaches [36]. The objective approach involves scenic beauty to be assessed by experts based on formal knowledge [37], using key elements and features of the geosite [38]. In this approach, to assess scenic beauty, the expert applies certain criteria subjectively presented as objectivity [30] such as the number of viewpoints, surface area, surrounding landscape and nature [22], color diversity and combination, the presence of water and vegetation, absence of human-induced deterioration and proximity to the observed features [19]. On the other hand, the subjectivist approach involves deriving scenic beauty based on people's perceptions and preferences [37].

There is no consensus on the two approaches, and the debate on whether scenic beauty is inherently related to the physical characteristics of geosites or whether it is objective has continued for years [39]. It has been indicated that "some agreement was found regarding landforms most likely to be perceived as scenic or unattractive by experts and non-experts" ([39], p. 1). However, the objective approach is criticized for its inadequate reliability [40]. Lothian ([36], p. 25) argues that, unlike the objectivist method, the subjectivist approach offers a method that is "scientifically and statistically rigorous, is replicable and objective, reflects the preferences of the community and can indicate the degree of accuracy of its results". This approach is dominant in scenic beauty assessment research [37].

The use of photographs for landscape scenic beauty assessment is generally considered acceptable [38,41–45]. Daniel [40] found that visual scenic beauty assessment based on color photographs mostly matches assessments based on on-site experience. As a result, several studies on the scenic beauty of landscapes, have been conducted using photos [39,41,43–47].

Many studies on scenic beauty of geosites mainly relate to landscape preference [26,41,48–56] and such an approach fails to assess people's ratings of the quality of the landscape [57].

An important issue in the assessment of scenic beauty is which factors influence geosite scenic beauty ratings. In previous studies, two factors were identified: biophysical and per-

sonal. Among the biophysical factors that positively influence scenic beauty rating were water bodies, naturalness/wilderness, vegetation/forest and color diversity/contrast [46,58]. In addition, landform size and diversity [59], openness and uniqueness [29], shape and scale [60], the presence of mountains/hilly landform and well-preserved man-made features [44,46], number of viewpoints and absence of human deterioration [22] all influence scenic beauty ratings. On the other hand, the influence of personal factors such as age, gender and education on scenic beauty ratings were investigated and some studies found a significant difference in scenic beauty rating based on these factors [38,42,61] while others did not [43,55,62,63].

However, there are other important factors that could have a relationship with scenic beauty, but that were not given due attention in previous studies. One of these is the scientific and educational value of geosites. Similar to scenic beauty, the scientific and educational value of geosites is also one of the most common criteria in the assessment of geosites for geoconservation, geoheritage management and geotourism development [5,7,18–21] and it is also one of UNESCO's criteria to register natural sites in its World Heritage Site list [24]. The fact that scenic beauty, and scientific and educational value are often assessed separately suggests that these are seen as complementary values but without a strong relationship between both. The relation between both values has, to our knowledge, not been quantified [17,20,21]. A better understanding of the relationship between both values is important when selecting, developing, conserving and managing geosites.

The scientific and educational value of geosites is assessed in many ways, and there is no commonly agreed method for using these values in geosite assessments. Some studies assess scientific value (and educational value is not included in their methodology) with its own sub-indicators such as geologic history, rarity, integrity, representativeness, (geo)diversity and scientific knowledge [5,19,21]. Educational value is separately evaluated with its own (sub)indicators [5,7]. On the other hand, Vujičić et al. [22] assessed scientific and educational values together (using four indicators: rarity, representativeness, knowledge of geoscientific issues and level of interpretation). Other researchers included educational value as one sub-indicator of scientific value [64,65]. In our study, scientific and educational values were considered as one value of geosites, similar to Vujičić et al. [22], and will hereafter be called scientific value.

The other important factor that received no to little empirical investigation so far is whether or not geoscience knowledge contributes to a higher perceived scenic beauty rating. There are philosophical arguments about the effects of scientific knowledge on the aesthetic appreciation of the natural environment. For example, Carlson [66] argues that knowledge of the different natural environments and their systems and elements is required to aesthetically appreciate nature. Despite its importance for allowing a complex, deep, and meaningful aesthetic appreciation of nature, criticism arises on Carlson's argument since people also appreciate nature without scientific knowledge [25], and there is nothing wrong with such judgments [67]. Though Stecker admitted that some knowledge can enhance one's appreciation of nature by enabling one to think and perceive nature in more complex ways, he indicated that there are certain very common appreciative responses to nature, such as appreciating a thundering waterfall for its grandeur, which requires less intellect. These are conceptual arguments about the role of scientific knowledge in the aesthetic appreciation of nature. Hence, an empirical study is required to test whether scientific knowledge contributes to higher scenic beauty ratings. As scientific knowledge is a broad concept, geoscience knowledge is used for our case.

The objective of this study is, therefore, to investigate the relationship between the scenic beauty of geosites and their scientific value and geoscience knowledge. Thus, we established the following two hypotheses:

Hypothesis 1 (H1). *There is a positive relationship between the scenic beauty assessment by tourists and scientific value of geosites.*

Hypothesis 2 (H2). *Geoscience knowledge contributes to a higher perceived scenic beauty.*

These hypotheses were tested in a case study of 34 geosites from southeastern Spain.

2. Materials and Methods

2.1. Description of the Study Area

With about 27% of the country's territory, Spain has the largest surface of protected natural areas in the European Union ([68], p. 307). It has also some of the best exposed geology in Europe, due to its mountainous nature, extensive coastline and somewhat arid climate [69]. The study area covers three provinces located in southeastern Spain: i.e., Granada, Almeria and Murcia (Figure 1). The region is home to two UNESCO Global Geoparks (Cabo de Gata-Níjar and Granada).
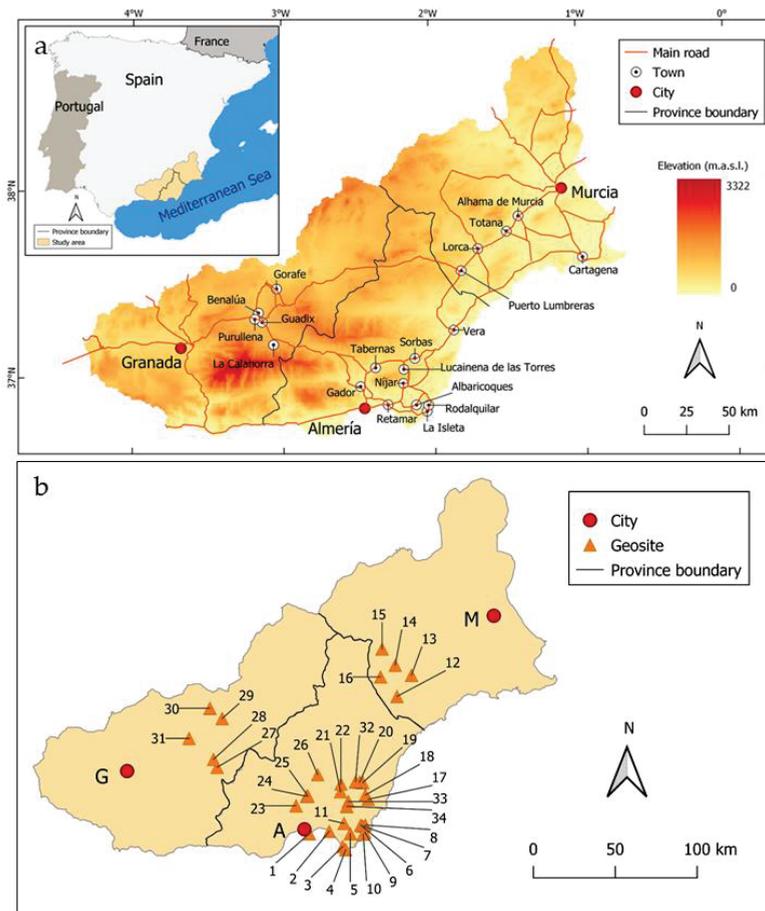
Figure 1. (**a**) Map showing the location of the study area in southeast Spain. Cities/towns indicated on the map are those near the geosites. (**b**) Location map of the 34 geosites in Table A1 in Appendix A; for their scenic beauty ratings, see Table A4 in Appendix A; for their scientific value rating, see Table A5 in Appendix A; for their photos, see Questionnaire S1 in the Supplementary Materials.

The study area offers a unique opportunity for teaching field geology and geomorphology [70], and many student field trips are organized by European universities to the region [71,72].

Geomorphological and Geological Setting of the Study Area

The study area is amongst the driest regions of Europe [73] which makes it an ideal place to learn and enjoy about the geology and geomorphology as the vegetation cover is rather limited allowing many geomorphological and geological features to be observed easily [71]. The region is characterized by a series of mountain ranges or Sierras (Betic chain, resulting from the Alpine orogeny and mainly consisting of hard Paleozoic and Mesozoic rocks) and uplifted Cenozoic basins dominated by unconsolidated sediments [74–77]. From a lithological point of view, volcanic, sedimentary and metamorphic rock types outcrop in the area [78–82], resulting in diverse landform types. The region is also tectonically active [74,75,82–84] which allows to observe active faults, horst and graben landforms as well as volcanic features [77,83–86]. Erosional and depositional features include various types of mass movements, gullies, badlands, fans and landforms resulting from fluvial and coastal dynamics [87–89]. Several mineral deposits (e.g., lead, iron, gold amongst others) have been mined from prehistory into modern times [78,90,91], of which several traces are still preserved in the landscape. Next to mining, other traces of past human–environment interactions on the landscape can be observed such as old farms and agricultural terraces being abandoned in the mountains [92,93], intensive (greenhouse) agriculture in the coastal and alluvial plains [94–97] and tourism development in the coastal areas (littoralization) [98] with its large impacts on groundwater hydrology [96,98–100].

2.2. Data Collection and Analysis

For this study, 34 geosites were selected from southeastern Spain (see Figure 1b for their location; Table A1 in Appendix A for their description, Table A4 in Appendix A for their scenic beauty rating; Questionnaire S1 in the Supplementary Materials for their photos), which were part of an educational 'Physical Geography' field excursion, held from 18–24 May 2019. These geosites were selected based on their scientific value in order to present a variety of topics related to the geomorphology, geology, pedology, hydrology, and archaeology of the region, and with a strong focus on human–environment interactions in a Mediterranean environment at various timescales. Most geosites (30) are related to geomorphology. In addition, 27 of them have viewpoints while 16 geosites can be directly-linked to human–environment interactions. Specifically, the geosites include volcanic cones and columns, horst and graben structures, faults, travertine dams, sand dunes, tafoni, alluvial fans, landslides, gullies, badlands, mining, and archaeological settlements. Whilst scenic beauty did not form a major criterion when selecting the sites visited during the field trip, several geosites have been selected as they provide spectacular views to surrounding landscapes and are, hence, ideal sites for a physical geography field trip.

A total of 176 respondents (actual and potential tourists) participated in this survey (see Table A3 in Appendix A for their socio-demographic background). Of these, 104 were persons with no geoscience background and who did not visit the Spanish geosites (hereafter called NGB-NV); 43 were persons with a geoscience background and who did not visit the selected geosites (hereafter called GB-NV); and 29 were persons with a geoscience background and who all visited the selected geosites during the educational 'physical geography' field excursion, held in 2019 (hereafter called GB-V). The NGB-NV group consisted of persons whose educational background is unrelated to geosciences. On the other hand, the GB-NV and GB-V group comprised persons who studied geography and/or geology, and whose education level was bachelor's degree and higher. The GB-NV group was purposefully included to control for the effects of direct experience to the geosites and expert information on the scenic beauty rating between the NGB-NV and GB-V groups. The NGB-NV and GB-NV groups rated scenic beauty in an online survey based on representative photos of the geosites, while the GB-V group made the assessment after visiting the geosites in 2019. The scenic beauty rating by these three groups was used to determine the contribution of geoscience knowledge for scenic beauty.

For the photo-based assessment, a total of 74 photos representing the 34 geosites were selected. These photos were presented in the order in which the GB-V group visited them

in the field. Each geosite was represented with two to three photos to provide typical views of the geosites to the respondents. The first photo of each geosite showed an overview of the surrounding landscape, and the second (and third, if any) photo/s usually showed the geosite in more detail. From the photos used in the survey, 63 were photos taken during the field trip while the remaining 11 photos were taken from images in Google Earth and the internet due to the poor quality of some of the photos we had. While selecting the latter photos, care was taken to make them representative of what the GB-V group saw on-site and to illustrate in the best possible way the main geo-feature of the selected site.

The online survey had two sections. The first section consisted of photos and a five-point Likert scale (where 1 = not at all interesting, 2 = slightly interesting, 3 = moderately interesting, 4 = very interesting, and 5 = extremely interesting) for rating scenic beauty, while the second section comprised the socio-demographic background of the respondents (see Questionnaire S1, in the Supplementary Material).

The online survey was conducted from 18 February to 10 March 2021, and all authors of this study sent the online survey via email to people in their network. In some cases, people who were first contacted by the authors further distributed the survey to other people, and hence it was rather difficult to know the total respondents contacted. However, by counting those for which we had reliable data, it was estimated that the survey was distributed to over 550 people. A total of 154 completed surveys were received, of which, 7 were discarded because the respondents indicated that they had previously visited one or more of the geosites. Hence, the 147 completed responses (104 NGB-NV and 43 GB-NV) were used for further analysis of the scenic beauty of the geosites. The NGB-NV group comprised persons with educational background from ca. 25 disciplines such as archaeology, agriculture, biology, chemistry, engineering, economics, history, languages, management, medicine, psychology, sustainable development and tourism (see Figure A1 in Appendix A) while the GB-NV group consisted of 32 geographers and 11 geologists.

On the other hand, the GB-V group assessed the scenic beauty and scientific value of geosites during an educational field excursion to the Spanish study area. This group comprised a total of 32 students (from KU Leuven and Free University Brussels) who enrolled in the 3rd bachelor and 1st master in Geography. It also included two KU Leuven professors of physical geography (>20 years of experience in the region), who led the trip, and three field assistants with a master's degree and educational background related to geoscience. Hence, the scenic beauty and scientific value assessment questionnaire was distributed to the 37 participants of the field trip. A total of 29 persons completed the questionnaire, including the two professors and the three field assistants.

The GB-V group had learned about the geosites in southeastern Spain before and during the field excursion, which enabled them to evaluate the scientific value of each geosite. They collected and read research papers about the geosites and they also made short presentations in the classroom before the field excursion. In addition, they were also given on-site scientific information about the characteristics, genesis, importance for earth sciences as well as for human–environment interactions of each geosite by the two professors (Figure 2). Furthermore, shortly after visiting all sites, the GB-V group also evaluated the scenic beauty of the 34 geosites.

The GB-V group was asked to rate the scenic beauty and scientific value of the geosites using a five-point Likert scale (where 1 = not at all interesting, 2 = slightly interesting, 3 = moderately interesting, 4 = very interesting, and 5 = extremely interesting), which is a similar scale as that provided to the other two groups of respondents (see Questionnaire S2 and Questionnaire S3 in the Supplementary Materials). In addition, the GB-V group was also asked to list interesting features of each geosite related to its scenic beauty and scientific value. The socio-demographic profile of the respondents was also collected.

Figure 2. Scientific information being given to the GB-V group at Lorca (geosite 13; © J. Poesen, May 2019).

The GB-V group was briefed about the contents of the survey questionnaire in a classroom one day before departure to Spain. The questionnaire was distributed to them immediately before the start of the field excursion and collected at the end of the field excursion; this helped them to be familiar with the questions.

Correlation analysis and scatter plots and boxplots were made to test the relationship between the scenic beauty and scientific value of the geosites. In addition, to further investigate the relationship between scenic beauty and scientific value, a word cloud analysis was conducted. This revealed the most frequent keywords that the respondents reported in order to describe the interesting features of geosites reflecting their scientific value and scenic beauty. In the word cloud analysis, only keywords were selected, and co-occurring words were removed before the analysis. For example, if the respondent mentioned "view over sierra and sea", then the keyword 'view' was taken, and the words 'over', 'sierra' and 'sea' were dropped from the analysis. This helped to avoid unnecessary repetition of words.

In order to investigate the relationship between scenic beauty and geoscience knowledge, one-way ANOVA and post-hoc multiple comparisons were conducted for the mean scenic beauty ratings of the geosites among the three respondent groups. Additionally, to identify why some geosites received higher scenic beauty and scientific value ratings by the respondent groups, the 34 geosites were grouped into five clusters based on the presence of particular features of interest to tourists at each geosite. The features used as criteria were local geo-features (such as volcanic cones and columns, horst and graben structures, faults, travertine dams, sand dunes, tafoni, alluvial fans, landslides, gullies, etc.), human–environment interaction (such as archaeological sites, agricultural fields-both currently in use and abandoned ones, dams and reservoirs) and viewpoints. The resulting clusters of geosites, in order of their numbers of geosites they have, are (1) HE = human–environment interaction features (2 geosites); (2) HE-LG-VP = human–environment interaction feature, local geo-feature and viewpoint (4 geosites); (3) LG = local geo-feature (5 geosites); (4) HE-VP = human–environment interaction feature and viewpoint (10 geosites); and

(5) LG-VP = local geo-feature and viewpoint (13 geosites) (see Table A2 in Appendix A for the list of clustered geosites).

3. Results

3.1. Scenic Beauty Rating and Socio-Demographic Background of Respondents

Table 1 shows the mean scenic beauty ratings of the 34 geosites as a function of socio-demographic factors. It can be seen that, on average, women (mean = 3.35; sd = 0.51) rated scenic beauty relatively higher than men (mean = 3.25; sd = 0.52). Young people with age 18–29 (mean = 3.31; sd = 0.57) rated scenic beauty higher than other age groups. In terms of education, those with bachelor's degree (mean = 3.34; sd = 0.53) rated scenic beauty higher than those with master's and PhD degrees. Besides, those who live in Belgium (mean = 3.46; sd = 0.6) rated scenic beauty higher than those from other countries. Furthermore, those who did not travel outside their continent (mean = 3.42; sd = 0.47) rated the scenic beauty of the geosites higher than respondents who visited one or more other continents. It was also found that respondents with geoscience background and who visited the geosites (mean = 3.40; sd = 0.34) rated scenic beauty higher than those with no geoscience background and who did not visit the geosites. As to the respondents' general primary preferred types of attractions, those who prefer attractions related to biodiversity and geology-landscape (mean = 3.6; sd = 0.56) rated scenic beauty higher than other groups.

Table 1. Mean scenic beauty ratings (scale range 1–5; standard deviations in parentheses) of the 34 geosites as a function of socio-demographic factors of the respondents (*n* is the number of persons). For information on the socio-demographic background of the respondents, see Table A3 in Appendix A.

Socio-Demographic Factor		Mean	F Value	*p* Value
Gender	Female (*n* = 71)	3.35 (0.51)	1.73	0.19
	Male (*n* = 99)	3.25 (0.52)		
Age [a]	18–29 (*n* = 71)	3.31 (0.57)	0.83	0.48
	30–49 (*n* = 35)	3.25 (0.46)		
	50 and above (*n* = 41)	3.22 (0.55)		
Education level	Bachelor's degree (*n* = 54)	3.34 (0.53)	0.31	0.74
	Master's degree (*n* = 98)	3.28 (0.51)		
	PhD degree (*n* = 17)	3.26 (0.49)		
Country of residence [b]	Belgium (*n* = 125)	3.46 (0.6)	1.39	0.25
	Other (*n* = 51)	3.33 (0.52)		
Continents visited	No travel outside my continent (*n* = 48)	3.42 (0.47)	1.76	0.16
	Visited one other continent (*n* = 54)	3.24 (0.53)		
	Visited 2–3 other continents (*n* = 44)	3.29 (0.54)		
	Visited 4–5 other continents (*n* = 29)	3.16 (0.46)		
Respondent group [c]	NGB-NV (*n* = 104)	3.22 (0.53)	2.50	0.08 [d]
	GB-NV (*n* = 43)	3.39 (0.53)		
	GB-V (*n* = 29)	3.40 (0.34)		
Primarily preferred attraction type/s	Biodiversity (*n* = 13)	3.35 (0.48)		
	Biodiversity and culture-history (*n* = 11)	3.1 (0.49)		
	Biodiversity, culture-history, and geology-landscape (*n* = 31)	3.44 (0.58)		
	Biodiversity and geology-landscape (*n* = 3)	3.6 (0.56)		
	Culture-history (*n* = 37)	3.09 (0.56)		
	Culture-history and geology-landscape (*n* = 27)	3.37 (0.43)		
	Geology-landscape (*n* = 51)	3.31 (0.45)	2.05	0.06 [d]

[a] Does not include data of those who visited the geosites. [b] Includes temporary (e.g., students) and permanent residence. [c] Respondent group refers to respondents grouped following their geoscience background and field visits: NGB-NV = no geoscience background and no visit to geosites; GB-NV = geoscience background and no visit to geosites; GB-V = geoscience background and visit to geosites. [d] Significant at *p* < 0.1; scenic beauty rated on 1–5 scale.

However, one-way ANOVA results showed that gender, age, country of residence and number of continents visited did not significantly influence mean scenic beauty rating while the respondent group and primarily preferred attraction were found significant at $p < 0.1$ (Table 1, Figure 3). Post-hoc pairwise (multiple) comparisons showed that none of the socio-demographic factors, including the respondent group and primarily preferred attraction, revealed a significant difference (at $p < 0.1$) in the scenic beauty ratings of the 34 geosites.
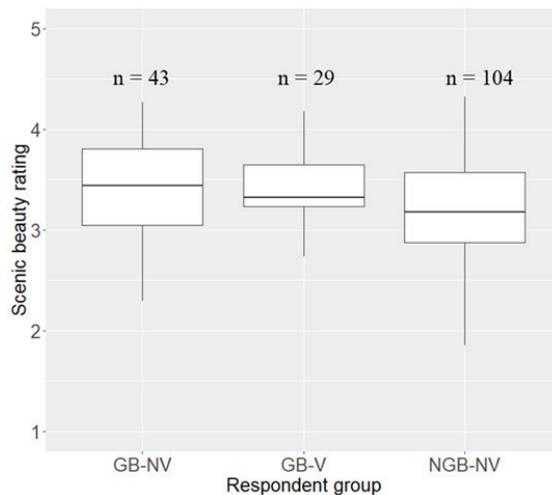
Figure 3. Boxplot of mean scenic beauty ratings of the 34 geosites by respondents, grouped following their geoscience background and field visits: NGB-NV = no geoscience background and no visit to geosites; GB-NV = geoscience background and no visit to geosites; GB-V = geoscience background and visit to geosites; n = the number of respondents in each group; scenic beauty was rated on a 1–5 scale.

To further investigate the effect of socio-demographic factors (excluding age as there was no data for the GB-V group in the "respondent group" factor) on scenic beauty rating, two-way ANOVA was conducted. Only the interaction of education level and country of residence were found significant (F value = 3.56, $p < 0.05$). However, further pairwise multiple comparisons indicated that none of the interaction effects were significant at $p < 0.1$.

3.2. Relationship between Scenic Beauty and Scientific Value of Geosites

3.2.1. Correlation Analysis Results

Geosites with a higher scientific value were rated higher for their scenic beauty, and those with lower scientific value were also rated lower by all the respondent groups (Figures 4a–c and 5a–c). In addition, the mean scenic beauty rating by all the respondent groups is positively related to the scientific value of geosites (Figure 5d).

Figure 4. (**a**–**c**) Relationship between scenic beauty ratings of the 34 geosites (rated by the three groups of respondents, grouped following their geoscience background and field visits: NGB-NV = no geoscience background and no visit to geosites; GB-NV = geoscience background and no visit to geosites; GB-V = geoscience background and visit to geosites) and scientific value (rated by the GB-V group). Both scenic beauty and scientific value were rated on a 1–5 scale. r = Pearson's correlation coefficient between scenic beauty (as rated by each respondent group) and scientific value (rated by the GB-V group). See Figure 1b for the location of geosites (indicated by their number in the figure); Table A1 in Appendix A for their description, Table A4 in Appendix A for their mean scenic beauty ratings; Table A5 in Appendix A for their scientific value ratings; Questionnaire S1 in the Supplementary Materials for their photos.

Correlation analysis also indicated that there is a significant (at least at $p < 0.05$) positive relationship between the scenic beauty and scientific value of the geosites (Figures 4a–c and 5a–c). However, the strength of the relationship depends on the type of respondent group who rated the scenic beauty. A weak relationship (Figure 4a) was found between scenic beauty rating by the NGB-NV group and scientific value (rated by the GB-V group) while a moderate relationship (Figure 4b) was found between scenic beauty as rated by the GB-NV group and scientific value (as rated by the GB-V group). The relationship between the scenic beauty and scientific value of the geosites, both rated by the GB-V group, was strong (Figure 4c). Furthermore, a positive relationship (r = 0.70) was found between the mean scenic beauty ratings of the geosites by all the three respondent groups and the scientific value ratings of the geosites.
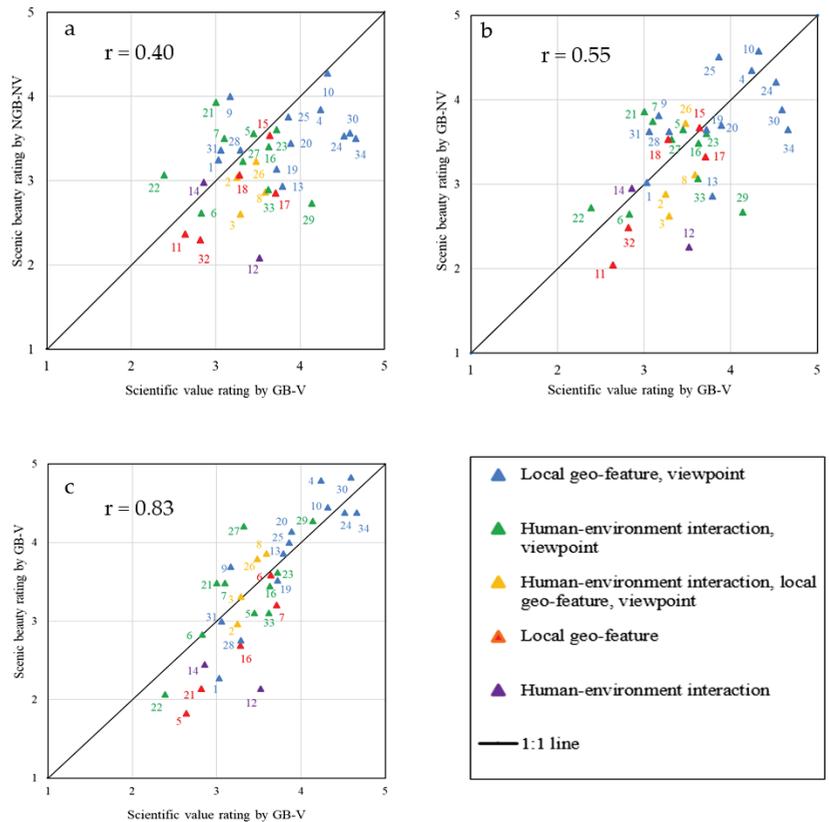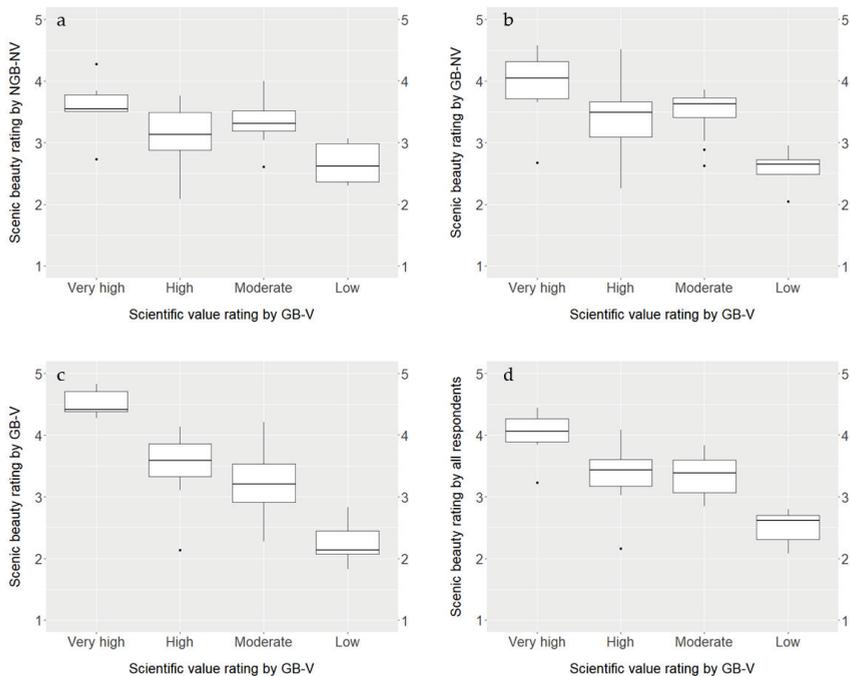
Figure 5. (**a–d**) Boxplots of scenic beauty rating by respondents, grouped following their geoscience background and field visits (NGB-NV = no geoscience background no visit to geosites, 104 persons; GB-NV = geoscience background and no visit to geosites, 43 persons; GB-V = geoscience background and visit to geosites, 29 persons), for different scientific value ratings. Scientific value was rated by the GB-V group (29 persons) on a 1–5 scale. This scientific value rating of geosites was then grouped based on mean scientific value rating: Very high = 4.0 and above (6 geosites); High = 3.5–3.9 (11 geosites); Moderate = 3.0–3.5 (12 geosites); Low = below 3.0 (5 geosites). The scientific value rating was done by the GB-V group, 29 persons (see Table A5 in Appendix A). "Scenic beauty rating by all respondents" is the mean scenic beauty rating of the three respondent groups.

3.2.2. Interesting Features Explaining Scenic Beauty and Scientific Value Ratings of the Geosites

The GB-V group was asked to list the most interesting geo-features that make up the scenic beauty as well as the scientific value of the geosites (Figure 6). The top five most frequent reported words describing interesting scenic features (Figure 6a) were view = 146, landscape = 38, gully = 34, sea = 32, and travertine = 31.

The top five most frequent words which the respondents mentioned as interesting features of geosites contributing to their scientific value (Figure 6b) were gully = 33, travertine = 31, terrace = 30, dam = 29, and badland = 21.

Among the most frequent words in the word cloud analysis, 22 are common to both scenic beauty and scientific value (which account for 45.8% of the words in Figure 6a and 57.9% in Figure 6b). These include, in alphabetical order, archaeology, atoll, badland, biodiversity, caldera, castle, dam, dune, flood, geology, gully, history, landslide, mining, rambla, rock, tafoni, terrace, travertine, valley, viewpoint and wind. These common words indicate that the GB-V respondent group appreciates scenic beauty and scientific value on many similar features, supporting our hypothesis that these two geosite values are interrelated.

Figure 6. The most frequently reported features of geosites explaining their scenic beauty and scientific value, as mentioned by the GB-V group (29 persons). (**a**) scenic beauty (total words = 48, minimum and maximum word frequency = 5 and 146, respectively); (**b**) scientific value (total words = 38, minimum and maximum word frequency = 5 and 33, respectively). Note that the word size corresponds to the frequency of that word in its category, i.e., in scenic beauty or scientific value.

3.3. Contribution of Geoscience Knowledge to Perceived Scenic Beauty

As shown in Figure 7, there is a relative agreement among the three respondent groups in the scenic beauty rating. More specifically, from the three pairwise comparisons, there is a better agreement in scenic beauty ratings of the geosites by the NGB-NV and GB-NV groups as their ratings are close to the 1:1 line.

However, in absolute terms, the groups with geoscience background (GB-NV and GB-V) gave higher scenic beauty rating to more geosites (i.e., to 24 and 20 geosites, respectively) as compared to the NGB-NV group (Figure 7). On the other hand, the GB-NV group gave a higher scenic beauty rating to 19 geosites and vice versa for the remaining 15 geosites (Figure 7b).

The data also revealed that geosite clusters where viewpoints are present were among those that were rated higher for their scenic beauty as well as for their scientific value (Figure 8). More specifically, all respondent groups rated scenic beauty higher for geosites that have both a local geo-feature and offer a viewpoint (Figure 8a–c). In addition, the scientific value was also rated higher by the GB-V group for this cluster of geosites (Figure 8d).

One-way ANOVA was used to compare the mean scenic beauty ratings of the 34 individual geosites by the three respondent groups (Figure 9). Significant differences were found for 22 individual geosites at different significance levels: $p < 0.05$, $p < 0.01$ and $p < 0.001$ (see Table A4 in Appendix A).

Post-hoc pairwise multiple comparisons showed significant mean scenic beauty rating differences between the three respondent groups (Table 2). A significant difference in scenic beauty rating was found between GB-NV and NGB-NV groups for 7 out of 34 geosites. For all these geosites, the GB-NV group rated scenic beauty higher than the NGB-NV group. In addition, a significant difference in scenic beauty rating was found between NGB-NV and GB-V for 17 out of 34 geosites. For 11 of these geosites, the GB-V group rated scenic beauty higher than the NGB-NV group, and vice versa for the remaining six geosites. Furthermore, a significant difference in mean scenic beauty rating was found between GB-NV and GB-V groups for 14 out of 34 geosites. For eight of these geosites, the GB-V group rated scenic beauty higher than the GB-NV group and vice versa for the rest six geosites.

Figure 7. (**a**–**c**) Comparison of mean scenic beauty ratings of the 34 geosites by the three respondent groups, grouped following their geoscience background and field visits: NGB-NV = no geoscience background and no visit to geosites; GB-NV = geoscience background and no visit to geosites; GB-V = geoscience background and visit to geosites. Scenic beauty was rated on a 1–5 scale. See Figure 1b for the location of geosites (indicated by their number in the figures); Table A1 in Appendix A for their description, Table A4 in Appendix A for their mean scenic beauty rating; Questionnaire S1 in the Supplementary Materials for their photos.
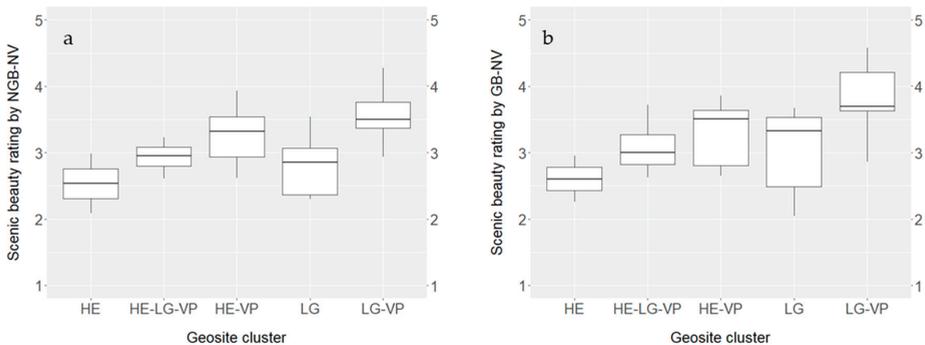
Figure 8. *Cont.*
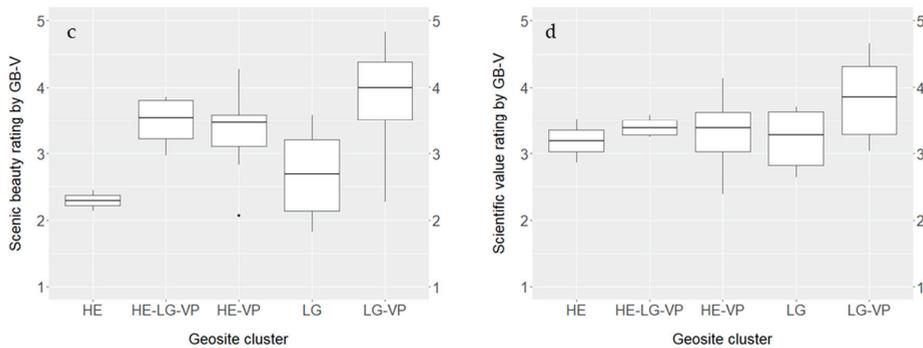
Figure 8. (**a–d**) Boxplots of scenic beauty rating by respondents, grouped following their geoscience background and field visits (NGB-NV = no geoscience background no visit to geosites, 104 persons; GB-NV = geoscience background and no visit to geosites, 43 persons; GB-V = geoscience background and visit to geosites (29 persons), for different geosite clusters: LG-VP = local geo-feature and viewpoint, 13 geosites; HE-VP = human–environment interaction feature and viewpoint, 10 geosites; HE-LG-VP = human–environment interaction feature, local geo-feature and viewpoint, 4 geosites; LG = local geo-feature, 5 geosites; HE = human–environment interaction feature, 2 geosites). See Table A2 in Appendix A for the list of clustered geosites. The scientific value rating was done by the GB-V group (29 persons). Both scenic beauty and scientific value were rated on a 1–5 scale (see Tables A4 and A5 in Appendix A for their mean ratings).

Table 2. Pairwise multiple comparisons of mean scenic beauty ratings (standard deviations in parentheses) of the 22 individual geosites (where a significant difference in mean scenic beauty rating was found) by the three groups, grouped following their geoscience background and field visits: NGB-NV = no geoscience background and no visit to geosites; GB-NV = geoscience background and no visit to geosites; GB-V = geoscience background and visit to geosites. Scenic beauty rated on a 1–5 scale.

Geosite Number	Geosite Name	Mean of NGB-NV (a)	Mean of GB-NV (b)	Mean of GB-V (c)	Mean Difference		
					(b–a)	(c–a)	(c–b)
1	Boca Andarax	3.25 (0.93)	3.02 (1.01)	2.28 (0.92)	−0.23	−0.97 ***	−0.74 **
3	Las Salinas	2.61 (0.84)	2.63 (1.05)	3.31 (1)	0.02	0.70 ***	0.68 **
4	Punta Baja	3.85 (0.89)	4.35 (0.61)	4.79 (0.41)	0.50 **	0.95 ***	0.44 **
5	Cerro Pistolas	3.56 (0.9)	3.65 (0.9)	3.10 (1.11)	0.09	−0.45 *	−0.55 *
8	Rodalquilar Mine	2.87 (1.01)	3.12 (1.1)	3.86 (0.79)	0.25	0.99 ***	0.75 **
11	El Puntal	2.37 (0.89)	2.05 (1.07)	1.83 (1.07)	−0.32	−0.54 **	−0.22
13	Lorca Castle	2.93 (0.98)	2.86 (1.04)	3.86 (0.83)	−0.07	0.93 ***	1.00 ***
14	Puentes Dam	2.98 (0.9)	2.95 (1.17)	2.45 (1.02)	−0.03	−0.53 *	0.50
17	Rio Alias	2.86 (1)	3.33 (0.94)	3.21 (0.9)	0.47 *	0.35	−0.11
18	Rambla de los Feos	3.07 (0.95)	3.53 (0.93)	2.69 (0.85)	0.46 *	−0.38	−0.85 ***
19	Los Perales	3.13 (0.98)	3.65 (1.15)	3.52 (1.02)	0.52 *	0.38	−0.13
20	Los Molinos	3.44 (0.98)	3.7 (1.08)	4.14 (0.92)	0.26	0.70 **	0.44
22	Los Yesos	3.07 (1.05)	2.72 (1.05)	2.07 (0.96)	−0.35	−0.99 ***	−0.65 *
24	Bar Alfaro	3.53 (0.99)	4.21 (0.94)	4.38 (0.86)	0.68 ***	0.85 ***	0.17
25	Mini Hollywood	3.76 (1.03)	4.51 (0.63)	4 (0.89)	0.75 ***	0.24	−0.51
26	Rambla Honda	3.23 (1.04)	3.72 (0.91)	3.79 (1.01)	0.49 *	0.56 *	0.02
27	La Calahorra	3.23 (1.05)	3.53 (0.98)	4.21 (0.82)	0.30	0.98 ***	0.67 *
28	Esfiliana	3.37 (1.01)	3.63 (1.05)	2.76 (0.95)	0.26	−0.61 *	−0.87 **
29	Gorafe	2.73 (0.93)	2.67 (0.99)	4.28 (0.7)	−0.06	1.55 ***	1.60 ***
30	Alicun de las Torres	3.57 (0.97)	3.88 (0.79)	4.83 (0.54)	0.32	1.26 ***	0.94 ***
31	Belerda	3.37 (0.88)	3.63 (1.16)	3 (1)	0.26	−0.37	−0.63 *
34	El Hoyazo	3.5 (1.01)	3.65 (0.92)	4.38 (0.56)	0.15	0.88 ***	0.73 **

* $p < 0.05$; ** $p < 0.01$; ** $p < 0.001$.

Figure 9. Illustration of the top-ranked geosites based on mean scenic beauty ratings by the three respondent groups. (**a**) Punta Baja (geosite 4) with andesitic columns (© G. Tessema, May 2019); (**b**) Los Escullos (geosite 10) with fossil dunes (© J. Poesen, May 2019); (**c**) Bar Alfaro (geosite 24) view on badlands near rambla de Tabernas with exposures of flysch and marls, inset photo—travertine features (© G. Tessema, May 2019); (**d**) Mini Hollywood (geosite 25) with view on badlands near rambla de Tabernas (© G. Tessema, May 2019); (**e**) Alicun de las Torres (geosite 30) with flowing water on travertine (© G. Tessema, 2019. (**f**) El Hoyazo (geosite 34)—eroded volcanic cone and coral reef (atoll) (© Google Earth Images, May 2020). These geosites are also among those in the top rank in terms of scientific value rating. See Figure 1b for their location; Table A1 in Appendix A for their description, Table A4 in Appendix A for their scenic beauty ratings; Questionnaire S1 in the Supplementary Materials for their photos.

4. Discussion and Conclusions

The objective of this research was to better understand the relationships between scenic beauty of geosites, their scientific value as well as geoscience knowledge of actual and potential tourists. The scenic beauty of 34 geosites in southeastern Spain was evaluated by 176 respondents, which were divided into three groups based on their geoscience background and visits to the geosites.

Socio-demographic factors such as gender, age, education level, country of residence and number of continents visited did not significantly affect the scenic beauty ratings of the geosites by the respondents. Previous studies on the assessment of scenic beauty of landscapes [43,55,62,63] also found that age, gender and education did not significantly affect the scenic beauty ratings of landscapes. In addition, Frank et al. [42] also found that age, gender and personal qualification (i.e., layman, stakeholder and expert) did not significantly influence landscape scenic beauty assessment results. On the other hand, Skřivanová et al. [61] found that there is a significant difference in the scenic beauty rating of landscapes between women and men, the former generally rating it higher. Svobodova et al. [50] studied the visual preferences for physical attributes of mining and post-mining landscapes with 1050 persons in a web-based survey in the Czech Republic and found that visual preferences for landscapes significantly varied based on gender, education level and professional field or study focus. Women rated the scenic beauty of landscapes significantly higher than men. Those with education lower than university-level rated scenic beauty of landscapes significantly higher than those with a university degree. Moreover, respondents whose profession is not related to landscape management rated scenic beauty of landscapes higher than respondents whose education is related to landscape management (e.g., ecology, nature conservation, architecture). López-Martínez [55] pointed out that different findings among studies about the effect of socio-demographic factors on scenic beauty assessments of landscapes might be attributed to differences in study areas, and thereby landscapes being evaluated.

The correlation analysis in this study revealed that there is a positive relationship between scenic beauty and scientific value of geosites, and this relationship improved with an increase in geoscience knowledge of the tourists and with a field visit of these sites. The positive correlation between scenic beauty and scientific value was stronger for the GB-V group than the GB-NV group, and a possible source of difference would be that the former rated the scientific value, received scientific information on-site and visited the geosites. This positive correlation was stronger for both the GB-V and GB-NV groups in comparison with the NGB-NV group, which can be attributed to the geoscience education of both GB groups.

The word cloud analysis of keywords provided by the respondents to describe the most interesting features at each geosite for their scenic beauty and scientific value supports the finding that scenic beauty and scientific value are interrelated. It should, however, be noted in the word cloud analysis that a larger frequency of keywords does not necessarily imply that more respondents reported a particular word (feature); it might well be that few respondents repeatedly mentioned such a word. Moreover, a respondent might have been interested in more than one type of interesting feature for a given geosite, and hence the frequency of the words might be larger.

There is a general consensus among the respondents in their scenic beauty rating in that for most cases, geosites rated higher by one group were also rated higher by the other (see Figure 7). Kalivoda et al. [38] studied scenic beauty rating between experts and non-experts and found that the higher the scenic beauty ranking, the better the consensus between the two groups. They argued that such a consensus plays an important role for the legal protection of geosites.

Overall, the GB-NV and GB-V groups rated the scenic beauty of some geosites significantly higher than the NGB-NV group (Table 2), and this could be because their geoscience knowledge helped them to better appreciate geosites than the NGB-NV group. Reynard and Giusti [101] (p. 152) support this arguing that "perhaps the [scenic] beauty resides . . . less in the outburst of emotions than in the elements of understanding". In addition, the field visit to the geosites by the GB-V group could also have helped them to rate scenic beauty compared to the NGB-NV group.

The GB-V group rated some geosites significantly higher than the GB-NV group, which could be attributed to the expert information the former received while visiting the geosites. Obviously, the GB-V group has better geoscience knowledge about the geosites

in this study than the GB-NV group due to the desk research the former had made about the geosites and the expert information it had received on-site. In addition, the field visit could also have had an impact on the scenic beauty rating, allowing the GB-V group to rate scenic beauty higher than the GB-NV group.

In addition to geoscience knowledge, the field visit and the relatively good weather conditions (dry and sunny) during the visit could also explain why the GB-V group rated some geosites significantly higher than the NGB-NV and GB-NV groups. The field visit allowed to see more detailed features of the geosites than the photos. Hull and Stewart [102] argued that photographs may not always capture all the landscape differences, allowing those who visit the sites to rate scenic beauty higher than the group who does not visit.

A good example where the on-site expert information and the field visit might have caused a significantly higher scenic beauty rating of the geosites by the GB-V group than the other two groups are the Gorafe and Alicun de las Torres geosites (geosite numbers 29 and 30, Table 2). Among the interesting features of Gorafe are the view over the Rio Gor valley cut into the Guadix-Baza sedimentary basin and the nearby Bronze-age megalithic park. The latter could not be clearly understood unless one travels to this geosite and also receives expert information about its archaeological history and significance. In addition, during the field excursion, the unique travertine features of Alicun de las Torres were shown and explained to the GB-V group and they were also able to appreciate the flowing spring water and landscape on-site.

On the other hand, the NGB-NV and GB-NV groups rated some geosites significantly higher than the GB-V group (for example, geosite numbers 1, 5, 22 and 28). These were among the lowest-rated geosites in terms of their scientific value by the GB-V group. As scientific value has a relationship with scenic beauty, it might also have contributed to a lower appreciation of these geosites. In other words, the on-site scientific interpretations provided to the GB-V group might have influenced them not to rate these geosites higher for their scenic beauty. For example, at Cerro Pistolas and El Puntal (geosites 5 and 11, respectively), the GB-V group received scientific information about the impacts of the greenhouses on the landscape and the related landscape degradation processes (land levelling, groundwater extraction and pollution by pesticides and degraded plastics), and this might have negatively affected their scenic beauty rating. There was also litter dumped at El Puntal which could have influenced the scenic beauty rating by the GB-V group. Stecker [67] argues that though scientific knowledge could enhance scenic beauty appreciation, it could also work the other way round, i.e., "knowledge prevents appreciation from being malfounded, from appreciating a part of nature for properties it does not have" (p. 400).

The findings in this study that scenic beauty and scientific value of geosites are interrelated and that geoscience knowledge contributes to higher perceived scenic beauty have important implications for geoconservation, geoheritage management and geotourism development. Erikstad [103] indicated that the necessity of geoconservation is not well developed and accepted in many countries around the world. The relationship between the two values could provide a strong support for the protection of the geosites. In addition, more geoscience education and geo-interpretation to people could help them to appreciate the scenic beauty of geosites. Beck et al. [104] indicated that one of the main objectives of interpretation is creating appreciation and deeper understanding of nature. It has also been argued that applying the concept of geotourism and geosites to particular landforms is the best way to transfer geoscience knowledge to society [17]. Thus, the geo-interpretations offered could help enhance visitor experience, thereby contributing to sustainable geotourism development. According to Newsome and Dowling [105] (p. 6), "visitors will always rate their experiences higher if they have also learned something about the landscape and geology they are visiting". People who appreciate the scenic beauty of geosites could in turn play their part for the conservation and management of these geosites. Education about the geosites also raises awareness for their protection [106].

The fact that geosites combining certain features are more interesting to all types of respondents, irrespective of their geoscience background, is important for geotourism development. The presence of a viewpoint was an important factor in the scenic beauty rating. Mikhailenko and Ruban [107] also indicated that the value of viewpoints (also called viewpoint geosites) in the western Caucasus (Russia), is strongly linked to their aesthetic properties. This study demonstrated that geosites combining a local geo-feature and a viewpoint were the most preferred by all groups of respondents. A study conducted in the Lake Tana region in Ethiopia also found that geosites combining a local geo-feature and a viewpoint were rated highest for their scenic beauty [16]. In addition, a survey of 582 visitors in the Albacete mountains (Spain), indicated that among the components that shape the character of the landscape (such as relief, water, vegetation, rural habitat, the combination of human and natural environments, climate, rural landscape, environmental quality and wildlife), the most important landscape component (as indicated by the rankings of these components by the respondents) was relief which includes mountains, gorges and valleys [108]. Such landscape components combine a local geo-feature and a viewpoint, and hence also support our finding. Geosites that combine a local geo-feature and a viewpoint can cater to the needs of different types of geotourists: from those that are purely interested in the geo-feature to those that just want to appreciate the scenic beauty of geosites.

Although there can be factors which might influence the perception of observers in a photo-based scenic beauty assessment such as the height of the horizon in the photograph and the shape of the photograph (e.g., square vs. wide angle), we believe that this had a minor impact on scenic beauty ratings of the geosites in our study. This is because the representative photographs of the geosites were carefully selected from many photos the first and second authors of this paper took during the field excursion in 2019. Where we believed that our photos were not representative, we selected some photos from previous excursions to the study area or from the internet. In addition, we showed two to three representative photos of each geosite to the respondents, in order to provide them with a typical view of the geosite. Moreover, the photo-based survey was conducted online using "Google Forms" and one photo was displayed per page and hence no downsizing of photos was made. In addition, we based our answers to hypothesis two mainly on the comparison of scenic beauty ratings between the NGB-NV and GB-NV groups, who rated scenic beauty based on photos of the geosites.

We acknowledge the limitation of our research in that the geosites selected were mainly related to geomorphology and human–environment interactions, and therefore lack more diversity. The number of participants (*n* = 176) in the survey was also relatively small and less diverse in their socio-demographic background. Moreover, the NGB-NV group rated scenic beauty based on photographs only. Future research could investigate scenic beauty rating with the following settings: (1) larger sample size of respondents and more diverse socio-demographic profiles; (2) more diverse geosites; (3) respondents with geoscience and no-geoscience background both groups visiting geosites in real life and one group offered scientific information and the other not, and repeating this for multiple groups; (4) scientific value of geosites rated by persons other than those who rate the scenic beauty. Although our study reveals some important relations, future research taking these recommendations into account will allow the drawing of more general conclusions about the relationship between scenic beauty and scientific value, as well as the contribution of geoscience knowledge to perceived scenic beauty rating.

Appendix A

Table A1. Description of the geosites in southeastern Spain. For their location, see Figure 1b; for their scenic beauty rating, see Table A3 in Appendix A; for their photos, see Questionnaire S1 in the Supplementary Materials.

Geosite Number [a]	Name of the Geosite, and/or Town	Major Features
1	Boca Andarax, Almeria	Delta of the Andarax river, coastal erosion and Holocene environmental change. Viewpoint on sierras and pediments.
2	Torre Garcia, Retamar	Marine terraces, Palomares fault, vegetated sand dunes, Rambla de las Amoladeras, archaeological site where garum (fermented fish sauce) was produced in Roman times.
3	Las Salinas, La Fabriquilla	Lagoon with salt production basins (Salinas), alluvial fans at the foot of Sierra de Gata
4	Punta Baja, Cabo de Gata	Volcanic plug and quarry with exposure of andesitic columns.
5	Cerro Pistolas, El Nazareno	Viewpoint over Sierra de Gata and Nijar basin, traditional (Cortijo) and modern (greenhouses) land use (littoralisation)
6	Albaricoques	Sierra de Gata with ancient water harvesting cistern (aljibe) along a transhumance route
7	San Diego Mine, Rodalquilar	Sierra de Gata with an ancient gold mine, ignimbrites and mine dumps
8	Rodalquilar Mine, Rodalquilar	Sierra de Gata with an ancient gold mine and gold extraction factory, caldera
9	La Isleta del Moro	Coastal evolution, alluvial fans and basalt columns
10	Los Escullos	Fossil dunes, eolianite rock cliff with tafoni (honeycomb weathering)
11	El Puntal	Pleistocene alluvial fan with dated calcretes (petrocalcic horizon)
12	Rambla Nogalte, Puerto Lumbreras	Ephemeral river channel, impact of historical flash floods (up to 2500 m^3/s)
13	Lorca Castle, Lorca	Horst and graben site, Lorca-Alhama fault, hogbacks, land use
14	Puentes Dam, La Parroquia	Impact of massive sedimentation in Puentes reservoir (storage capacity loss)
15	Rambla Salada, Zarcilla de Ramos	Ephemeral channel and exposure of gypsum-rich and (Quaternary) valley-fill deposits, present-day channel bank failures and bank gullies, gully erosion control using check dams
16	Sierra de la Torrecilla, La Fuensanta	Impact of land use (almond grove monoculture) on soil erosion by water and tillage, gully erosion control using large check dams and "clear water effects" in downstream gully channel
17	Rio Alias, Los Alamillos	Evolution of river terrace composition following a river capture

Table A1. *Cont.*

Geosite Number [a]	Name of the Geosite, and/or Town	Major Features
18	Rambla de los Feos, Los Arejos	River terraces on gypsum and marls
19	Los Perales	Viewpoint on Sorbas basin, Rio Aguas valley, wind gap (river capture site), large-scale landslides (including rock topple, rockfall and large and deep tension cracks), thick gypsum deposits resting on marls.
20	Los Molinos	Viewpoint on Sorbas basin, Rio Aguas valley, relief inversion, river capture, gypsum plateau and gypsum karst features (sinkholes and caves)
21	Lucainena de las Torres	Iron ore mines in Sierra Alhamilla (mica schists) and industrial archaeological site (furnaces to extract iron)
22	Los Yesos	Undissected Tabernas basin with large-scale irrigated olive monoculture
23	Los Millares	Viewpoint over dissected Tabernas basin, Rio Andarax and surrounding sierras. Copper-age (Chalcolithic) archaeological site on promontory near the Rio Andarax
24	Bar Alfaro, Tabernas	Badlands near rambla de Tabernas with exposures of flysch and marls, fault and travertine dam.
25	Mini Hollywood, Tabernas	Viewpoint on badlands near rambla de Tabernas, Sierra Alhamilla, and on Alfaro hogback.
26	Rambla Honda, Tabernas	Large-scale fan infilling valley cut into mica schists, hogbacks and remnants of historic settlements with traditional spate irrigation systems (terraces and canals).
27	La Calahorra castle, La Calahorra	Viewpoint on Sierra Nevada, open-pit iron mine of Marquesada and on Guadix basin.
28	Esfiliana	Large bank gullies dissecting gently sloping gravelly alluvial fans in the Guadix basin.
29	Gorafe	Viewpoint over Rio Gor valley cut in Guadix-Baza basin, with large-scale landslides, groundwater calcretes, Bronze-age megalithic park
30	Alicun de las Torres	Viewpoint over Rio Fardes valley and large travertine dams, hot water springs
31	Belerda	Viewpoint on Sierra Nevada, Guadix basin infill, large valley-bottom gully and groundwater calcretes
32	Rio Aguas, Sorbas	Ephemeral stream channel with heterogeneous bedload deposit.
33	Embalse de Isabel II, Níjar	Valley cut in mica schists of the Sierra de los Filabres, with completely infilled reservoir
34	El Hoyazo, Níjar	Eroded volcano with volcanic plug and coral reef deposits, ancient garnet mining site

[a] The geosites were numbered based on the order in which they were visited by the GB-V group.

Table A2. Grouping of the 34 geosites into 5 clusters based on features of interest (see the methodology section to understand how the classification was made).

Geosite Number	Geosite Name	Features of Interest at the Geosite
1	Boca Andarax	Local geo-feature, viewpoint
2	Torre Garcia	Human–environment interaction, local geo-feature, viewpoint
3	Las Salinas	Human–environment interaction, local geo-feature, viewpoint
4	Punta Baja	Local geo-feature, viewpoint
5	Cerro Pistolas	Human–environment interaction, viewpoint
6	Albaricoques	Human–environment interaction, viewpoint
7	San Diego Mine	Human–environment interaction, viewpoint
8	Rodalquilar Mine	Human–environment interaction, local geo-feature, viewpoint
9	La Isleta del Moro	Local geo-feature, viewpoint
10	Los Escullos	Local geo-feature, viewpoint
11	El Puntal	Local geo-feature
12	Rambla Nogalte	Human–environment interaction
13	Lorca Castle	Local geo-feature, viewpoint
14	Puentes Dam	Human–environment interaction
15	Zarcilla de Ramos (Rambla Salada)	Local geo-feature
16	Sierra de la Torrecilla	Human–environment interaction, viewpoint
17	Rio Alias	Local geo-feature
18	Rambla de los Feos	Local geo-feature
19	Los Perales	Local geo-feature, viewpoint
20	Los Molinos	Local geo-feature, viewpoint
21	Lucainena de las Torres	Human–environment interaction, viewpoint

Table A2. *Cont.*

Geosite Number	Geosite Name	Features of Interest at the Geosite
22	Los Yesos	Human–environment interaction, viewpoint
23	Los Millares	Human–environment interaction, viewpoint
24	Bar Alfaro	Local geo-feature, viewpoint
25	Mini Hollywood	Local geo-feature, viewpoint
26	Rambla Honda	Human–environment interaction, local geo-feature, viewpoint
27	La Calahorra	Human–environment interaction, viewpoint
28	Esfiliana	Local geo-feature, viewpoint
29	Gorafe	Human–environment interaction, viewpoint
30	Alicun de las Torres	Local geo-feature, viewpoint
31	Belerda	Local geo-feature, viewpoint
32	Rio Aguas	Local geo-feature
33	Embalse de Isabel II	Human–environment interaction, viewpoint
34	El Hoyazo	Local geo-feature, viewpoint

Table A3. Socio-demographic profile of the three respondent groups (*n* = number of persons).

Socio-Demographic Variables		NGB-NV Group (*n* = 104) Frequency *n* (%)	GB-NV Group (*n* = 43) Frequency *n* (%)	GB-V Group (*n* = 29) Frequency *n* (%)	Total Respondents (*n* = 176) Frequency *n* (%)
Gender [a] (*n* = 171)	Female	51 (49)	14 (32.6)	7 (29.2)	72 (42.1)
	Male	53 (51)	29 (67.4)	17 (70.8)	99 (57.9)
Age (*n* = 147)	18–29	46 (44.2)	25 (58.1)	NA [b]	71 (48.3)
	30–49	25 (24.1)	10 (23.3)	NA	35 (23.8)
	50–77	33 (31.7)	8 (18.6)	NA	41 (27.9)
Education level [a] (*n* = 169)	Bachelor's degree (*n* = 54)	34 (34.3)	11 (25.6)	9 (33.3)	54 (32.0)
	Master's degree	58 (58.6)	24 (55.8)	16 (59.3)	98 (58.0)
	PhD degree	7 (7.1)	8 (18.6)	2 (7.4)	17 (10.0)
Country of residence (*n* = 176)	Belgium	67 (64.4)	29 (67.4)	28 (96.6)	125 (71.0)
	Other	37 (35.6)	14 (32.6)	1 (3.4)	52 (29.0)
Continents visited [a] (*n* = 175)	No travel outside my continent	25 (24)	14 (32.5)	9 (32.1)	48 (27.4)
	Visited one other continent	41 (39.4)	7 (16.3)	6 (21.4)	54 (30.9)
	Visited 2–3 other continents	21 (20.2)	15 (34.9)	8 (28.6)	44 (25.1)
	Visited 4–5 other continents	17 (16.4)	7 (16.3)	5 (17.9)	29 (16.6)
Primarily preferred attraction types (*n* = 173)	Biodiversity	8 (7.7)	1 (2.3)	4 (15.4)	13 (7.5)
	Biodiversity and culture-history	11 (10.6)	0 (0.0)	0 (0.0)	11 (6.4)
	Biodiversity and geology-landscape	2 (1.9)	1 (2.3)	0 (0.0)	3 (1.7)
	Biodiversity, culture-history and geology-landscape	20 (19.2)	11 (25.6)	0 (0.0)	31 (17.9)
	Culture-history	28 (26.9)	4 (9.3)	5 (19.2)	37 (21.4)
	Culture-history and geology-landscape	17 (16.4)	10 (23.3)	0 (0.0)	27 (15.6)
	Geology-landscape	18 (17.3)	16 (37.2)	17 (65.4)	51 (29.5)

[a] Missing values for the GB-V group. [b] NA = data not available.

Table A4. Comparison of mean scenic beauty ratings (standard deviations in parentheses) of the 34 individual geosites by the three groups of respondents, grouped following their geoscience background and field visits: NGB-NV = No-Geoscience Background-No Visit to geosites; GB-NV = Geoscience Background-No Visit to geosites; GB-V = Geoscience Background-Visit to geosites.

Geosite Number	Name of the Geosite	Mean of the NGB-NV Group	Mean of the GB-NV Group	Mean of the GB-V Group	F Value
1	Boca Andarax	3.25 (0.93)	3.02 (1.01)	2.28 (0.92)	11.92 ***
2	Torre Garcia	3.04 (0.92)	2.88 (0.88)	2.97 (0.82)	0.46
3	Las Salinas	2.61 (0.84)	2.63 (1.05)	3.31 (1)	6.95 **
4	Punta Baja	3.85 (0.89)	4.35 (0.61)	4.79 (0.41)	19.65 ***
5	Cerro Pistolas	3.56 (0.9)	3.65 (0.9)	3.10 (1.11)	3.35 *
6	Albaricoques	2.62 (0.96)	2.65 (1.02)	2.83 (0.85)	0.56
7	San Diego Mine	3.5 (0.91)	3.74 (1.11)	3.48 (0.95)	1.06
8	Rodalquilar Mine	2.87 (1.01)	3.12 (1.1)	3.86 (0.79)	11.35 ***
9	La Isleta del Moro	4 (0.86)	3.81 (1.03)	3.69 (1.04)	1.51
10	Los Escullos	4.28 (0.85)	4.58 (0.7)	4.45 (0.78)	2.26
11	El Puntal	2.37 (0.89)	2.05 (1.07)	1.83 (1.07)	4.20 *

Table A4. *Cont.*

Geosite Number	Name of the Geosite	Mean of the NGB-NV Group	Mean of the GB-NV Group	Mean of the GB-V Group	F Value
12	Rambla Nogalte	2.09 (1.06)	2.26 (1.14)	2.04 (0.95)	0.39
13	Lorca Castle	2.93 (0.98)	2.86 (1.04)	3.86 (0.83)	11.69 ***
14	Puentes Dam	2.98 (0.9)	2.95 (1.17)	2.45 (1.02)	3.38 *
15	Zarcilla de Ramos (Rambla Salada)	3.54 (0.92)	3.67 (0.99)	3.59 (0.68)	0.34
16	Sierra de la Torrecilla	3.4 (0.96)	3.49 (1.05)	3.45 (0.83)	0.12
17	Rio Alias	2.86 (1)	3.33 (0.94)	3.21 (0.9)	4.15 *
18	Rambla de los Feos	3.07 (0.95)	3.53 (0.93)	2.69 (0.85)	7.56 ***
19	Los Perales	3.13 (0.98)	3.65 (1.15)	3.52 (1.02)	4.45 *
20	Los Molinos	3.44 (0.98)	3.7 (1.08)	4.14 (0.92)	5.69 **
21	Lucainena de las Torres	3.93 (0.85)	3.86 (1.08)	3.48 (0.83)	2.8
22	Los Yesos	3.07 (1.05)	2.72 (1.05)	2.07 (0.96)	10.82 ***
23	Los Millares	3.61 (0.95)	3.6 (1.07)	3.62 (1.08)	0.00
24	Bar Alfaro	3.53 (0.99)	4.21 (0.94)	4.38 (0.86)	13.19 ***
25	Mini Hollywood	3.76 (1.03)	4.51 (0.63)	4 (0.89)	10.08 ***
26	Rambla Honda	3.23 (1.04)	3.72 (0.91)	3.79 (1.01)	5.69 **
27	La Calahorra	3.23 (1.05)	3.53 (0.98)	4.21 (0.82)	10.88 ***
28	Esfiliana	3.37 (1.01)	3.63 (1.05)	2.76 (0.95)	6.61 **
29	Gorafe	2.73 (0.93)	2.67 (0.99)	4.28 (0.7)	35.61 ***
30	Alicun de las Torres	3.57 (0.97)	3.88 (0.79)	4.83 (0.54)	23.62 ***
31	Belerda	3.37 (0.88)	3.63 (1.16)	3 (1)	3.6 *
32	Rio Aguas	2.3 (0.95)	2.49 (0.96)	2.14 (0.92)	1.24
33	Embalse de Isabel II	2.89 (1)	3.07 (0.99)	3.1 (1.01)	0.77
34	El Hoyazo	3.5 (1.01)	3.65 (0.92)	4.38 (0.56)	10.10 ***

* $p < 0.05$; ** $p < 0.01$.; ** $p < 0.001$.

Table A5. Mean scientific value ratings of the 34 geosites, rated by the GB-V group ($n = 29$ persons).

Geosite Number	Geosite Name	Scientific Value Rating	Geosite Number	Geosite Name	Scientific Value Rating
1	Boca Andarax	3.03	18	Rambla de los Feos	3.28
2	Torre Garcia	3.25	19	Los Perales	3.72
3	Las Salinas	3.29	20	Los Molinos	3.89
4	Punta Baja	4.24	21	Lucainena de las Torres	3.00
5	Cerro Pistolas	3.45	22	Los Yesos	2.39
6	Albaricoques	2.83	23	Los Millares	3.72
7	San Diego Mine	3.10	24	Bar Alfaro	4.52
8	Rodalquilar Mine	3.59	25	Mini Hollywood	3.86
9	La Isleta del Moro	3.17	26	Rambla Honda	3.48
10	Los Escullos	4.32	27	La Calahorra	3.32
11	El Puntal	2.64	28	Esfiliana	3.29
12	Rambla Nogalte	3.52	29	Gorafe	4.14
13	Lorca Castle	3.79	30	Alicun de las Torres	4.59
14	Puentes Dam	2.86	31	Belerda	3.06
15	Zarcilla de Ramos (Rambla Salada)	3.64	32	Rio Aguas	2.82
16	Sierra de la Torrecilla	3.63	33	Embalse de Isabel II	3.62
17	Rio Alias	3.71	34	El Hoyazo	4.66
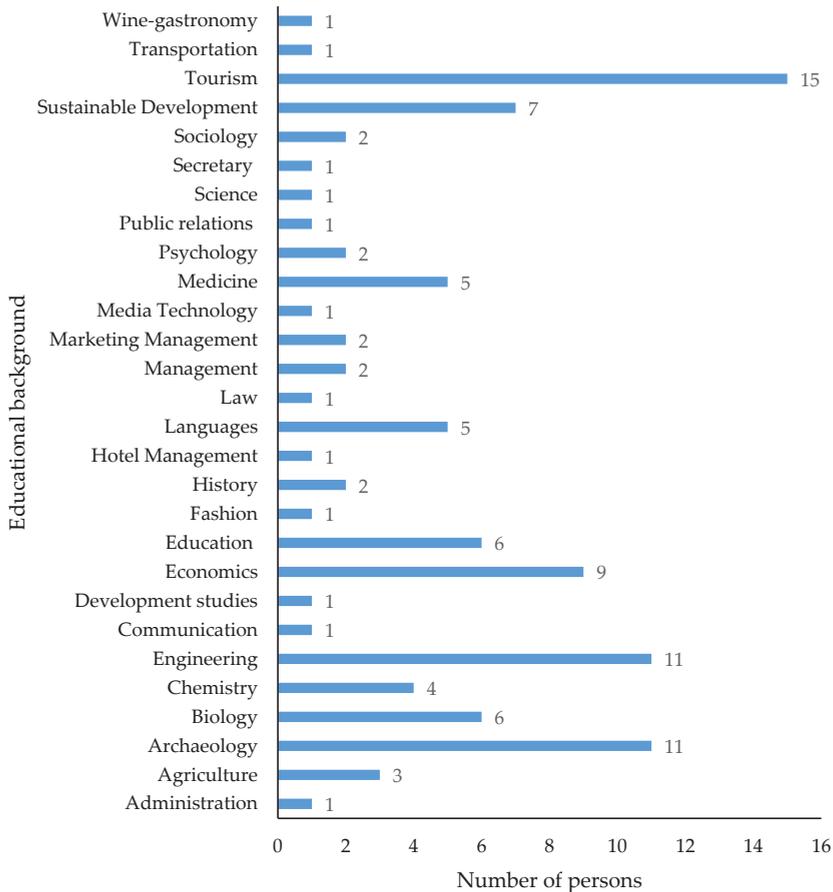
Figure A1. Number of persons in the NGB-NV group (total = 104) and their educational background.

References

1. Coratza, P.; Reynard, E.; Zwoliński, Z. Geodiversity and Geoheritage: Crossing Disciplines and Approaches. *Geoheritage* **2018**, *10*, 525–526. [CrossRef]
2. Gray, M. Geodiversity: The backbone of Geoheritage and Geoconservation. In *Geoheritage. Assessment, Protection, and Management*; Reynard, E., Brilha, J., Eds.; Elsevier Inc.: Amsterdam, The Netherlands, 2018; pp. 13–25.
3. Gray, M. *Valuing and Conserving Abiotic Nature*; John Wiley & Sons: Chichester, England, 2004; ISBN 0470848952.
4. Dowling, R.K. Global Geotourism—An Emerging Form of Sustainable Tourism. *Czech J. Tour.* **2013**, *2*, 59–79. [CrossRef]
5. Kubalíková, L. Geomorphosite assessment for geotourism purposes. *Czech J. Tour.* **2013**, *2*, 80–104. [CrossRef]
6. Schrodt, F.; Bailey, J.J.; Daniel Kissling, W.; Rijsdijk, K.F.; Seijmonsbergen, A.C.; Van Ree, D.; Hjort, J.; Lawley, R.S.; Williams, C.N.; Anderson, M.G.; et al. To advance sustainable stewardship, we must document not only biodiversity but geodiversity. *Proc. Natl. Acad. Sci. USA* **2019**, *116*, 16155–161658. [CrossRef]
7. Brilha, J. Inventory and Quantitative Assessment of Geosites and Geodiversity Sites: A Review. *Geoheritage* **2016**, *8*, 119–134. [CrossRef]
8. Huggett, R.J. *Fundamentals of Geomorphology*, 4th ed.; Routledge: New York, NY, USA, 2017; ISBN 9781138940642.
9. Reynard, E. Geosite. In *Encyclopedia of Geomorphology*; Goudie, A.S., Ed.; Routledge: London, UK, 2004; p. 440.
10. Newsome, D.; Dowling, R. The scope and nature of geotourism. In *Geotourism*; Dowling, R., Newsome, D., Eds.; Elsevier Butterworth Heinemann: Oxford, UK, 2006; pp. 3–25.
11. Wimbledon, W.A.P. Geoheritage in Europe and its conservation. *Episodes* **2013**, *36*, 68. [CrossRef]
12. Farsani, N.T.; de Carvalho, C.N.; Xu, K. Education as a key tenet of geotourism. In *Handbook of Geotourism*; Dowling, R., Newsome, D., Eds.; Edward Elgar Publishing Limited: Cheltenham, UK, 2018; pp. 234–243.

13. Gajek, G.; Zgłobicki, W.; Kołodyńska-Gawrysiak, R. Geoeducational Value of Quarries Located Within the Małopolska Vistula River Gap (E Poland). *Geoheritage* **2019**, *11*, 1335–1351. [CrossRef]
14. Sanz, J.; Zamalloa, T.; Maguregi, G.; Fernandez, L.; Echevarria, I. Educational Potential Assessment of Geodiversity Sites: A Proposal and a Case Study in the Basque Country (Spain). *Geoheritage* **2020**, *12*, 23. [CrossRef]
15. Bentivenga, M.; Cavalcante, F.; Mastronuzzi, G.; Palladino, G.; Prosser, G. Geoheritage: The Foundation for Sustainable Geotourism. *Geoheritage* **2019**, *11*, 1367–1369. [CrossRef]
16. Tessema, G.A.; van der Borg, J.; Minale, A.S.; Van Rompaey, A.; Adgo, E.; Nyssen, J.; Asrese, K.; Van Passel, S.; Poesen, J. Inventory and Assessment of Geosites for Geotourism Development in the eastern and southeastern Lake Tana region, Ethiopia. *Geoheritage*. accepted.
17. Zgłobicki, W.; Poesen, J.; Cohen, M.; Del Monte, M.; García-Ruiz, J.M.; Ionita, I.; Niacsu, L.; Machová, Z.; Martín-Duque, J.F.; Nadal-Romero, E.; et al. The Potential of Permanent Gullies in Europe as Geomorphosites. *Geoheritage* **2019**, *11*, 217–239. [CrossRef]
18. Brilha, J. Geoheritage: Inventories and evaluation. *Geoherit. Assess. Prot. Manag.* **2018**, 69–85. [CrossRef]
19. Pereira, P.; Pereira, D.; Caetano Alves, M.I. Geomorphosite assessment in Montesinho Natural Park (Portugal). *Geogr. Helv.* **2007**, *62*, 159–168. [CrossRef]
20. Reynard, E.; Fontana, G.; Kozlik, L.; Scapozza, C. A method for assessing "scientific" and "additional values" of geomorphosites. *Geogr. Helv.* **2007**, *62*, 148–158. [CrossRef]
21. Pereira, P.; Pereira, D. Methodological guidelines for geomorphosite assessment. *Geomorphol. Relief Process. Environ.* **2010**, *2*, 215–222. [CrossRef]
22. Vujičić, M.D.; Vasiljević, D.A.; Marković, S.B.; Hose, T.A.; Lukić, T.; Hadžić, O.; Janićević, S. Preliminary geosite assessment model (GAM) and its application on fruška gora mountain, potential geotourism destination of Serbia. *Acta Geogr. Slov.* **2011**, *51*, 361–377. [CrossRef]
23. Fassoulas, C.; Mouriki, D.; Dimitriou-Nikolakis, P.; Iliopoulos, G. Quantitative Assessment of Geotopes as an Effective Tool for Geoheritage Management. *Geoheritage* **2012**, *4*, 177–193. [CrossRef]
24. The selection criteria. Available online: https://whc.unesco.org/en/criteria/ (accessed on 5 April 2020).
25. Matthews, P. Scientific knowledge and the aesthetic appreciation of nature. *J. Aesthet. Art Crit.* **2002**, *60*, 37–48. [CrossRef]
26. Ribe, R.G. Is scenic beauty a proxy for acceptable management? The influence of environmental attitudes on landscape perceptions. *Environ. Behav.* **2002**, *34*, 757–780. [CrossRef]
27. Cassatella, C. Landscape Scenic Values: Protection and Management from a Spatial-Planning Perspective. In *Nature Policies and Landscape Policies: Towards an Alliance*; Gambino, R., Peano, A., Eds.; Springer International Publishing: Berlin/Heidelberg, Germany, 2015; pp. 341–352.
28. Asur, F.; Sevimli Deniz, S.; Yazici, K. Visual preferences assessment of landscape character types using data mining methods (Apriori algorithm): The case of Altınsaç and Inkoy (Van/Turkey). *J. Agric. Sci. Technol.* **2020**, *22*, 247–260.
29. Gosal, A.S.; Ziv, G. Landscape aesthetics: Spatial modelling and mapping using social media images and machine learning. *Ecol. Indic.* **2020**, *117*, 106638. [CrossRef]
30. Williams, A.T. The concept of scenic beauty in a landscape. *Coast. Res. Libr.* **2019**, *26*, 17–41. [CrossRef]
31. Ruban, D.A. Aesthetic properties of geological heritage landscapes: Evidence from the Lagonaki Highland (Western Caucasus, Russia). *J. Geogr. Inst. "Jovan Cvijić" Sasa* **2018**, *68*, 289–296. [CrossRef]
32. Seresinhe, C.I.; Preis, T.; MacKerron, G.; Moat, H.S. Happiness is Greater in More Scenic Locations. *Sci. Rep.* **2019**, *9*, 4498. [CrossRef]
33. Seresinhe, C.I.; Preis, T.; Moat, H.S. Quantifying the Impact of Scenic Environments on Health. *Sci. Rep.* **2015**, *5*, 16899. [CrossRef]
34. Ruban, D.A.; Sallam, E.S.; Ermolaev, V.A.; Yashalova, N.N. Aesthetic Value of Colluvial Blocks in Geosite-Based Tourist Destinations: Evidence from SW Russia. *Geoscience* **2020**, *10*, 51. [CrossRef]
35. Ribe, R.G. On the possibility of quantifying scenic beauty—A response. *Landsc. Plan.* **1982**, *9*, 61–74. [CrossRef]
36. Lothian, A. Landscape and the philosophy of aesthetics: Is landscape quality inherent in the landscape or in the eye of the beholder? *Landsc. Urban Plan.* **1999**, *44*, 177–198. [CrossRef]
37. Tveit, M.S.; Sang, A.O.; Hagerhall, C.M. Scenic beauty: Visual landscape assessment and human landscape perception. In *Environmental Psychology: An Introduction*, 1st ed.; Steg, L., van den Berg, A.E., de Groot, J.I.M., Eds.; Wiley-Blackwell: London, UK, 2013; pp. 34–46.
38. Kalivoda, O.; Vojar, J.; Skřivanová, Z.; Zahradník, D. Consensus in landscape preference judgments: The effects of landscape visual aesthetic quality and respondents' characteristics. *J. Environ. Manag.* **2014**, *137*, 36–44. [CrossRef] [PubMed]
39. Chang Chien, Y.-M.; Carver, S.; Comber, A. An Exploratory Analysis of Expert and Nonexpert-Based Land-scape Aesthetics Evaluations: A Case Study from Wales. *Land* **2021**, *10*, 192. [CrossRef]
40. Daniel, T.C. Whither scenic beauty? Visual landscape quality assessment in the 21st century. *Landsc. Urban Plan.* **2001**, *54*, 267–281. [CrossRef]
41. Tveit, M.S. Indicators of visual scale as predictors of landscape preference; a comparison between groups. *J. Environ. Manag.* **2009**, *90*, 2882–2888. [CrossRef] [PubMed]
42. Frank, S.; Fürst, C.; Koschke, L.; Witt, A.; Makeschin, F. Assessment of landscape aesthetics—Validation of a landscape metrics-based assessment by visual estimation of the scenic beauty. *Ecol. Indic.* **2013**, *32*, 222–231. [CrossRef]

43. Ozkan, U.Y. Assessment of visual landscape quality using IKONOS imagery. *Environ. Monit. Assess.* **2014**, *186*, 4067–4080. [CrossRef]
44. Othman, J. Assessing Scenic Beauty of Nature-based Landscapes of Fraser's Hill. *Procedia Environ. Sci.* **2015**, *30*, 115–120. [CrossRef]
45. Mo, L.; Chen, J.; Xie, Y. Assessment of landscape resource using the scenic beauty estimation method at compound ecological system. *Environ. Sci. Pollut. Res.* **2021**, *28*, 5892–5899. [CrossRef] [PubMed]
46. Arriaza, M.; Cañas-Ortega, J.F.; Cañas-Madueño, J.A.; Ruiz-Aviles, P. Assessing the visual quality of rural landscapes. *Landsc. Urban Plan.* **2004**, *69*, 115–125. [CrossRef]
47. Bevk, T.; Martinez, N.M.; Brereton, P.; Laloševi, M.; Peri, M. Iterative Digital Photo-based Assessment for Rural Landscape Perception: A Small Experiment from County Wicklow, Ireland. *J. Digit. Landsc. Archit.* **2017**, *2*, 18–27. [CrossRef]
48. Wang, Y.; Zlatanova, S.; Yan, J.; Huang, Z.; Cheng, Y. Exploring the relationship between spatial morphology characteristics and scenic beauty preference of landscape open space unit by using point cloud data. *Environ. Plan. B Urban Anal. City Sci.* **2020**, *0*, 1–19. [CrossRef]
49. Dramstad, W.E.; Tveit, M.S.; Fjellstad, W.J.; Fry, G.L.A. Relationships between visual landscape preferences and map-based indicators of landscape structure. *Landsc. Urban Plan.* **2006**, *78*, 465–474. [CrossRef]
50. Svobodova, K.; Sklenicka, P.; Molnarova, K.; Salek, M. Visual preferences for physical attributes of mining and post-mining landscapes with respect to the sociodemographic characteristics of respondents. *Ecol. Eng.* **2012**, *43*, 34–44. [CrossRef]
51. Zhao, J.; Wang, R.; Cai, Y.; Luo, P. Effects of Visual Indicators on Landscape Preferences. *J. Urban Plan. Dev.* **2013**, *139*, 70–78. [CrossRef]
52. Svobodova, K.; Sklenicka, P.; Vojar, J. How does the representation rate of features in a landscape affect visual preferences? A case study from a post-mining landscape. *Int. J. Min. Reclam. Environ.* **2015**, *29*, 266–276. [CrossRef]
53. Wang, R.; Zhao, J.; Liu, Z. Consensus in visual preferences: The effects of aesthetic quality and landscape types. *Urban For. Urban Green.* **2016**, *20*, 210–217. [CrossRef]
54. Chesnokova, O.; Nowak, M.; Purves, R.S. A crowdsourced model of landscape preference. *Leibniz Int. Proc. Inform. LIPIcs* **2017**, *86*, 1–13. [CrossRef]
55. López-Martínez, F. Visual landscape preferences in Mediterranean areas and their socio-demographic influences. *Ecol. Eng.* **2017**, *104*, 205–215. [CrossRef]
56. Eroğlu, E.; Kaya, S.; Dogan, T.G.; Meral, A.; Demirci, S.; Başaran, N.; Corbaci, O.L. Determination of the Visual Preferences of Different Habitat Types. *Fresenius Environmental Bulletin.* **2018**, *27*, 4889–4899.
57. Unwin, K.I. The Relationship of Observer and Landscape in Landscape Evaluation. *Trans. Inst. Br. Geogr.* **1975**, *66*, 130. [CrossRef]
58. Gungor, S.; Polat, A.T. Relationship between visual quality and landscape characteristics in urban parks. *J. Environ. Prot. Ecol.* **2018**, *19*, 939–948.
59. Migoń, P. Geoheritage and World Heritage Sites. In *Geoheritage. Assessment, Protection, and Management*; Reynard, E., Brilha, J., Eds.; Elsevier Inc.: Amsterdam, The Netherlands, 2018; pp. 237–250.
60. Kirillova, K.; Fu, X.; Lehto, X.; Cai, L. What makes a destination beautiful? Dimensions of tourist aesthetic judgment. *Tour. Manag.* **2014**, *42*, 282–293. [CrossRef]
61. Skřivanová, Z.; Kalivoda, O.; Sklenička, P. Driving factors for visual landscape preferences in protected landscape areas. *Sci. Agric. Bohem.* **2014**, *2014*, 36–43. [CrossRef]
62. Gruehn, D.; Roth, M. Landscape preference study of agricultural landscapes in Germany. *J. Landsc. Ecol.* **2010**, 67–78.
63. Chen, Y.; Sun, B.; Liao, S.B.; Chen, L.; Luo, S.X. Landscape perception based on personal attributes in determining the scenic beauty of in-stand natural secondary forests. *Ann. For. Res.* **2016**, *59*, 91–103. [CrossRef]
64. Baca, I.; Schuster, E. Listing, evaluation and touristic utilisation of geosites containing archaeological artefacts. Case study: Ciceu ridge (Bistrita-Nasaud Country, Romania). *Rev. Geogr. Acad.* **2011**, *5*, 5–20.
65. Mucivuna, V.C.; Reynard, E.; Garcia, M.d.G.M. Geomorphosites Assessment Methods: Comparative Analysis and Typology. *Geoheritage* **2019**, *11*, 1799–1815. [CrossRef]
66. Carlson, A. Appreciation and the Natural Environment. *J. Aesthet. Art Crit.* **1979**, *37*, 267. [CrossRef]
67. Stecker, R. The correct and the appropriate in the appreciation of nature. *Br. J. Aesthet.* **1997**, *37*, 393–402. [CrossRef]
68. Salazar, A.; Carcavilla, L.; Díez-Herrero, A. Geomorphological Heritage and Conservation in Spain. In *Landscapes and Landforms of Spain*; Gutiérrez, F., Gutiérrez, M., Eds.; Springer: Berlin/Heidelberg, Germany, 2014; pp. 307–318.
69. Hose, T.A. A Geoheritage Case Study: Andalucía, Spain. In *Geoheritage and Geotourism. A European Perspective*; Hose, T.A., Ed.; Boydell Press: Woodbridge, UK, 2016; pp. 245–257.
70. Oyarzun, R.; Romero, E.G.; García, J.A.L.; Regueiro, M.; Molina, J.A. Teaching field geology in SE Spain: An alternative approach. European geologist. *Eur. Geol.* **2007**, *25*, 9–12.
71. Villalobos-Megía, M. Prologue. In *Geology of the Arid Zone of Almería, Southeast Spain: An Educational Guide*, 2nd ed.; Villalobos-Megía, M., Ed.; Fundación Gypaetus: Granada, Spain, 2003; p. 10.
72. Alexander, R. Some Observations on Human-Landscape interactions in Almeria. In Proceedings of the the International Symposium in memory of Prof Juan Puigdefabregas (EcoDesert), Almeria, Spain, 20–21 February 2020; pp. 131–133.
73. Ureña-Amate, M.D.; Boutarbouch, N.D.; Socias-Viciana, M.d.M.; González-Pradas, E. Controlled release of nitrate from hydrotalcite modified formulations. *Appl. Clay Sci.* **2011**, *52*, 368–373. [CrossRef]

74. Gutiérrez, F.; Harvey, A.; García-Ruiz, J.M.; Silva, P.; Cendrero, A. Geomorphological research in Spain. *Geomorphology* **2013**, *196*, 1–12. [CrossRef]

75. Bellin, N.; Vanacker, V.; Kubik, P.W. Denudation rates and tectonic geomorphology of the Spanish Betic Cordillera. *Earth Planet. Sci. Lett.* **2014**, *390*, 19–30. [CrossRef]

76. Stokes, M.; Mather, A.; Rodes, A.; Kearsey, S.; Lewin, S. Anatomy, Age and Origin of an Intramontane Top Basin Surface (Sorbas Basin, Betic Cordillera, SE Spain). *Quaternary* **2018**, *1*, 15. [CrossRef]

77. Martín-Martín, M.; Guerrera, F.; Tramontana, M. Tectono-Sedimentary Evolution of the Cenozoic Basins in the Eastern External Betic Zone (SE Spain). *Geosciences* **2020**, *10*, 394. [CrossRef]

78. Carranza, E.J.M.; van Ruitenbeek, F.J.A.; Hecker, C.; van der Meijde, M.; van der Meer, F.D. Knowledge-guided data-driven evidential belief modeling of mineral prospectivity in Cabo de Gata, SE Spain. *Int. J. Appl. Earth Obs. Geoinf.* **2008**, *10*, 374–387. [CrossRef]

79. Rodríguez-Fernández, J.; Azor, A.; Azañón, J.M. The Betic Intramontane Basins (SE Spain): Stratigraphy, Subsidence, and Tectonic History. In *Tectonics of Sedimentary Basins: Recent Advances*, 1st ed.; Busby, C., Azor, A., Eds.; Blackwell Publishing Ltd: Chichester, UK, 2012; pp. 461–479.

80. Mattei, M.; Riggs, N.R.; Giordano, G.; Guarnieri, L.; Cifelli, F.; Soriano, C.C.; Jicha, B.; Jasim, A.; Marchionni, S.; Franciosi, L.; et al. Geochronology, geochemistry and geodynamics of the Cabo de Gata volcanic zone, Southeastern Spain. *Ital. J. Geosci.* **2014**, *133*, 341–361. [CrossRef]

81. Soriano, C.C.; Giordano, G.; Riggs, N.; Porreca, M.; Bonamico, A.; Iosimi, D.; Cifelli, F.; Mattei, M.; De Benedetti, A.; Guarnieri, L.; et al. Geologic map, volcanic stratigraphy and structure of the Cabo de Gata volcanic zone, Betic-Rif orogen, SE Spain. *Ital. J. Geosci.* **2014**, *133*, 325–340. [CrossRef]

82. Valetti, L.; Rutter, E.; McCabe, A.; Mecklenburgh, J. On the structure and evolution of the Sorbas basin, S.E. Spain. *Tectonophysics* **2019**, *773*, 228230. [CrossRef]

83. Pérez-Peña, J.V.; Azor, A.; Azañón, J.M.; Keller, E.A. Active tectonics in the Sierra Nevada (Betic Cordillera, SE Spain): Insights from geomorphic indexes and drainage pattern analysis. *Geomorphology* **2010**, *119*, 74–87. [CrossRef]

84. Giaconia, F.; Booth-Rea, G.; Martínez-Martínez, J.M.; Azañón, J.M.; Pérez-Peña, J.V.; Pérez-Romero, J.; Villegas, I. Geomorphic evidence of active tectonics in the Sierra Alhamilla (eastern Betics, SE Spain). *Geomorphology* **2012**, *145–146*, 90–106. [CrossRef]

85. Alfaro, P.; Delgado, J.; García-Tortosa, F.J.; Lenti, L.; López, J.A.; López-Casado, C.; Martino, S. Widespread landslides induced by the Mw 5.1 earthquake of 11 May 2011 in Lorca, SE Spain. *Eng. Geol.* **2012**, *137–138*, 40–52. [CrossRef]

86. Do Couto, D.; Gumiaux, C.; Augier, R.; Lebret, N.; Folcher, N.; Jouannic, G.; Jolivet, L.; Suc, J.P.; Gorini, C. Tectonic inversion of an asymmetric graben: Insights from a combined field and gravity survey in the sorbas basin. *Tectonics* **2014**, *33*, 1360–1385. [CrossRef]

87. Silva, P.G.; Goy, J.L.; Zazo, C.; Bardají, T. Fault-generated mountain fronts in southeast Spain: Geomorphologic assessment of tectonic and seismic activity. *Geomorphology* **2003**, *50*, 203–225. [CrossRef]

88. Oyarzun, R.; Cubas, P.; Higueras, P.; Lillo, J.; Llanos, W. Environmental assessment of the arsenic-rich, Rodalquilar gold-(copper-lead-zinc) mining district, SE Spain: Data from soils and vegetation. *Environ. Geol.* **2009**, *58*, 761–777. [CrossRef]

89. Brotons, J.M.; Díaz, A.R.; Sarría, F.A.; Serrato, F.B. Wind erosion on mining waste in southeast Spain. *L. Degrad. Dev.* **2010**, *21*, 196–209. [CrossRef]

90. Rytuba, J.J.; Arribas, A.; Cunningham, C.G.; McKee, E.H.; Podwysocki, M.H.; Smith, J.G.; Kelly, W.C.; Arribas, A. Mineralized and unmineralized calderas in Spain; Part II, evolution of the Rodalquilar caldera complex and associated gold-alunite deposits. *Miner. Depos.* **1990**, *25*, 28–35. [CrossRef]

91. Bedini, E. Application of WorldView-3 imagery and ASTER TIR data to map alteration minerals associated with the Rodalquilar gold deposits, southeast Spain. *Adv. Sp. Res.* **2019**, *63*, 3346–3357. [CrossRef]

92. De Baets, S.; Meersmans, J.; Vanacker, V.; Quine, T.A.; Van Oost, K. Spatial variability and change in soil organic carbon stocks in response to recovery following land abandonment and erosion in mountainous drylands. *Soil Use Manag.* **2013**, *29*, 65–76. [CrossRef]

93. Castillo, C.P.; Aliaga, E.C.; Lavalle, C.; Llario, J.C.M. An assessment and spatial modelling of agricultural land abandonment in spain (2015–2030). *Sustain.* **2020**, *12*, 560. [CrossRef]

94. Quintas-Soriano, C.; Castro, A.J.; Castro, H.; García-Llorente, M. Impacts of land use change on ecosystem services and implications for human well-being in Spanish drylands. *Land Use Policy* **2016**, *54*, 534–548. [CrossRef]

95. Garcia-caparros, P.; Contreras, J.I.; Baeza, R.; Segura, M.L.; Lao, M.T. Integral Management of Irrigation Water in Intensive Horticultural Systems of Almería. *Sustainability* **2017**, *9*, 2271. [CrossRef]

96. Castro, A.J.; López-Rodríguez, M.D.; Giagnocavo, C.; Gimenez, M.; Céspedes, L.; La Calle, A.; Gallardo, M.; Pumares, P.; Cabello, J.; Rodríguez, E.; et al. Six Collective Challenges for Sustainability of Almería Greenhouse Horticulture. *Int. J. Environ. Res. Public Health* **2019**, *16*, 4097. [CrossRef] [PubMed]

97. Luis Caparrós-Martínez, J.; Rueda-Lópe, N.; Milán-García, J.; de Pablo Valenciano, J. Public policies for sustainability and water security: The case of Almeria (Spain). *Glob. Ecol. Conserv.* **2020**, *23*, 1–17. [CrossRef]

98. De Andrés, M.; Barragán, J.M.; García Sanabria, J. Relationships between coastal urbanization and ecosystems in Spain. *Cities* **2017**, *68*, 8–17. [CrossRef]

99. Custodio, E.; Andreu-Rodes, J.M.; Aragón, R.; Estrela, T.; Ferrer, J.; García-Aróstegui, J.L.; Manzano, M.; Rodríguez-Hernández, L.; Sahuquillo, A.; del Villar, A. Groundwater intensive use and mining in south-eastern peninsular Spain: Hydrogeological, economic and social aspects. *Sci. Total Environ.* **2016**, *559*, 302–316. [CrossRef]

100. Martínez-Valderrama, J.; Guirado, E.; Maestre, F.T. Unraveling misunderstandings about desertification: The paradoxical case of the Tabernas-Sorbas basin in Southeast Spain. *Land* **2020**, *9*, 269. [CrossRef]

101. Reynard, E.; Giusti, C. The landscape and the cultural value of geoheritage. In *Geoheritage. Assessment, Protection, and Management*; Reynard, E., Brilha, J., Eds.; Elsevier: Amsterdam, The Netherlands, 2018; pp. 147–165.

102. Hull IV, R.B.; Stewart, W. Validity of photo-based scenic beauty judgments. *J. Environ. Psychol.* **1992**, *12*, 101–114. [CrossRef]

103. Erikstad, L. Geoheritage and geodiversity management—The questions for tomorrow. *Proc. Geol. Assoc.* **2013**, *124*, 713–719. [CrossRef]

104. Beck, L.; Cable, T.T.; Knudson, D.M. *Interpreting Cultural and Natural Heritage: For a Better World*; Sagamore Publishing: Champaign, IL, USA, 2018; ISBN 9781571678652.

105. Newsome, D.; Dowling, R. Setting an agenda for geotourism. In *Geotourism: The Tourism of Geology and Landscape*; Newsome, D., Dowling, R., Eds.; Goodfellow Publishers Ltd.: Oxford, UK, 2010; pp. 1–12.

106. Vegas, J.; Díez-herrero, A. An Assessment Method for Urban Geoheritage as a Model for Environmental Awareness and Geotourism (Segovia, Spain). *Geoheritage* **2021**, *13*, 1–7. [CrossRef]

107. Mikhailenko, A.V.; Ruban, D.A. Environment of viewpoint geosites: Evidence from the Western Caucasus. *Land* **2019**, *8*, 93. [CrossRef]

108. Abellán, F.C.; Martínez, C.G. Landscape and tourism as tools for local development in mid-mountain rural areas in the southeast of spain (Castilla–la mancha). *Land* **2021**, *10*, 221. [CrossRef]

Transformation of the Landscape in the Conditions of the Slovak Republic for Tourism

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Abstract: Tourism is one of the most dynamic sectors of the economy in Slovakia. With the orientation of localities to tourism, the landscape transformation is reflected in several positive and negative changes in the landscape. The aim of the contribution is to highlight the transformation processes leading to the creation of a tourist landscape in six selected localities in Slovakia. When selecting sites, we applied criteria such as the diversity of the original use, size or attractiveness. The environmental, socio-cultural and economic impacts of tourism on the landscape of localities were valuable in terms of sustainable development principles. From the methodological point of view, the primary methodology was the drivers–pressures–state–impact–response (DPSIR) model, used for integrated environmental assessment and the life cycle methodology of a tourism center with integrated sustainable development indicators. In the work results, based on the analysis of the historical development and the current state of localities, we evaluate their phase of the life cycle and the effects of tourism on the environment. We also present the possibilities of further development and heading direction of localities from point of view of tourism while pointing out the benefits and risks connected with the planned development.

Keywords: landscape transformation; tourist landscape; impacts of tourism on the landscape; sustainable tourism; Slovakia

1. Introduction

The landscape is the capital for tourism. In a country with attractiveness that can result from natural factors and is the result of people and their activities, tourism primarily develops. Secondarily, tourism can also grow in places that have been used primarily for other purposes in the past. Examples are transforming a mining landscape [1] or an industrial landscape [2,3] into a tourist landscape. The result of primary and secondary activities of tourism is the transformation of the original types of the landscape into a tourist landscape. We perceive a tourist landscape according to Gunn [4] as the total physical and visual environment utilized by all tourism activities, including the whole context and infrastructure of tourism development, such as transportation, services, information, direction and, generally speaking, all such developments that attract people to a destination. Increasingly, the use of the tourist type of landscape is characterized as insensitive in terms of natural components [5–7], as well as the local population [8–10].

We, therefore, consider it very important to know the impact of tourism on the landscape, even in areas that have begun to develop tourism relatively recently and embarked on the transformation process into a tourist landscape, and the possible contribution to the sustainable development of partial areas. In this context, we raise a research question: How is the transformation of the country into a recreational landscape in selected locations which have not been used primarily for tourism, and to what extent, in line with the requirements of sustainable development?

The aim of the contribution is to highlight the transformation processes leading to the creation of a tourist landscape in six selected localities in Slovakia. As criteria of selection,

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we chose the diversity of the original use, size and attractiveness. The evaluation included the environmental, socio-cultural and economic impacts of tourism on the landscape of localities in terms of the principles of sustainable development. From a methodological point of view, the primary methodology was DPSIR, which illustrates the cause and effect relationship between environmental and human systems.

We subsequently documented the impact of tourism on representative destinations through a modified life cycle model, reflecting the criterion of such currently important sustainability. Additionally, in the paper, we present scenarios of further development and direction of localities considering tourism. In parallel, we will highlight the benefits but also the risks associated with the planned development.

2. Theoretical Background

Every landscape, including the tourist landscape, is original. Its changes can be evaluated according to Žigrai [11] based on the most important universal quantities of space and time. Space and time create an environment in which natural and human forces form and permanently transform a natural landscape into a cultural one and form its unique character [12]. Many new elements and structures are superimposed upon the traditional landscapes during the transformation that become highly fragmented and lose their identity [13]. Changes to the landscape are of interest to several geographical and landscape-ecological studies. The concept of driving forces of landscape changes is has been addressed in several studies. Bürgi, Hersperger and Schneeberger [14] identified that the spatial, temporal and institutional scales determine the driving forces of landscape change. Hersperger et al. [15] present four basic models for linking land change with driving forces and actors. The proposal of alternative pathways of some of the major myths of driving forces of land cover change is the aim of the article of Lambin et al. [16]. The analysis of changes in the landscape is important in terms of understanding the dynamics of its development, not only in the past but also in the future [17]. A detailed overview of the research and mapping of land use in the context of Slovakia is provided in the work of the authors Oťaheľ and Feranec [18]. According to Burley [19], land use stems from knowledge of the land cover and its function.

From the point of view of understanding this issue in wider territorial relations, the contribution of Prokopová et al. [20] can be inspiring, where the authors analyze transformation processes in Eastern Europe, including Slovakia. The driving forces of landscape change across Europe are presented by Plieninger et al. [21] with a systematic synthesis of 144 case studies. In a European and global context, it is necessary to mention, in terms of research into landscape changes, the implementation of various projects or programs that not only serve as suitable data sources, but also integrate the latest scientific knowledge or methodologies in this area. The most famous are the Global Land Programme (GLP) [22], which succeeds land use and land cover change (LUCC) and the Copernicus Land Monitoring Service (CLMS) [23], which provides information on land cover and land use and their change in Europe.

If the cultural landscape is used for recreational purposes according to the landscape's predominant type of activity, we indicate its subtype—the tourist landscape. Definitions of the tourist landscape can be found in a few interesting publications. Skowronek et al. [24] (p. 81) "identify tourist landscape as an area, peculiar in its physiognomy and structure, differing from other landscape types. It is recognizable and accepted by its users, created to meet their touristic and recreational needs and expectations." Terkenli [25] (pp. 185–186) claims that due especially to its experiential character, the landscape becomes a social interface where local and global perspectives and other dimensions of tourism studies come together in the ready construction and consumption of place identity. In the article of Gkoltsiou and Terkenli [26] is presented a methodological framework for assessing the structure of tourist landscapes. It is based on elements and aspects of both tourism and landscape, comprising the tourist landscape, and on qualitative and quantitative methods of landscape analysis. A detailed systematic overview of the papers dated 2003–2013

focused on the research of the mutual interaction of tourism and Skowronek et al.'s [24] process landscape. In *Landscape, Tourism and Meaning*, the authors [27] also deal with a landscape approach to tourism theory.

In connection with assessing the impacts of tourism on the environment, the authors Hall and Page in *The Geography of Tourism and Recreation* [28] deal mainly with environmental, socio-cultural and economic impacts. At present, the topic of sustainable development is also present in the works on tourism. As early as 1997, the authors Wahab and Pigram [29] in the book "Tourism, Development and Growth: The Challenge of Sustainability" deal with sustainability and opportunities and challenges in sustainable tourism. Zelenka [30] deals with research into the sustainability of tourism in the destination as well as the presentation of appropriate methods. Environmental aspects of tourism represent the key focus of the study "Environmental Studies in Tourism" from Pásková [31]. The works of Szromek [32] and Szromek et al. [33] show a combination of several approaches to identification of the life cycle stage of a tourism destination in the context of the implementation of sustainable development practices in tourism.

3. Materials and Methods

When selecting six tourist sites (Alekšince, Čierny Balog, Butkov, Hniezdne, Špania dolina, Podhájska) (Figure 1), several criteria were decisive ones. The first criterion was the transformation of the landscape. Localities were selected where the origin of the tourist landscape was a secondary phenomenon. The second criterion in the selection was the diversity of its original use. The third criterion was the size and attractiveness of the site. Through gradual selection, we identified six localities that are not considered to be attractive as a first impression and certainly are not the top destinations in Slovakia, but have recreational potential at different qualitative levels (diversity of localization, implementation and selective assumptions [34]). These localities are in regions where the intensity of tourism is not high [35].

Figure 1. Selected tourist sites and their localization in Slovakia. Source: Adapted with permission from ref. [36]. Copyright 2005–2021 e-Slovensko.cz.

The source of information during the field research, in addition to text documents, were map sources as well as aerial photographs. The black and white images with a resolution of 0.5 m come from the 1940s and 1950s [37]. We used a color orthophotomosaic to display and interpret the current state of the landscape. The orthophotomosaic was created in the years 2017–2019 based on the processing of aerial laser scanning data. Its final positioning accuracy is 0.3 m [38]. Several print and electronic resources were used for the characteristics of sites. Development and strategic documents were important in

connection with their development, such as economic development and social development programs, zoning plans, etc.

To reach the paper's primary goal, it was necessary to apply several methods to assess the impact of tourism on the landscape. We first evaluated the sites using the causal framework, also known as DPSIR. It is a methodological tool of integrated environment assessment (IEA). The model's name is an abbreviation of the first letters of driving force, pressure, state, impact and response. It was developed by the European Environment Agency, which added driving force and impact to the pressure–state–response (PSR) model developed by the OECD [39]. Driving forces, which are the triggering mechanisms of processes in society, cause pressure on the environment. Pressure (positive and negative) is the immediate cause of changes in the state of the environment. The impact is logically followed by response, in which measures and tools are formulated to eliminate or remediate environmental damage [40]. The DPSIR model can also be applied in assessing the impact of tourism on the landscape or the destination. As part of the integration of environmental policy, sets of aggregated and individual indicators were compiled for the conditions of Slovakia for six sectors of economic activity, including tourism. For tourism needs, 8 aggregated indicators and 30 individual indicators were set, which are continuously updated [41]. We applied this methodology aligned with the method of Pásková [31] and, in addition to environmental impacts, we also assessed the socio-cultural and economic impacts of tourism on a specific locality. In addition, we evaluated the adverse effects of these influences, but we also emphasized their positive impact (Figure 2).
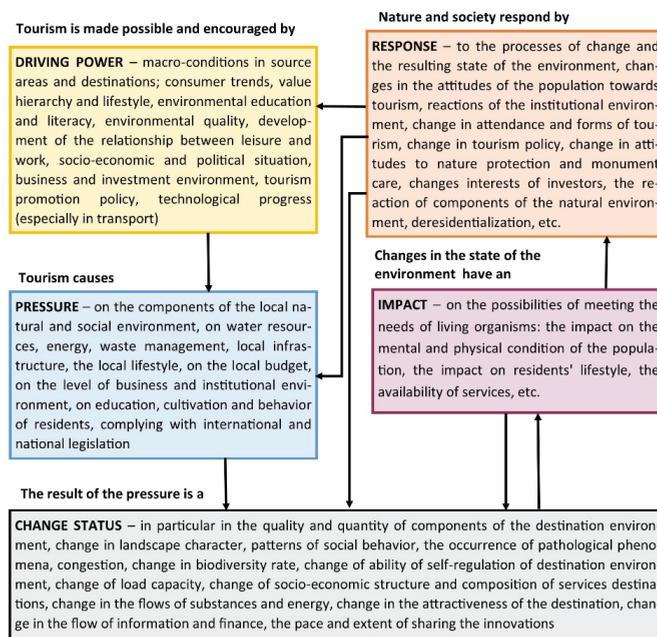
Tourism is made possible and encouraged by

DRIVING POWER – macro-conditions in source areas and destinations; consumer trends, value hierarchy and lifestyle, environmental education and literacy, environmental quality, development of the relationship between leisure and work, socio-economic and political situation, business and investment environment, tourism promotion policy, technological progress (especially in transport)

Nature and society respond by

RESPONSE – to the processes of change and the resulting state of the environment, changes in the attitudes of the population towards tourism, reactions of the institutional environment, change in attendance and forms of tourism, change in tourism policy, change in attitudes to nature protection and monument care, changes interests of investors, the reaction of components of the natural environment, deresidentialization, etc.

Tourism causes

PRESSURE – on the components of the local natural and social environment, on water resources, energy, waste management, local infrastructure, the local lifestyle, on the local budget, on the level of business and institutional environment, on education, cultivation and behavior of residents, complying with international and national legislation

Changes in the state of the environment have an

IMPACT – on the possibilities of meeting the needs of living organisms: the impact on the mental and physical condition of the population, the impact on residents' lifestyle, the availability of services, etc.

The result of the pressure is a

CHANGE STATUS – in particular in the quality and quantity of components of the destination environment, change in landscape character, patterns of social behavior, the occurrence of pathological phenomena, congestion, change in biodiversity rate, change of ability of self-regulation of destination environment, change of load capacity, change of socio-economic structure and composition of services destinations, change in the flows of substances and energy, change in the attractiveness of the destination, change in the flow of information and finance, the pace and extent of sharing the innovations

Figure 2. DPSIR model for tourism. Source [31].

The well-used Butler's model of the destination life cycle is one of the most well-known tourism center evaluations [42]. According to Pásková [31], the destination model's dynamic nature is interesting for geographers dealing with tourism development in specific localities. The model makes it possible to consider the spatial–temporal aspect and the impact on individual components of the recreational landscape. The model goes through constant development and various modifications, as evidenced by Butler and other authors [43]. In this paper, we are inspired by a modified model (Figure 3) by Szromek et al. [33].
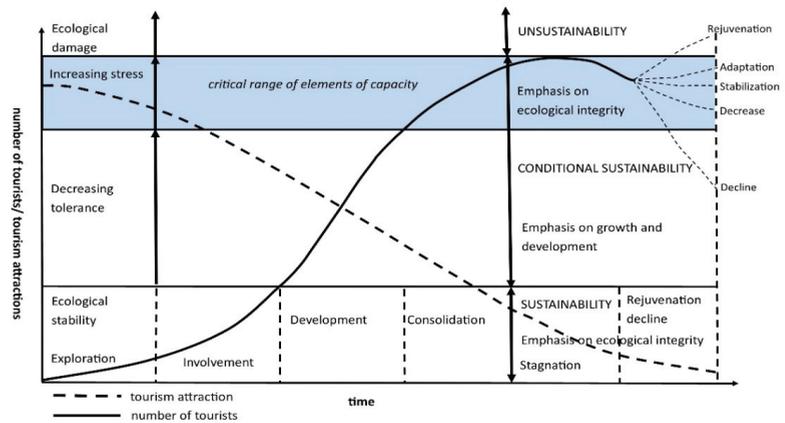
Figure 3. Life cycle model of a recreation center concerning sustainable development. Source [33,42].

The model describes the spatial and other changes that the tourism center is experiencing in its development. Based on increases of incoming tourism and the growth of the number of infrastructure facilities, various stages of development of the center can be identified from the initial level to the peak [44]. At the same time, the model also reflects the impact of an increasing number of visitors on the ecological stability of the territory as well as its sustainable development. There are 6 phases of the life cycle of the tourist center. The first phase is referred to as exploration and represents the process of discovering and creating the tourist site. It is characterized by minimal tourist traffic. The sustainable development of the territory is typical, which is based on functioning natural processes in the territory without significant anthropogenic interventions. The second phase represents penetration of tourism into the site. There is minimal impact on local society, and the landscape and its environment remains. Sustainable development with minimal manifestations of risk factors, and with few anthropogenic environmental interventions, is still prevalent in the landscape. Due to the increasing number of visitors in connection with seasonality, there may gradually be more pressure on the landscape. The third phase is the development of the tourism site. It is accompanied by the conversion of native natural landscape types and original sites into sites with a dominant recreational function. The development phase has a major impact on the environment and the local economy. The landscape is moving from a state of sustainable development to a state of conditional sustainability. In such a case, the sustainability of the territory needs to be targeted at the construction of a tourism center. It is essential to determine in advance the restrictions and limits of intervention in the territory. At this stage, the anthropogenic pressure on declining ecosystem tolerance is reflected in the growing stress in the landscape and in the decreasing ecological stability of the territory. The fourth phase is consolidation. The number of tourists already exceeds the number of locals and continues to grow. A distinct central tourist zone is being formed in the landscape and ecological damage reaches its highest levels. Stress persists in the landscape until it grows. The territory's tolerance for change is very low, as the territory has undergone significant and often irreversible changes. The fifth phase is the stagnation of the tourism center. It is associated with a conflict between the level and intensity of tourism and the recreational potential or carrying capacity of the landscape. In addition to the negative consequences for the natural components of the landscape, negative impacts on the social and cultural environment are also felt. Environmental damage reaches the peak in the landscape, and the landscape significantly changes its appearance, structure and function. Alternatively, the tourism center may move from stagnation to rejuvenation, adaptation, stabilization, decrease or decline [42,45,46].

4. Results

4.1. Examples of Transformed Territories of Slovakia into Tourism Localities

4.1.1. Alekšince

An example of a transformed landscape with the military form of relief is the village of Alekšince, specifically its Museum of Socialism and the Cold War. The village of Alekšince is located in the west of Slovakia. The area of the village is 15.07 km^2 and the village has 1669 inhabitants (as of 31 December 2019). The relief of lowland hills is dominant, while the village center is located at an altitude of 162 m. The traditional landscape type of the municipality in terms of land use is agricultural landscape, which accounts for 89.9%. Arable land takes up 82.4% of the village area, vineyards 3.23%, gardens 2.67% and permanent grassland 1.48%. Built-up areas dominate the non-agricultural land with 7.3% of the municipality's area. Forests have only a minimal share of 0.4% of the current landscape structure. Water areas represent only 1.8%. Thus, agriculture still has an important position in the economy of the municipality. Crop production carried out by several agriculture companies and privately farmed land prevails, and animal production, focused on horse breeding, is also represented.

The Museum of Socialism and the Cold War was established in the village in a former underground military shelter in 2012 (Figure 4).
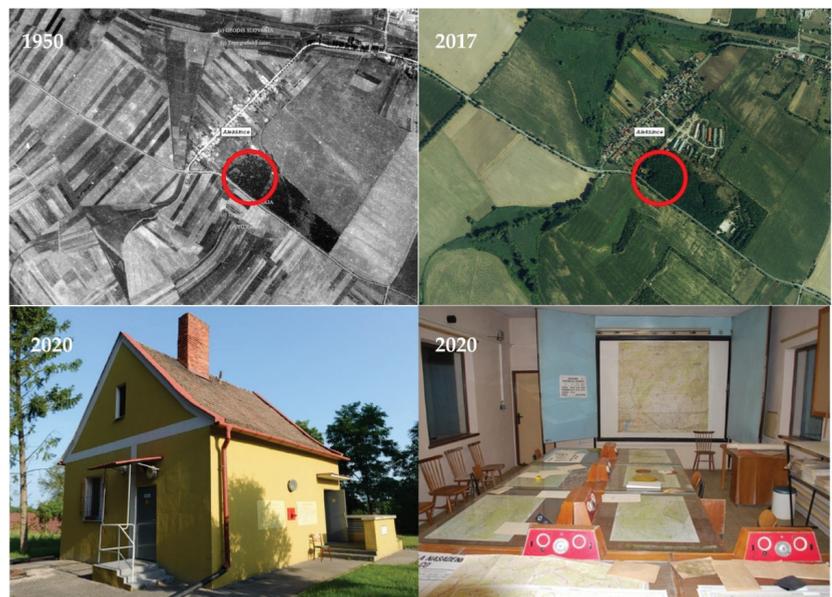
Figure 4. Visual interpretation of the Alekšince (Museum of Socialism and the Cold War) site. Source: 1950—Adapted with permission from ref. [37]. Copyright 2021 GEODIS SLOVAKIA, s.r.o. Bratislava, Topografický ústav Banská Bystrica. 2017—Adapted with permission from ref. [38]. Copyright 2021 GKÚ Bratislava, NLC Zvolen. 2020 left—Reprinted with permission from ref. [47]. Copyright 2021 Dromedar.sk. 2020 right—Reprinted with permission from ref. [48]. Copyright 2019 Miribord.

It is unique in Slovakia, as the museum is located at a depth of 7 m underground. The military underground shelter against weapons of mass destruction was built in the 1960s [47]. The shelter consists of a massive monolithic reinforced concrete skeleton with a tangle of corridors and rooms with an area of 350 m^2. The specialized museum maps the period of Slovak military history in the period 1948–1989. The museum has two basic parts—exterior and interior. The exterior includes statues from socialism, which stood at the squares of Slovak towns and villages and military equipment from the Cold War. In

the interior, the first section presents the underground shelter equipment from the Cold War and the second section presents the Cold War's atmosphere and character through exhibits, information panels and audiovisual recordings [48,49]. The position and area dimensions of the site in which the Museum of Socialism and the Cold War is located in the rated periods of 1950 and 2017 do not show further changes that are significant. The 1950 orthophotoimage is a small shot of a location on the land whose surroundings comprise forests and arable land. Due to the type of construction and the period, it is easily identifiable. The 2017 orthofotomosaic is the same. The immediate surroundings are still forests and agricultural land. Significant interventions in the land in the form of technical or social infrastructure are not evident in connection with the museum. Based on the obtained statistical data and reconnaissance of the terrain, we compiled a DPSIR model (Table 1).

Table 1. DPSIR model for Alekšince.

Component	Interpretation
D (driving force)	the potential identified by the civic association in the underground military shelter, the effective use of the site, the follow-up to historical events in Slovakia, the development of the village, the revitalization of the area that would otherwise be unused, public interest, overall tourism development
P (pressure)	data increase in waste production, increased transport in the village, land use
S (state)	data minimal air pollution, a change in the way the site is used, which is not just an environmental burden
I (impact)	data operating and modification costs, new jobs, site modification and completion
R (response)	contribution to municipal taxes from tourist visits, completion of tourism products, non-traditional forms of tourism, orientation towards cognitive tourism, support of the locality's educational significance, construction of new attractions using military themes (combat attractions, survival courses, etc.)

Source: Own preparation.

The pros of the area are the offer of a retro tourist attraction, symbolized by the Museum of Socialism and the Cold War, but this museum is also important in education. The museum building does not represent an environmental burden. The absence of tourist infrastructure in the village can be identified as a con. Chance or the opportunity for sustainability is found in the anticipated networking of tourist sites with a similar focus. We consider the financial aspect, which will not allow the expansion of trendy multimedia presentations or virtual reality, to be the most problematic aspect. If the building is not further restored, it will remain abandoned and become a burden eventually.

4.1.2. Butkov

The Butkov locality is an example of the transformation of the landscape created by opencast mining. Butkov Hill (765 m above sea level) is located in northwestern Slovakia and limestone and silt have been mined on its northwestern slope for 132 years. By quarrying within the framework of visual–spatial significance, we rank it among the exposed dominant forms of anthropogenic relief of the Považie region, significantly changing the landscape's character [50]. It is a wall-type quarry, which currently has fifteen floors. Until 2012, this mining work did not differ from others in Slovakia. From 2012, a unique transformation of anthropogenic relief began on the southern side of the quarry, on its 11th floor, and mining is an ongoing process in the rest of the quarry [51] (Figure 5). On this floor of the quarry is the youngest pilgrimage site in Slovakia—"Rock Sanctuary of Divine Mercy on Butkov", which is gradually transforming into a center of religious tourism. The complex of the rock sanctuary consists of several sacral buildings. In 2013, the first 12 m cross was built, then the monument of St. John Paul II (2014), the memorial of St. Sister Faustina (2015), Chapel of the Divine Mercy (2016) and 900 m long stone Stations of the Cross (2016) [52]. In May 2017, another significant landmark was added to the complex, a 6 m high statue of the Virgin Mary, the Mother of Mercy, which measures 9 m with the pedestal, making it the tallest statue of the Virgin Mary in Central Europe

(Figure 5). The complex also includes a stage and an auditorium where either services or concerts take place. Regular pilgrimages take place twice a year. During the construction of the entire complex, including the sacral buildings, the quarry's material was used as much as possible. The area also includes additional services such as stalls with devotionals, refreshments and sanitary facilities. The whole complex is electrified and a potential visitor can view a substantial part of it through not only the website but also by broadcasts via a live camera [53]. The attractiveness of the locality is increased by the possibility of beautiful views of the Považie region as well as the Biele Karpaty Mountains.

Figure 5. Visual interpretation of the Butkov (The Rock Sanctuary of Divine Mercy on Butkov) site. Source: 1950—Adapted with permission from ref. [37]. Copyright 2021 GEODIS SLOVAKIA, s.r.o. Bratislava, Topografický ústav Banská Bystrica. 2017—Adapted with permission from ref. [38]. Copyright 2021 GKÚ Bratislava, NLC Zvolen. 2020—author's photo.

The rock sanctuary is located in the cadaster of the village of Ladce. The area of the village is 15.69 km^2 and the village has 2587 inhabitants (as of 31 December 2019). It is located about 5.6 km from the village. The landscape structure of the village is dominated by forests (34.87%), and other areas, where mining areas and recreational areas are 8.38% of the total area [54]. Agricultural land makes up 42.39%, while arable land has a share of 20.78%. Gardens occupy 2.23%, permanent grassland 19.28%, water areas 4.28% and 10.05% of the municipality is built up.

The company Považská cementáreň, a.s. Ladce has long been the largest employer in the area and plays a significant role in the economic development in the region. A positive benefit of the company is the implementation of activities following sustainable development. The company also excels in its philanthropic activities, as evidenced by the Rock Sanctuary of Divine Mercy on Butkov, in the creation of which this company has the largest share and puts in the most effort.

In this locality, we can observe a very significant change in land use in the time horizon of 1950 to 2017. According to the historical orthophotomap from 1950, it is clear that the locality of today's sanctuary was wooded. Mining was realized at lower altitudes, west to northwest of current quarry. The orthophotomosaic from 2017 already captures the transformation of the mining landscape. On the 11th floor of the quarry, a complex has

constantly been under construction since 2012, which is becoming an important center of religious tourism, based on the obtained statistical data and reconnaissance of the terrain (Table 2).

Table 2. DPSIR model for Butkov.

Component	Interpretation
D (driving force)	construction of sacred buildings, public interest in religious and secular motifs, organization of events (pilgrimages, concerts), convenient and transport accessibility, cooperation with the Sanctuary of Divine Mercy in Krakow-Lagievniki, the involvement of the management of Považská cemenáreň, a.s. Ladce and municipality government, trends in tourism that appeal to life attitudes to the search for new, peaceful and spiritual aspects
P (pressure)	increasing the production of waste in the complex itself as well as in the parking lot, increasing the built-up area of the complex, or parking areas
S (state)	the increased attractiveness of the locality, the village of Ladce and its surroundings, the completion of the elements of the infrastructure of the area
I (impact)	costs of infrastructure construction, new jobs, increase in employment, impact on the lifestyle of the residents of the village
R (response)	construction of other sacral buildings, construction of accommodation facilities, the cooperation of several regional development subjects, completion of tourism products for domestic and travel agencies from abroad (especially for Polish pilgrims worshipping St. Sister Faustina and St. John Paul II.)

Source: Own preparation.

The location excels with a strong story, which leads to the gradual transformation of a tourist-unattractive mining landscape with an anthropogenic form of relief into a religious landscape. In the context of the growing interest in the site in question, the con is the absence of accommodation. We also see an opportunity to develop the locality connected to the network of cultural routes such as St. Jacob's Way, where Butkov could be one of the stops. Such a transformed site will not represent an environmental burden, except for waste generation with long-term high traffic levels.

4.1.3. Hniezdne

Another example of a transformed landscape in which part of the tourist landscape is formed is the village of Hniezdne. The area of the village is 17.98 km^2 and the village has 1445 inhabitants (as of 31 December 2019). In the territory there is a basin hill and the relief of plains and floodplains. The altitude in the middle of the village reaches 533 m.

Historically, the area has undergone several changes. In the period of the 17th and 18th centuries, the settlement-craft landscape type was dominant. At the end of the 18th century, the village acquired an agricultural character. Since the 1990s, the industrial landscape type, represented by the industrial enterprise BGV, s.r.o. Hniezdne with a focus on the production of alcohol and alcoholic beverages, has been seen. Significant for the municipality's economy is the company BGV, s.r.o. Hniezdne [55], operating in the village for more than 20 years.

Since 2012, a tourist type of landscape began to be created in the village, primarily by BGV, s.r.o. Hniezdne, which created a tourism operation in the eastern part of the village in the area of tourism known as Nestville Park. The basis for creating the park was establishing an exhibition of distilleries and traditional folk crafts—Nestville Distillery. Nestville Distillery consists of three parts—historical, modern and traditional. The historical part has examples of historical crafts related to distilling. The modern part presents one of the most modern refineries for alcohol production in Central Europe, with more than 35,000 tons of grain processed annually [56]. The traditional part consists of a tasting area and Nestville Whiskey maturing warehouses. The park also includes other parts such as Exposhop, Nestville Chocolate (Figure 6), a playground, Nestville Taberna (Figure 6), Nestville Horses, Nestville Apartments, Nestville Market and a skating rink.

Figure 6. Visual interpretation of the Hniezdne site. Source: 1950—Adapted with permission from ref. [37]. Copyright 2021 GEODIS SLOVAKIA, s.r.o. Bratislava, Topografický ústav Banská Bystrica. 2017—Adapted with permission from ref. [38]. Copyright 2021 GKÚ Bratislava, NLC Zvolen. 2020 left—Adapted with permission from ref. [56]. Copyright 2020 BGV, s.r.o. 2020 right—author's photo.

Despite the ongoing activities, the village's landscape structure is still dominated by agricultural land (53.46%), while arable land covers 30.15% of the area. Important landscape components of the village are permanent grasslands (22.67%) and forest areas (27.53%). Built-up areas cover only 4.37%, water areas 2.47% and other areas 12.15%.

The historical landscape structure is preserved mostly in the central part of the village. It presents Hniezdne as a town-type residence with a preserved medieval town center, a lenticular square.

We follow distinctive interventions into the use of the landscape during the last seventy years. In 1950, the use of sites is obvious for agricultural purposes on the orthophoto map. They include the surface of the wild built-up areas that are made up of buildings of a single peasant cooperative of Hniezdne. We follow the results of previous land transformation in 2017. In 2001, industrial land related to BGV, s.r.o. Hniezdne and its production of alcohol drinks appeared. In 2012, recreational land began to grow in Nestville Park (Figure 6). Based on the reconnaissance of the terrain, we compiled a DPSIR model (Table 3).

There is a strong business entity in the village, which initially started a business in spirit production. It has expanded its portfolio with activities in the area of today's extremely popular gastronomic tourism; thus de facto directly capitalizing its production. In this context, we think that a one-sided orientation to the gastronomy segment can also be a weakness of the area in question in the case of, e.g., a decline in interest in this phenomenon. A potential threat is the loss of authenticity (the use of English building names, as well as the offering of a product—whiskey, which is not typical for this region). The potential environmental burden may be closely related to local production (distillery, brewery), requiring high pressure on water consumption.

Table 3. DPSIR model for Hniezdne.

Component	Interpretation
D (driving force)	cultural and historical heritage (connection to the historical foundations of distillery from the 18th century, monument zone), public interest, quality environment, advantageous transport location, investor interest, new trends in tourism, proximity to large tourist source regions, effective marketing of the area, presentation of the territory in the media
P (pressure)	increase in waste production, increased water consumption, impact on water quality, increase in built-up area (by 5.9% since 2011), increased traffic in the municipality, impact on local culture
S (state)	minimal air pollution, no significant source of pollution, land use was added, other non-agricultural land area decreased by 2%, land acculturation, preference of current trends, revitalization of agricultural brownfield
I (impact)	increasing the cost of building infrastructure, supporting local agriculture, new jobs, increasing the employment of the local population, impact on protected areas, new types of experiences for visitors, loss of community identity
R (response)	contribution to the taxes of the municipality, completion of tourism products, support of agritourists, restoration of spas based on the tradition of the 19th century

Source: Own preparation.

4.1.4. Podhájska

An example of a transformed agricultural landscape, which has significantly focused on tourism activities, is the village of Podhájska. The area of the village is 11.12 km^2 and the village has 1015 inhabitants (as of 31 December 2019). The village is situated in its most productive agricultural part. In the village, agricultural land covers 77.1%, while the degree of plowing reaches 81.2%. Permanent grasslands cover 7.4%, gardens 3.16% and orchards 2.13%. Non-agricultural land accounts for 22.9%, of which 10.3% is forests and 9.2% is built-up areas. Water areas are 1.0% and other areas are 2.44%.

The stimulus for the development of tourism in the village was the discovery of thermal mineral waters in the 1980s. Maximum water temperatures are up to 80 °C and heat output is 14.42–19.2 MWt. From a chemical point of view, these are waters of the sodium chloride type with mineralization up to 19.6 g/l. They represent marinogenic waters with varying degrees of degradation of marine salinity [57,58].

Based on thermal strongly mineralized water, a thermal swimming pool was built in Podhájska in 1973, to which the Aquamarin Wellness Center was added in 2012 (Figure 7). At present, the thermal swimming pool complex consists of 10 pools during the summer season, of which 4 pools have geothermal water. Natural solariums complement the water attractions. During the winter season, there is a relaxation and reconditioning complex. The Aquamarin Wellness Center consists of an indoor pool world, an outdoor pool world and a vital world. The indoor pool world consists of 5 pools and the outdoor pool world includes 2 pools with thermal water and 2 pools with regular water [59].

Sports grounds and accommodation facilities complete the recreational area of the swimming pool. In the area of the swimming pool is located Hotel Borinka (105 beds), the campsite at St. Urban (30 places for caravans and 60 places for tents) and the cottage complex Bungalovy (64 beds). Catering services are offered by the Jasmín restaurant (90 seats). Other accommodation capacities in Podhájska are provided by B&Bs, apartment houses or private accommodation in the village and the surrounding villages. With its natural sources of thermal water, the village of Podhájska has gradually transformed into an important tourist center not only in the Nové Zámky district but also in the Nitra self-governing region. However, it is also attractive to foreign visitors, especially from the Czech Republic, Germany, Poland and Hungary. The Podhájska thermal swimming pool ranks 4th, following resorts such as Aquacity Poprad, Bešeňová Water Park and Aquapark Tatralandia, with 781,568 visitors and a total revenue of EUR 6.9 mil.

Figure 7. Visual interpretation of the Podhájska site. Source: 1950—Adapted with permission from ref. [37]. Copyright 2021 GEODIS SLOVAKIA, s.r.o. Bratislava, Topografický ústav Banská Bystrica. 2017—Adapted with permission from ref. [38]. Copyright 2021 GKÚ Bratislava, NLC Zvolen. 2020—author's photo.

The location presents a very significant change in land use in the time horizon of 1950 to 2017. The sole use of territory for agricultural purposes is apparent in the orthophotomap from 1950. In the following periods of the 20th and 21st centuries, several campuses with different uses of the land, as presented in the orthophotomosaic from 2017, have been added. These campuses also include areas of accommodation and catering facilities, road communications and parking and housing stock (Figure 7), based on the obtained information of statistical data and reconnaissance of the terrain (Table 4).

Table 4. DPSIR model for Podhájska.

Component	Interpretation
D (driving force)	potential of thermal water, healing effects of thermal water, sufficient capacity of water sources, increasing interest of visitors in services, development of the village, overall development of tourism, effective marketing
P (pressure)	increase in waste production, increased consumption of water and thermal water, increased frequency of transport, change of land use, loss of authenticity of the village, need to build tourism infrastructure, increase in land and real estate prices, increase in attendance
S (state)	minimal air pollution, change of use of real estate, deterioration of surface and groundwater quality, duality of local community in perception of tourism, marginalization of local population, rising land prices, excessive tourism, outflow of young population from the village, irritation by the tourists
I (impact)	costs of building infrastructure, new jobs, increasing employment in the municipality, new services
R (response)	contribution to the taxes of the municipality of tourism, building of the infrastructure of the municipality, completion of tourism products, orientation to the spa tourism

Source: Own preparation.

The village's tourism is realized only using the main attractor—thermal water—while emphasis should be placed on the offer of more variability, which is significant.

The village is also beginning to show the harmful effects of tourism, such as tourist inflation, the growth of duality in the community, as well as signs of excessive tourism.
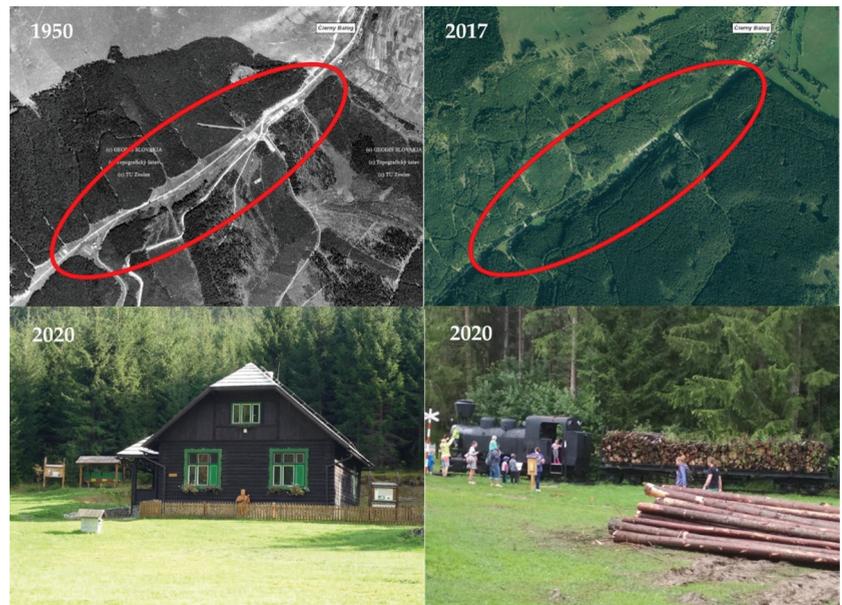
4.1.5. Čierny Balog

The village of Čierny Balog, the largest village in Slovakia with an area of 147.10 km^2, is located in Central Slovakia. In 2019, the village had 5090 inhabitants. It is found in the Vydrovo locality and reaches an altitude of about 570 m. This area's settlement dates back to the 15th century and is related to pastoralism; later, lumbering settlements were established in this area, which supplied wood from the surrounding forests near the mines and smelters. As per Supuka and Štefunková [60], it represents a forestry type of cultural landscape. The current landscape structure is also strongly influenced by the historical development of the area. The village is dominated by forests—78.9%. Within this share, commercial forests dominate (92.2%). Agricultural land is less than 19%, permanent grasslands (17.3%), water areas (0.21%), built-up areas (0.99%) and other areas (1.03%).

The harvested wood was transported in the first phase by water. The growing demand of industrial factories for wood led to constructing a unique and efficient transport system for its time—the forest railway. It began to operate in 1909. The end of the operation of the Čiernohronská Railway was set for 31 December 1982. By the Slovak communist government's decision, the entire railway and machinery were to be scrapped by 1985. Her rescue owed to a few enthusiasts and their personal courage. An important step was the registration of the Čiernohronská Railway in the Central State List of Cultural Monuments (1982). The resumption of operation on the railway took place on 1 May 1992. To this day, visitors have the opportunity to drive in period wagons powered by steam locomotives.

The historical development and traditions of Čierny Balog, inspired the company Lesy SR š. p. to create the Forest Museum, opened to the public in 2002 on an area of 140 ha in Vydrovská Dolina Valley. Its goal is to introduce visitors to foresters and forest workers from the past to the present. On an area of 140 ha, of which 116 ha is occupied by forest, the open-air museum has more than 70 thematic stops. In the open-air museum area, visitors can also see an eco-gallery, a symbolic forest cemetery, an information center, a didactic shelter or a map of Slovakia's forestry.

The open-air museum's construction is not completed, and new attractions are added every year [61]. The symbiosis of these two elements so typical for this area (technical monument—forest railway and open-air forest museum) (Figure 8) has brought visitors an extremely attractive tourist product. In addition to relaxation, it also offers an educational moment through forest pedagogy.

A comparison of 1950 and 2017 orthophotomaps shows an increase in afforestation in 2017. Through visible afforestation, the area has come close to fulfilling the principle of sustainability. This is also documented by movable and immovable exhibits that symbolize the history of the site, e.g., mountaineering and steam locomotives (Figure 8).

Figure 8. Visual interpretation of the Čierny Balog (Vydrovská Dolina Valley) site. Source: 1950—Adapted with permission from ref. [37]. Copyright 2021 GEODIS SLOVAKIA, s.r.o. Bratislava, Topografický ústav Banská Bystrica. 2017—Adapted with permission from ref. [38]. Copyright 2021 GKÚ Bratislava, NLC Zvolen. 2020—author's photo.

Based on the obtained information of statistical data and reconnaissance of the terrain (Table 5), the area presents a strong story, transformed into an offer of a sustainable tourist products, which the open-air forestry museum in combination with the old-fashioned steam railway is. The municipality must ensure better conditions, especially in terms of car parking and expanding the catering facilities' capacity.

Table 5. DPSIR model for Čierny Balog.

| Component	Interpretation
D (driving force)	presentation of the history, cultivation and importance of the forest, a demonstration of traditional forest management from the Horehronie region, timber transport by old fashioned railway, the interest of visitors, the authenticity of the environment, the preservation of the traditional culture of the region
P (pressure)	increased waste production, increased water consumption, increased traffic in the village, problems with parking
S (state)	no significant air pollution is recorded, no significant source of pollution has been added, increased noise in the main season
I (impact)	infrastructure construction costs (catering facilities, parking spaces), new jobs, craft support
R (response)	contribution to the municipality's taxes, traditional logging and attractive historical railway is a sustainable product of tourism

Source: Own preparation.

We see the opportunity to develop tourism mainly in the expansion of the offer, e.g., during the summer months, concerts by folk bands or observations of the night sky, with the astronomer's live interpretation.

4.1.6. Špania Dolina

Špania Dolina, as an example of a mining landscape, is located in Central Slovakia. The area of the village is 12.72 km^2 and the village has 215 inhabitants (as of 31 December 2019). The village center lies at an altitude of 711 m. The current landscape structure of the village is dominated by 79.1% forests (36.8% special-purpose forests). Agricultural land covers 16.9% and permanent grasslands 15.7%. Water areas make up 0.2%, built-up areas 1.78% and other areas 2.05%. Since 1978, part of the village has been included in the protection zone of the Low Tatras National Park. In the village are Special Area of Conservation Baranovo and the Special Protection Area Veľká Fatra.

The village was known in the world for the mining and processing of copper ore. An extensive, unified mining complex was created here with massive towing shafts, long, well-equipped towing tunnels and complicated machines and equipment. The village experienced extreme prosperity in 1496–1546 [62] when the Thurzo-Fugger copper mining company controlled mining. During this period, Špania Dolina and its surroundings was one of the wealthiest areas in the world. From the 17th century, the yield of copper ores from the mines in Špania Dolina gradually decreased.

Thanks to its unique location and, mostly, the remnants of mining activities (350-year-old mining works), the village has become a popular tourist destination. In contrast, in all current documents, the village is listed as a recreational village [63] (Figure 9). The spoil tips—the most dominant artificially created landscape forms in the natural environment—are located in the area at altitudes of 430–900 m. The uncovered, unforested Maximilián spoil tip comes into contrast with the surrounding landscape, making it an essential and characteristic element of the area. A dense network of mining trails is currently used as bike paths, hiking trails and, in the winter months, as ski trails.
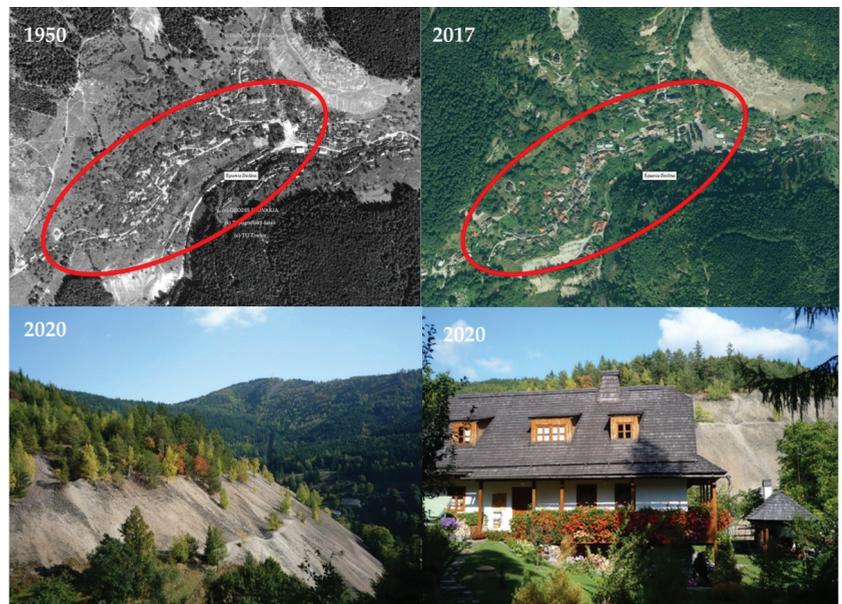
Figure 9. Visual interpretation of the Špania Dolina site. Source: 1950—Adapted with permission from ref. [37]. Copyright 2021 GEODIS SLOVAKIA, s.r.o. Bratislava, Topografický ústav Banská Bystrica. 2017—Adapted with permission from ref. [38]. Copyright 2021 GKÚ Bratislava, NLC Zvolen. 2020—author's photo.

It is also attractive with its spatial arrangement, representing a unique valuable urban complex consisting of folk, technical, church and public buildings. The village's dominant

feature is the church, built on a terrain terrace; the mining astronomical clock is one of the attractive sites, which represents a model of a typical Špania Dolina mine from the 16th century. The famous copper tradition is also reflected in the Museum of Copper and Lace (a product by which families improved their living conditions). The mining history has recently been transformed into a mining nature trail, which acquaints the visitor with the village's glorious past using information boards or a guide.

A comparison of the 1950 and 2017 ortophotomaps is documented by the fact that the territory in question is conserved. Shown in the orthophotomosaic from 2017 is a more significant proportion of forest, with a heap in the southwestern part of the village showing signs of succession. Houses in the village are transformed into recreational buildings with a view of cultural monuments or old mining works, based on the obtained information of statistical data and reconnaissance of the terrain (Table 6).

Table 6. DPSIR model for Špania Dolina.

| Component	Interpretation
D (driving force)	Medieval mining and its historical heritage, to preserve and maintain the characteristic manifestation of mining activities (recreational, cultural, social and educational function), the attractiveness of the area, society's demand for tranquility in less frequented tourist areas, high-quality air, advantageous geographical location, monuments' authenticity
P (pressure)	increased traffic density, worn state of the communications, the requirement to build accommodation facilities, endangering the stability of selected forms of relief, increased interest in real estate, preferring the needs of visitors to residents
S (state)	undesired change of landscape character, landslides
I (impact)	infrastructure construction costs, impact on the biodiversity of the area, rising real estate prices, marginalization of the needs of residents
R (response)	transformation of history into products of tourism, cognitive tourism, objects respecting the monument values of the area, construction of car parks outside the monument reservation, lace-creating workshops

Source: Own preparation.

The site has an engaging story based on local history. The problem or the weakness is the limited space for building a possible tourist infrastructure, which results from the morphology of the relief and the monumental character of the area. The opportunity is a connection to the existing Barborská route with potentially growing tourist importance. We do not anticipate an environmental burden in the area.

4.2. Life Cycle of Transformed Tourism Sites

The life cycle model of a tourism center is one of the most popular ways of evaluating the stage of development of a locality or center. The commonly used Butler model [42] can be effectively supplemented with the phases and conditions of sustainability and ecological stability, following the current requirements for the sustainable development of tourism, based on the proposals of Szromek et al. [33].

In evaluating our selected tourist sites, we monitor their various phases of the life cycle as centers of tourism (Figure 10).
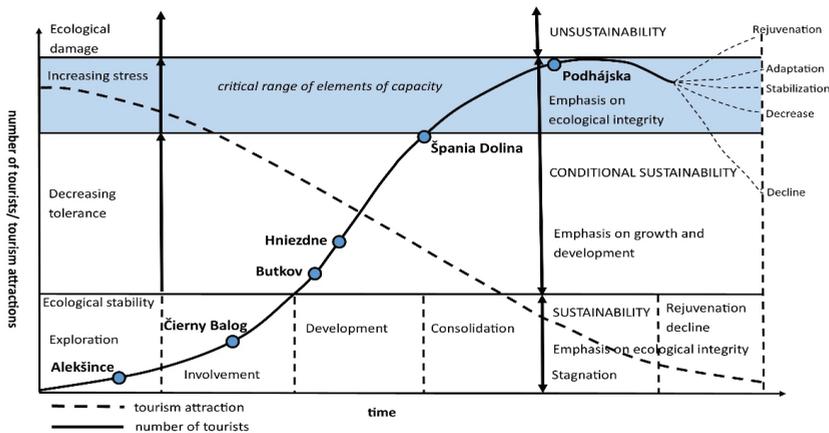
Figure 10. Life cycle of transformed tourism localities in Slovakia concerning sustainable development. Source: [33,42], own processing, 2021.

Based on the characteristics of the tourism, the village of Alekšince can be perceived as being in the exploration phase. The village's dominant feature in terms of tourism development is the location in which the Museum of Socialism and the Cold War is located. The site represents a new area, sporadically discovered by small groups of tourists looking for a change of environment, fun, uniqueness and attraction. In the locality case, the biggest attraction is the authenticity of the environment, which is unknown to the current young generation. An important attraction is also the educational aspect of the locality and its uniqueness in Slovakia. The museum is gradually beginning to respond to the positive feedback from visitors with other activities. The destination's development is very slow, without significant landscape interventions, and currently does not include any tourist infrastructure construction. The landscape itself shows almost no changes in the structure of the land cover. Sustainable development of the territory is typically based on functioning processes typical for the agricultural landscape. There are no significant new anthropogenic interventions in the locality. Pressures on its ecological stability do not threaten the museum's territory; stress factors are minimal, as well as the effect of risk factors on individual components of the environment.

The Čierny Balog locality is in the phase of penetration or involvement. It is a location where tourists regularly appear, thus encouraging local people to provide simple services, especially in accommodation and meals. In 2006, it provided 165 beds for accommodation which, in 2005, was 261 beds [64]. The location is already relatively well known to the public, mainly due to promotional activities. The number of visitors is gradually increasing. Their activities have only a minimal impact on local societies, the landscape and its ecological environment. Sustainable development is still prevalent in the landscape with minimal manifestations of risk factors, and with small anthropogenic interventions in the environment. The locality principle is instead to preserve the authenticity of the area and cultural and historical values of the area and offer a demonstration of our ancestors' way of life. The site does not prefer excessive transformation and significantly altered infrastructure, which would have a counterproductive effect in this environment and could destroy authenticity elements, but is based on preserving its character and uniqueness.

The Butkov and Hniezdne localities are in the development phase while including the higher development stage in Nestville Park in Hniezdne. This is expected for both localities as they are currently well known and gradually popular tourist destinations, to which a larger number of tourists come regularly. The original parts of the localities have undergone a transformation process in recent years, and the types of the landscape have changed in the tourist parts. The primary role in the development of the destination is

given to priority investors who respond to visitors' demand in their offer. On top of Butkov, construction has taken place since 2012. In the near future, the planned construction of a seating area is planned, and the construction of a chapel and social zone for pilgrims. In the locality of Hniezdne, it is also in the zoning plan of the village to create a complex zone of a production and recreational character with an agrotourism focus in Nestville Park. Employment is increasing, the quality of life is improving and endogenous regional development is being implemented. The development of tourism also encourages the emergence of artificial tourist attractions in the form of products, such as parks interfering with the locality's culture and authenticity, responding primarily to the effect of current trends. The original character of the destinations is gradually changing in the localities. Among the visitors, groups of individual mass tourists are the majority, having higher demands for the quality of infrastructure and services. Impacts on the landscape are significantly visible in the localities at this stage. The shift from a state of sustainable development to a state of conditional sustainable development and the sustainability of the area must be purposefully incorporated into a tourism center's construction. We observe an evident anthropogenic pressure in the localities, which is reflected in the decreasing tolerance of ecosystems, in the landscape's growing stress and in decreasing the area's ecological stability. Processes of environmental and ecological damage to the landscape are also observed on a small scale.

The Špania Dolina tourism site is in the consolidation phase. Due to its unique historical landscape structure, which the locality has among its priorities and tries to adhere to consistently, it has already reached a position in its life cycle characterized by the most advanced stage of development. Tourists already exceed the number of locals. The housing stock has not changed over recent decades; the village has 220 homes, including 50 tourist cottages [65]. The area's tolerance for change is very low, as the area has undergone significant changes during its historical development. Its stability can be easily changed and even minimal pressure on the landscape's carrying capacity can cause severe damage and devastation. Interventions in the territory are due to the inclusion of the site in the Nízke Tatry National Park. At the same time, the village has been targeted since 1979 for the conservation of folk architecture with established conditions for construction and economic activities.

In the phase of stagnation, especially when considering sustainable development, is the locality of tourism of Podhájska. Central to its character (center of international importance), offer (year-round operation) and infrastructure (200 beds in the swimming pool area, over 1500 beds in the village, various kinds of catering facilities) is a period of full maturity within the tourism industry. In terms of sustainable development, there are multiple problems, such as excessive and unbearable growth of visitors at a limited capacity, increasing water consumption and growth of municipal waste. The daily number of visitors is growing, reaching an average of 5000 people per day, which represents an annual water consumption of 101,000 m^3 per year only for tourism in the village. The amount of waste is growing, which in 2011 was 245.06 tons, in 2015 it was 413.27 tons and in 2016 it was 598.7 tons [66]. Environmental damage has reached a top position in the landscape and the landscape has significantly changed its appearance, structure and function. The number of tourists already exceeds the number of residents and is still growing, along with growing profits. While in 2006, 545,000 visitors visited the swimming pool, in 2009, there were 560,000 visitors and in 2018, there were 782,000 visitors. In the structure of the landscape, a significant recreational area is evident, which has become dominant. The appearance of the village has changed significantly in recent years. In accordance with Antrop (2004) [13], we state that the traditional rural village discovered by tourism was affected by morphological and functional urbanization, which caused profound social, economic and cultural changes. The original houses of the local population have been replaced by buildings that disrupt the rural character of the development. Due to the village's excessive development for tourism needs, there are already manifestations of tension between residents who are not involved in tourism and tourists, limiting and affecting their daily lives. Tourism in the

village is gaining mass character. Tourism is beginning to be perceived by some residents as a burden, with the first signs of excessive tourism appearing. The local population cannot keep a sufficient pace to respond to rising land and real estate prices, and the risk is that the young population may lose interest in living in the village.

5. Discussion

Landscape transformation is a typical process responding to anthropogenic needs and requirements. In many regions and localities, not only in Slovakia, this is also conditioned by the interest in tourism development. It brings new impulses to the landscape, which may manifest themselves in the future as positive or negative changes. However, changes from an environmental point of view are also noticeable and they can take on a positive and negative character. Therefore, it is essential to prioritize their sustainable development when planning the development of tourism centers. It is important that their economic and social development is aligned with environmental development and that it accepts the requirements of sustainability.

The DPSIR method was used in the first part when evaluating the selected localities. The common practice is that the model is also used in tourism to assess its impact on the environment. However, in most work, application is usually focused only on the effects of tourism on the natural components of the environment. In accordance with Pásková [31], we extended the assessment of the impacts of tourism to other components of the environment in the causal DPSIR model. We evaluated, e.g., impacts on the transport environment (increase in traffic frequency), housing environment (change in the functional use of housing stock, increasing land prices), cultural and social environment (loss of identity, acculturation) or social environment (marginalization of the local population, a massive level of tourism). At the same time, we also analyzed the positive effects of tourism on the environment, thus limiting the unilateral assessment of changes in the impact of tourism. We consider such a modified methodology to be significantly more objective and more applicable. We verified its use in dimensionally different localities.

In the next part of the work, we apply another method used to evaluate tourism issues—the life cycle of a tourist destination. This model is a useful conceptual framework for studying the dynamics and sustainability of destination environments. It creates a suitable platform for verifying and applying multiple concepts of tourism studies, in particular load capacity and social change. The concept of the method is usually based on monitoring the load capacity of the destination in terms of the number of visitors and its interrelated social changes [67–69]. Combination of the destination cycle concept with social change theory is mentioned by Snepenger and Reiman et al. [70]. In line with Wall [71], it is an endogenous theoretical concept of a tourism study that has a high descriptive and exploitation value.

The advantage of the model used can be perceived mainly in the fact that it considers the temporal and spatial development of the tourism industry, and its effects on the natural and social environment of the tourism site. Other information provided is development of the composition and relationships of key actors involved in the various stages of the destination life cycle. Based on the works of Szromek et al. [33], we have incorporated into the model other essential characteristics through which we also address the conditions of sustainable tourism development and the ecological stability of the site. We see the pros again in the complexity of evaluating tourism sites and the current strongly preferred trend and the necessity of applying environmental perspectives on the issue.

Other possibilities for assessing tourism destinations that would be interesting in the future to apply include, e.g., the concept of beneficial capacity of territories. It is established upon professionally supported expertise and the socially acceptable maximum load of territories with anthropogenic influences, so irreversible changes lead to reducing natural components and socio-cultural environments. Authors [72–75] have covered the topic in more detail in other articles. In applying the concept, it is important to know the level of environmental vulnerability and the current way to use the solved territory by inventory

and land use. Examples are, e.g., the work of Nicu and Stoleriu [76], who evaluate the changes to land use around the churches of Moldavia. They use photo interpretation through orthophotos and historical maps at multiple times, indicating changes in the landscape and the anthropogenic environmental changes. Similarly, Schupl et al. [77] and Gerard et al. [78] have studied past and future land use changes in the European Union's cultural landscapes. According to these authors, cultural landscapes show strong variation of changes under different scenario conditions in terms of future landscape change. Olsson et al. [79] interpret the landscape changes in two mountain valleys in central Norway over the period 1960–1990 in relation to differential land use and environmental factors. Assessment of agricultural land changes at selected locations of Slovakia using orthophotomaps from several time periods is also present in the works of Masný and Zaušková [80] and others [81–83].

In six selected model examples, the transformation of the landscape into a recreational landscape is the result of a combination of the potential of the territory and the creativity of humankind. Humankind changes the potential of the landscape into a form usable by tourism. Most model territories develop with respect to the principle of sustainable development (Alekšince, Butkov, Čierny Balog and Špania Dolina). The opposite is true for the development of the village of Podhájska. The direction of development of the village of Hniezdne is borderline. It will depend on the representatives of the municipality and the business plans of the owners of Nestville Park.

The importance of evaluating the transformation processes in a landscape is more than necessary, especially when we want to assess the character of the landscape in the specific site, its identity but also the direction. In the development of the territory, they can provide valuable information for future decision-making processes, which should be primarily responsible for and in accordance with the principles of sustainable development. The basis on which to build effectively is information related to changes in land use. Due to the dynamism of changes, new challenges arise in the research of the landscape, and not only the tourist landscape.

References

1. Gregorová, B.; Hronček, P.; Tometzová, D.; Molokáč, M.; Čech, V. Transforming Brownfields as Tourism Destinations and Their Sustainability on the Example of Slovakia. *Sustainability* **2020**, *12*, 10569. [CrossRef]
2. Soľjan, I.; Liro, J. New pilgrimage centre in Kraków's Łagiewniki-Borek Fałęcki district (In Polish: Nowe centrum pielgrzymkowe w krakowskiej dzielnicy Łagiewniki-Borek Fałęcki). *Peregr. Crac.* **2014**, *25*, 135–151.
3. Soľjan, I.; Liro, J. The changing roman catholic pilgrimage centres in Europe in the context of contemporary sociocultural changes. *Soc. Cult. Geogr.* **2020**, *21*. [CrossRef]
4. Gunn, C.A. Landscape Assessment for Tourism. In *Proceedings of Our National Landscape: A Conference on Applied Techniques for Analysis and Management of the Visual Resource, Incline Village, NV, USA, 23–25 April 1979*; Pacific Southwest Forest and Range Experiment Station: Berkeley, CA, USA, 1979; pp. 409–414.
5. Chrenka, B.; Ira, V. Transformation of tourist landscapes in mountain areas: Case studies from Slovakia. *Hum. Geogr.* **2011**, *5*, 13–20. [CrossRef]
6. Hof, A. Urban and tourist land use patterns and water consumption: Evidence from Mallorca, Balearic Islands. *Land Use Pol.* **2011**, *28*, 792–804. [CrossRef]

7. Petrikovičová, L.; Krogmann, A.; Fialová, D.; Svorad, A. Intensive tourist-related urbanisation impacts on a mountain village: The case study of Veľká Lomnica in Slovakia. *Geogr. Pol.* **2019**, *92*, 395–408. [CrossRef]
8. Kadlecová, V.; Fialová, D. Recreational housing, a phenomenon significantly affecting rural ares. *Morav. Geogr. Rep.* **2010**, *18*, 38–44.
9. Hughes, N. 'Tourists go home': Anti-tourism industry protest in Barcelona. *Soc. Mov. Stud.* **2018**, *17*, 471–477. [CrossRef]
10. Martín Martín, J.M.; Guaita Martínez, J.M.; Salinas Fernández, J.A. An Analysis of the Factors behind the Citizen's Attitude of Rejection towards Tourism in a Context of Overtourism and Economic Dependence on This Activity. *Sustainability* **2018**, *10*, 2851. [CrossRef]
11. Žigrai, F. Dimensions and attributes of the cultural landscape (In Slovak: Dimenzie a znaky kultúrnej krajiny). *Zivotn. Prostr.* **2000**, *34*, 229–233.
12. Boltižiar, M.; Chrastina, P.; Kramáreková, H.; Lauko, V.; Šolcová, L. *Landscape Research in Case Studies (In Slovak: Výskum Krajiny v Príkladových štúdiách)*, 1st ed.; FPV UKF: Nitra, Slovakia, 2014; p. 318.
13. Antrop, M. Landscape change and the urbanization process in Europe. *Landsc. Urban Plan.* **2004**, *67*, 9–26. [CrossRef]
14. Bürgi, M.; Hersperger, A.M.; Schneeberger, N. Driving forces of landscape change current and new directions. *Landsc. Ecol.* **2004**, *19*, 857–868. [CrossRef]
15. Hersperger, A.M.; Gennaio, M.P.; Veburg, P.H.; Burgi, M. Linking Land Change with Driving Forces and Actors: Four Conceptual Models. *Ecol. Soc.* **2010**, *15*. [CrossRef]
16. Lambin, E.F.; Turner, B.L.; Geist, H.J.; Agbola, S.B.; Angelsen, A.; Bruce, J.W.; Coomes, O.T.; Dirzo, R.; Fischer, G.; Folke, C.; et al. The causes of land-use and land-cover change: Moving beyond the myths. *Glob. Environ. Chang.* **2001**, *11*, 261–269. [CrossRef]
17. Oťaheľ, J.; Feranec, J. Research of changes in landscape cover to understand the development of the landscape (In Slovak: Výskum zmien krajinnej pokrývky pre poznanie vývoja krajiny). *Geogr. Slovaca.* **1995**, *10*, 187–190.
18. Oťaheľ, J.; Feranec, J. Research and mapping of land use: The past and the present in the context of Slovakia (In Slovak: Výskum a mapovanie využitia krajiny: Minulosť a súčasnosť v kontexte Slovenska). *Geogr. Časopis.* **2006**, *58*, 105–123.
19. Burley, T.M. Land use or land utilization? *Prof. Geogr.* **1961**, *13*, 18–20. [CrossRef]
20. Prokopová, M.; Cudlín, O.; Včeláková, R.; Lengyel, S.; Salvati, L.; Cudlín, P. Latent Drivers of Landscape Transformation in Eastern Europe: Past, Present and Future. *Sustainability* **2018**, *10*, 2918. [CrossRef]
21. Plieninger, T.; Draux, H.; Fagerholm, N.; Bieling, C.; Bürgi, M.; Kizos, T.; Kuemmerle, T.; Primdahl, J.; Verburg, P.H. The driving forces of landscape change in Europe: A systematic review of the evidence. *Land Use Pol.* **2016**, *57*, 204–214. [CrossRef]
22. Global Land Programme. Available online: https://glp.earth/ (accessed on 13 March 2021).
23. Copernicus Land Monitoring Service. Available online: https://land.copernicus.eu/pan-european/corine-land-cover (accessed on 13 March 2021).
24. Skowronek, E.; Tucki, A.; Huijbens, E.; Jóźwik, M. What is the tourist landscape? Aspects and features of the concept. *Acta Geogr. Slov.* **2018**, *58*, 73–85. [CrossRef]
25. Terkenli, T.S. Landscapes of Tourism: A Cultural Geographic Perspective. In *Tourism and Environment*, 2nd ed.; Briassoulis, H., Straaten, J., Eds.; Kluwer Academic Publisher: Dordrecht, The Netherland, 2000; Volume 6, pp. 179–202.
26. Gkoltsiou, A.; Terkenli, T.S. Tourism and landscape: Toward interdisciplinary analysis of tourist landscape structure. *Tourismos* **2012**, *7*, 145–164.
27. Knudsen, D.C.; Metro-Roland, M.M.; Soper, A.K.; Greer, C.E. (Eds.) *Landscape, Tourism, and Meaning*, 1st ed.; Ashgate Publishing: Farnham, UK, 2008; p. 157.
28. Hall, M.; Page, S.J. *The Geography of Tourism and Recreation–Environment, Place and Space*, 4th ed.; Routledge: London, UK, 2014; p. 448.
29. Wahab, S.; Pigram, J. *Tourism, Development and Growth: The Challenge of Sustainability*, 1st ed.; Routledge: London, UK, 1997; p. 302.
30. Zelenka, J. Selected Approaches to Sustainable Tourism Research. (In Czech: Vybrané přístupy k výzkumu udržitelnosti cestovního ruchu). *Czech Hosp. Tour.* **2010**, *6*, 126–136.
31. Pásková, M. Tourism Environmentalism. (In Czech: Environmentalistika cestovního ruchu). *Czech J. Tour.* **2012**, *1*, 77–113.
32. Szromek, A.R. An Analytical Model of Tourist Destination Development and Characteristics of the Development Stages: Example of the Island of Bornholm. *Sustainability* **2019**, *11*, 6989. [CrossRef]
33. Szromek, A.R.; Kruczek, Z.; Walas, B. The Attitude of Tourist Destination Residents towards the Effects of Overtourism—Kraków Case Study. *Sustainability* **2020**, *12*, 228. [CrossRef]
34. Mariot, P. *Geography of Tourism (In Slovak: Geografia Cestovného Ruchu)*, 1st ed.; VEDA: Bratislava, Slovakia, 1983; pp. 94–210.
35. Weiss, P.; Jankovičová, M.; Kurčová, E. *Regionalization of tourism in the Slovak Republic (In Slovak: Regionalizácia Cestovného Ruchu v Slovenskej Republike)*, 1st ed.; Ministry of Economy of the Slovak Republic: Bratislava, Slovakia, 2005; pp. 6–88.
36. Maps of Slovakia (In Slovak: Mapy Slovenska). Available online: https://www.e-slovensko.cz/s/mapy (accessed on 30 March 2021).
37. Historická Ortofotomapa © GEODIS SLOVAKIA, S.R.O. A Historické LMS © Topografický ústav Banská Bystrica. Available online: https://mapy.tuzvo.sk/HOFM/Default3.aspx (accessed on 15 March 2021).
38. Ortofotomozaika© GKÚ, NLC, r. 2017. Available online: https://mapy.tuzvo.sk/HOFM/Default3.aspx (accessed on 15 March 2021).

39. Gabrielsen, P.; Bosch, P. *Environmental Indicators: Typology and Use in Reporting*; EEA Internal Working Paper: Copenhagen, Denmark, 2003; p. 20.

40. Kanianska, R. Integration of Environmental and Economic Policies and the Method of its Evaluation (In Slovak: Integrácia environmentálnej a ekonomickej politiky a metóda jej hodnotenia). *Zivotn. Prostr.* **2007**, *41*, 203–205.

41. Tourism and Its Impact on The environment in the Slovak Republic in 2005 (In Slovak: Cestovný ruch a jeho vplyv na životné prostredie v Slovenskej republike k roku 2005). Available online: https://www.bing.com/newtabredir?url=https%3A%2F%2Fwww.enviroportal.sk%2Fuploads%2Fspravy%2Fturizmus-sektor.pdf (accessed on 29 January 2021).

42. Butler, R.W. The concept of a tourism areas cycle of evolution: Implications for the management of recourses. *Canad. Geogr.* **1980**, *24*, 5–14. [CrossRef]

43. Lagiewski, R. The Application of the Talc Model: A Literature Survey. In *Aspects of Tourism: The Tourism Area Life Cycle Vol.1 Applications and Modifications*, 1st ed.; Butler, R., Ed.; Cromwell Press: Trowbridge, UK, 2006; pp. 27–50.

44. Kurek, W.; Faracik, E.; Mika, M.; Pawlusiński, R.; Pitrus, E.; Ptaszycka-Jackowska, D. *Tourism (In Polish: Turystyka)*, 1st ed.; Wydawnictwo Naukowe PWN: Warszawa, Poland, 2007; pp. 12–49.

45. Gregorová, B.; Neradný, M.; Klaučo, M.; Masný, M.; Balková, N. *Tourism and Regional Development (In Slovak: Cestovný Ruch a Regionálny Rozvoj)*, 1st ed.; UMB: Banská Bystrica, Slovakia, 2015; pp. 6–63.

46. Matlovičová, K.; Matlovič, R. *Destination Marketing for Geographers (In Slovak: Destinačný Marketing pre Geografov)*, 1st ed.; Prešovská univerzita: Prešov, Slovakia, 2017; p. 275.

47. Unique Attraction near Nitra: Seven Meters Underground, There Is a Museum of Socialism (In Slovak: Unikát pri Nitre: Sedem Metrov pod Zemou sa Nachádza Múzeum Socializmu). Available online: https://dromedar.zoznam.sk/cl/1001069/1949205/Unikat-pri-Nitre--Sedem-metrov-pod-zemou-sa-nachadza-muzeum-socializmu (accessed on 15 January 2021).

48. Museum of Socialism and the Cold War (In Slovak: Múzeum Socializmu a Studenej Vojny). Available online: https://miribord.com/sk/aktivity/muzeum/aleksince/muzeum-socializmu-a-studenej-vojny/1623/ (accessed on 30 January 2021).

49. Museum of Socialism and the Cold War (In Slovak: Múzeum Socializmu a Studenej Vojny). Available online: http://www.vypadni.sk/sk/muzeum-socializmu-a-studenej-vojny (accessed on 30 January 2020).

50. Jančura, B.; Beláček, M.; Slámová, M. Visual Aspects and After-effects of Mineral Resources Mining in Landscape (In Slovak: Vizuálne aspekty ťažby nerastných surovín v krajine). *Zivotn. Prostr.* **2010**, *44*, 30–34.

51. Lintnerová, O. *Impact of Mining on the Environment (In Slovak: Vplyv ťažby Nerastných Surovín na Životné Prostredie)*, 1st ed.; Comenius University: Bratislava, Slovakia, 2002; p. 160.

52. Siepak, M.A. *Rock Sanctuary of God's Mercy (In Slovak: Skalné sanktuárium Božieho milosrdenstva)*, 1st ed.; Wydawnictwo Misericordia: Kraków, Poland, 2017; pp. 103–124.

53. Butkov Cross (In Slovak: Kríž Butkov). Available online: https://www.krizbutkov.sk/ (accessed on 29 January 2021).

54. Basal Environmental Information System of Settlements (In Slovak: Bazálne environmentálne informácie o sídlach Slovenska). Available online: http://www.beiss.sk/ (accessed on 15 January 2021).

55. Ligus, V. *Zoning Plan of the Village of Hniezdne (In Slovak: Územný plán obce Hniezdne)*, 1st ed.; Ateliér Urbeko, S.R.O.: Prešov, Slovakia, 2008; p. 56.

56. Nestville Park. Available online: https://www.nestvillepark.sk/nestville-park/ (accessed on 8 February 2021).

57. Oremusová, D. *Geographical Aspects of Regional Development of the Termál Microregion (In Slovak: Geografické Aspekty Regionálneho Rozvoja Mikroregiónu Termál)*, 1st ed.; UKF: Nitra, Slovakia, 2009; p. 46.

58. Žoncová, M. Evaluation of the diversification of rural landscape in Slovakia after 1989 with a focus on the built-up area of municipalities: A case study of Podhájska municipality. *Hung. Geogr. Bull.* **2018**, *67*, 143–158. [CrossRef]

59. The Village of Podhájska. Official Website of the Village (In Slovak: Obec Podhájska. *Oficiálna Stránka Obce)*. Available online: https://www.obecpodhajska.sk/ (accessed on 20 November 2020).

60. Supuka, J.; Štefunková, D. Cultural Landscapes and their Historical Values (In Slovak: Kultúrne krajiny a ich historické hodnoty). *Zivotn. Prostr.* **2014**, *48*, 3–8.

61. Forests Slovakia (In Slovak: Lesy Slovenskej Republiky). Available online: https://www.lesy.sk/kontakty/kontaktne-informacie/ (accessed on 20 January 2021).

62. Dadová, J. Load of mining country in Špania Dolina area and possibilities of remediation (In Slovak: Záťaž baníckej krajiny v oblasti Špania Dolina a možnosti remediácie). In Proceedings of the 12nd International Conference Management and Environment, Bratislava, Slovakia, 19–20 November 2012; Rusko, M., Ed.; Strix n.f.: Žilina, Slovakia, 2012.

63. The Village of Špania Dolina (In Slovak: Obec Špania Dolina). Available online: http://www.spaniadolina.sk/en/ (accessed on 20 November 2020).

64. Scarabeo-SK, S.R.O. *Economic Development and Social Development Program of the Municipality Čierny Balog 2016–2025 (In Slovak: Program Hospodárskeho Rozvoja a Sociálneho Rozvoja obce Čierny Balog 2016–2025)*, 1st ed.; Scarabeo-SK, S.R.O.: Banská Bystrica, Slovakia, 2015; p. 142.

65. Supuka, A. *Zoning Plan of the Village of Špania Dolina (In Slovak: Územný Plán obce Špania Dolina)*, 1st ed.; Landurbia: Banská Bystrica, Slovakia, 2019; p. 96.

66. Čamajová, V. *Zoning Plan of the Village of Podhájska (In Slovak: Územný Plán Obce Podhájska)*, 1st ed.; ABCprint: Žiar nad Hronom, Slovakia, 2017; p. 190.

67. Wall, G. Cycles and Capacity: Incipient Theory or Conceptual Contradiction? *Tour. Man.* **1982**, *3*, 188–192. [CrossRef]

68. Martin, B.S.; Uysal, M. An examination of the Relationship between Carrying Capacity and the Tourism Lifecycle: Management and Policy Implications. *J. Environ. Manag.* **1990**, *31*, 327–333. [CrossRef]
69. Keller, C.P. Stages of Peripheral Tourism Development—Canada's North West Territories. *Tour. Man.* **1987**, *8*, 20–32. [CrossRef]
70. Snepenger, D.J.; Reiman, S.; Johnson, J.; Snepenger, M. Is Downtown Mainly for Tourists? *J. Travel Res.* **1998**, *36*, 5–12. [CrossRef]
71. Wall, G. Cycles and capacity: A contradiction in terms. *Ann. Tour. Res.* **1983**, *10*, 268–270. [CrossRef]
72. Stankey, G.H. Integrating wildland recreation research into decision making: Pitfalls and promises. *Recreat. Res. Rev.* **1981**, *9*, 31–37.
73. Getz, D. Capacity to Absorb Tourism: Concepts and Implications for Strategic Planning. *Ann. Tour. Res.* **1983**, *10*, 239–262. [CrossRef]
74. Pásková, M. Udržitelný rozvoj cestovního ruchu. *Sborník České Geografické Společnosti.* **2001**, *20*, 178–195.
75. Russo, A.P. A Stakeholders' Approach to Tourism Policy in Bruges. In *Tourism Studies in Bruges*; WES Research and Consultancy: Bruges, Belgium, 2002; pp. 32–41.
76. Nicu, I.C.; Stoleriu, C.C. Land use changes and dynamics over the last century around churches of Moldavia, Bukovina, Northern Romania—Challenges and future perspectives. *Habitat Int.* **2019**, *88*, 101979. [CrossRef]
77. Schulp, C.J.; Levers, C.; Kuemmerle, T.; Tieskens, K.F.; Verburg, P.H. Mapping and modelling past and future land use change in Europe's cultural landscapes. *Land Use Policy* **2019**, *80*, 332–344. [CrossRef]
78. Gerard, F.; Petit, S.; Smith, G.; Thomson, A.; Brown, N.; Manchester, S.; Wadsworth, R.; Bugar, G.; Halada, L.; Bezák, P.; et al. Land cover change in Europe between 1950 and 2000 determined employing aerial photography. *Prog. Phys. Geogr.* **2010**, *34*, 183–205. [CrossRef]
79. Ollson, E.G.A.; Austrheim, G.; Grenne, S.N. Landscape change patterns in mountains, land use and environmental diversity, Mid-Norway 1960–1993. *Landsc. Ecol.* **2000**, *15*, 155–170. [CrossRef]
80. Masný, M.; Zaušková, Ľ. Multi-temporal analysis of an agricultural landscape transformation and abandonment (Ľubietová, Central Slovakia). *Open Geosci.* **2015**, *7*, 888–896. [CrossRef]
81. Špulerová, J.; Dobrovodská, M.; Lieskovský, J.; Bača, A.; Halabuk, A.; Kohút, F.; Mojses, M.; Kenderessy, P.; Piscová, V.; Barančok, P.; et al. Inventory and classifcation of historical structures of the agricultural landscape in Slovakia. *Ekologia* **2011**, *30*, 157–170. [CrossRef]
82. Špulerová, J.; Dobrovodská, M.; Izakovičová, Z.; Kenderessy, P.; Petrovič, F.; Štefunková, D. Developing strategy for the protection of traditional agricultural landscapes based on a complex landscape-ecological evaluation (the case study of mountain landscape in Slovakia). *Morav. Geogr. Rep.* **2013**, *21*, 15–26.
83. Štefunková, D.; Špulerová, J.; Dobrovodská, M.; Mojses, M.; Petrovič, F. Traditional agricultural landscapes—A model of detailed land use mapping. *J. Landsc. Ecol.* **2013**, *11*, 1–21.