

Article

# Heritage Interpretation and Sustainable Development: A Systematic Literature Review

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**Abstract:** Heritage interpretation is an educational activity that provides information on natural and cultural heritage to people visiting heritage sites and objects. The article aims to identify different ways of using heritage interpretation as a tool for managing areas of sustainable development. The study consisted of a systematic literature review (knowledge mapping) in the field of heritage interpretation and sustainable development. Using the most important databases of scientific publications in the world (Scopus, Web of Science, Ebsco, Proquest), publications on the interpretation of heritage and sustainable development were searched. A total of 106 articles and scientific monographs were identified. Then, quantitative and qualitative data analysis was performed (text mining, topic extraction, content analysis). As a result, six thematic areas were identified: opportunities and threats for the area related to the implementation of heritage interpretation programs; the effectiveness of heritage interpretation in the areas of sustainable development; sustainable tourism development planning in heritage areas; the role of a guide-interpreter in the sustainable development of the area; the role of creativity in the heritage interpretation; and strategies for managing the visitor traffic in heritage areas. These thematic areas were discussed by citing examples from the literature on the subject.

**Keywords:** knowledge mapping; text mining; topic extraction; literature review; sustainable tourism



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## 1. Introduction

Heritage interpretation is an educational activity consisting of providing information on natural and cultural heritage to people visiting heritage sites and objects. Interpretation is done using a variety of techniques: talks, guided tours, (touch) panels, audio guides and others. It aims to provide emotions and experiences as well as engage visitors in the heritage discourse. Its task is to provide optimal experiences to visitors, manage the visitors' traffic and shape attitudes conducive to the protection and conservation of heritage resources [1–3]. An overview of the current definitions of heritage interpretation is presented in Table 1.

The main purpose of the interpretation is to enable visitors to understand the place, sensitise them to the surroundings and make them aware of the importance of the landscape, nature and monuments of the visited area. Heritage interpretation enriches the visitors' experience by stimulating and triggering their leisure time activities. Equally important is the practical goal, which is to increase the awareness of visitors and instil a model of behaviour friendly to the environment and culture. The purpose of heritage interpretation is also to popularise new ideas (e.g., new conservation trends), help tourists learn about the history of visited places, explain technical problems and physical phenomena, and make it possible to spot rare species of animals or plants [1,3]. This is why heritage interpretation is called a key factor in managing the movement of visitors to natural and cultural heritage sites [2].

Freeman Tilden formulated six fundamental principles of interpretation in the first heritage interpretation textbook of 1957 [11]. These principles can be summarised as three

ideas. The first one says that the interpretation should arouse the interest and curiosity of the visitors. The second is that the concepts presented to visitors should relate to their experiences. The third is that the interpretation must reveal unforgettable content to visitors. Since Tilden publicised his book, many other authors have formulated their own rules for heritage interpretation (Table 2). The most recent trends in interpretation include the importance of visitor co-creation and participation in creating experiences, the role of creativity, the use of positivist theories, interpretation as a space for inclusive public discourse, the use of VR and AR, and the interpretation of digital heritage [12].

**Table 1.** Contemporary definitions of heritage interpretation.

Authors	Definition
Beck and Cable [3]	Interpretation is an educational activity that aims to reveal meanings about our cultural and natural resources. Through various media—including talks, guided tours, and exhibits—interpretation enhances our understanding, appreciation, and, therefore, protection of historic sites and natural wonders.
ICOMOS [4]	Interpretation refers to the full range of potential activities intended to heighten public awareness and enhance understanding of cultural heritage site. These can include print and electronic publications, public lectures, on-site and directly related off-site installations, educational programmes, community activities, and ongoing research, training, and evaluation of the interpretation process itself.
Silbermann [5]	The public discussion in the public sphere as a deliberative discourse of collective identities, social norms, and of the possibility of individual freedom from the weight of heritage—rather than following a guided tour—offers itself as a new interpretive paradigm. “Process, not product; collaboration, not ‘expert-only presentation; memory community, not heritage audience.”
Moscardo [6]	Heritage interpretation is defined as persuasive communication activities, such as guided tours, brochures and information provided on signs and in exhibitions, aimed at presenting and explaining aspects of the natural and cultural heritage of a tourist destination to visitors.
Interpret Europe [7]	Heritage interpretation is a structured approach to non-formal learning specialised in communicating significant ideas about a place to people on leisure. It establishes a link between visitors and what they can discover at heritage sites such as a nature reserve, a historic site or a museum.
AHI [8]	Interpretation is a communication process that shares interesting stories and experience’s that help people make sense of, and understand more about, a site, collection or event.
NAI [9]	Interpretation is “a mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource.”
Interpretation Australia [10]	Interpretation communicates ideas, information and knowledge about locations, the natural world or historic places in a way which helps visitors to make sense of their environment. Good interpretation will create engaging, unique and meaningful experiences for visitors.

The purpose of this article is to identify the current trends in the use of heritage interpretation as a sustainable development management tool. Therefore, the following research question was formulated: What is the current state of knowledge in the field of heritage interpretation in the areas of sustainable development?

**Table 2.** Contemporary principles of heritage interpretation.

<b>Author and Principles</b>	
Ham [13]	
1.	Interpretation is pleasurable.
2.	Interpretation is relevant.
3.	Interpretation is organized.
4.	Interpretation has a theme.
Beck and Cable [3]	
1.	To spark an interest, interpreters must relate the subject to the lives of visitors.
2.	The purpose of interpretation goes beyond providing information to reveal deeper meaning and truth.
3.	The interpretive presentation—as a work of art—should be designed as a story that informs, entertains, and enlightens.
4.	The purpose of the interpretive story is to inspire and to provoke people to broaden their horizons.
5.	Interpretation should present a complete theme or thesis and address the whole person.
6.	Interpretation for children, teenagers, and seniors—when these comprise uniform groups—should follow fundamentally different approaches.
7.	Every place has a history. Interpreters can bring the past alive to make the present more enjoyable and the future more meaningful.
8.	High technology can reveal the world in exciting new ways. However, incorporating this technology into the interpretive program must be done with foresight and care.
9.	Interpreters must concern themselves with the quantity and quality (selection and accuracy) of information presented. Focused, well-researched interpretation will be more powerful than a longer discourse.
10.	Before applying the arts in interpretation, the interpreter must be familiar with basic communication techniques. Quality interpretation depends on the interpreter’s knowledge and skills, which should be developed continually.
11.	Interpretive writing should address what readers would like to know, with the authority or wisdom and the humility and care that comes with it.
12.	The overall interpretive program must be capable of attracting support-financial, volunteer, political, administrative—whatever support is needed for the program to flourish.
13.	Interpretation should provide people the ability, and the desire, to sense the beauty in their surroundings—to provide spiritual uplift and to encourage resource preservation.
14.	Interpreters can promote optimal experiences through intentional and thoughtful program and facility design.
15.	Passion is the essential ingredient for powerful and effective interpretation-passion for the resource and for those people who come to be inspired by the same.
Moscardo, Ballantyne and Hughes [14]	
1.	Interpretation shall make personal contact with or be related to the target audience.
2.	Interpretation should provide or encourage new and varied experiences.
3.	Interpretation should be organized using clear and easy to follow structures.
4.	Interpretation should be based on the topic.
5.	Interpretation should involve visitors in the learning process and encourage them to take control of their learning.
6.	Interpretation should demonstrate understanding and respect for the audience.

Table 2. Cont.

Author and Principles	
ICOMOS [4]	
1.	Access and Understanding. Interpretation and presentation programmes should facilitate physical and intellectual access by the public to cultural heritage sites.
2.	Information Sources. Interpretation and presentation should be based on evidence gathered through accepted scientific and scholarly methods as well as from living cultural traditions.
3.	Context and Setting. The Interpretation and Presentation of cultural heritage sites should relate to their wider social, cultural, historical, and natural contexts and settings.
4.	Authenticity. The Interpretation and presentation of cultural heritage sites must respect the basic tenets of authenticity in the spirit of the Nara Document (1994).
5.	Sustainability. The interpretation plan for a cultural heritage site must be sensitive to its natural and cultural environment, with social, financial, and environmental sustainability among its central goals.
6.	Inclusiveness. The Interpretation and Presentation of cultural heritage sites must be the result of meaningful collaboration between heritage professionals, host and associated communities, and other stakeholders.
7.	Research, Training, and Evaluation. Continuing research, training, and evaluation are essential components of the interpretation of a cultural heritage site.
Rahaman and Kiang [15]—for digital heritage interpretation	
1.	Satisfaction: Users need to be made satisfied. The interpretive process should aim to enhance their enjoyment of the place and visit.
2.	Provocation/Empathy: The process should increase the awareness of heritage protection, preservation, or conservation. It should facilitate attitudinal and behavioral change among the end-users about the heritage site, people and culture throughout the process.
3.	Learning: The process should aim to convey the symbolic and cultural meaning to the end-users through some learning activities.
4.	Multiple perspectives of the past: The interpretive process should present the history from possible multiple perspectives; thus, it would provide the opportunity to have a broader and alternative understanding of the past.
Interpretation Australia [10]	
Good interpretation should:	
1.	Enrich the visitor's experience by making it more meaningful and enjoyable;
2.	Assist the visitor to develop a keener awareness, appreciation and understanding of the heritage being experienced;
3.	Accomplish management objectives by encouraging thoughtful use of the resource by the visitor; and
4.	Promote public understanding of heritage management organisations and their programs.

## 2. Materials and Methods

The study involved a systematic literature review (knowledge mapping) in the field of heritage interpretation and sustainable development. It consists of identifying, evaluating and synthesising the results of individual studies using strict rules, and thus is a valuable source of scientific knowledge. It requires the use of all necessary databases in the analysis, minimising the risk of bias and ensuring the transparency of the research procedure [16]. In particular, in this work, a systematic mapping of the literature was made to describe the current state of knowledge in the field of heritage interpretation. Systematic mapping review is a type of empirical research using secondary materials that provides an overview of the state of knowledge in a given field, identifying important problems and areas of knowledge present in the literature on the subject [17]. The PRISMA standard was applied in the study [18].

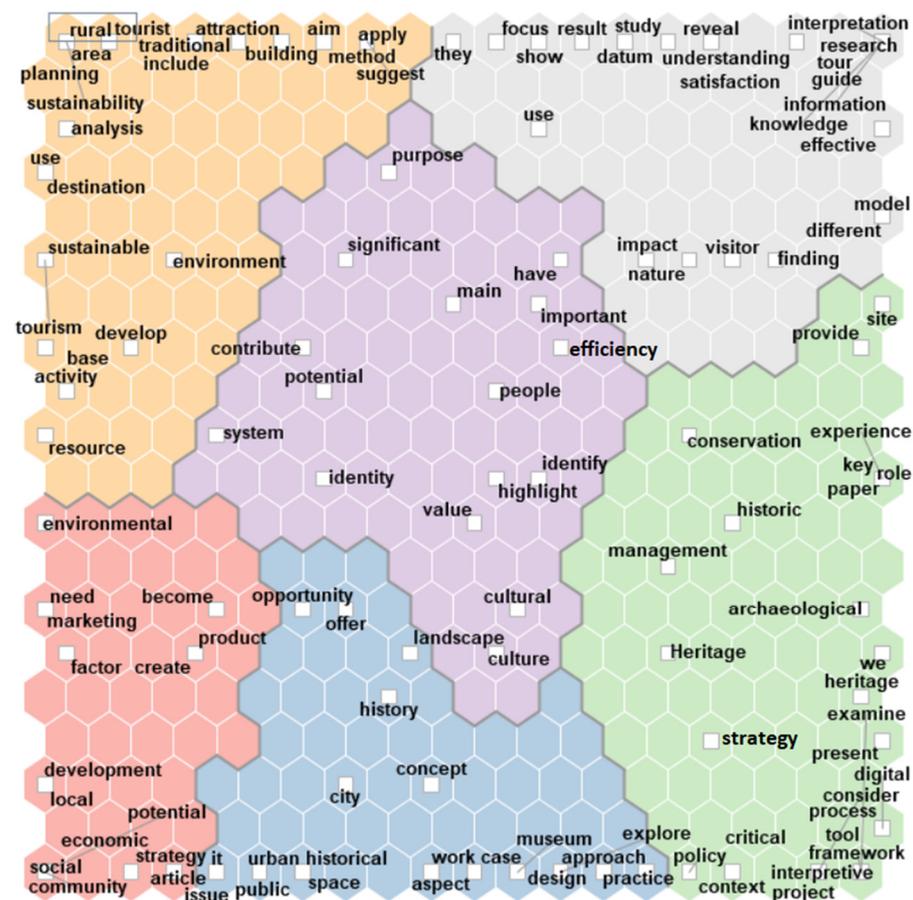
First, using the most popular databases of scientific publications (Scopus, Web of Science, Ebsco, Proquest), the author searched for articles and books containing both the



was found to be the most readable and the easiest to interpret. It took 8 min and 26 sec to complete this task (Intel Core i5-1035G1 CPU, 1.19 GHz, 8 GB RAM).

The obtained clusters of nodes (and words) allowed for the identification of the following thematic areas present in the literature on the subject (Figure 2):

1. Opportunities and threats related to the implementation of heritage interpretation programs in the areas of sustainable development (bottom middle—blue): incl. [5,25,26].
2. Effectiveness of heritage interpretation in areas of sustainable development (middle—purple): incl. [27–29].
3. Planning the development of sustainable tourism in the areas of cultural heritage (top left—orange): incl. [30–32].
4. The role of a tourist guide in the sustainable development of a heritage area (top right—grey): incl. [33–35].
5. Creativity in heritage interpretation (bottom left—purple): incl. [36–38].
6. Strategies for managing the visitor traffic in heritage areas (bottom right—green): incl. [39–41].



**Figure 2.** Self-organising map of words: thematic areas in the field of heritage interpretation and sustainable development present in the literature.

### 3.2.1. Opportunities and Threats Related to the Implementation of Heritage Interpretation Programs in the Areas of Sustainable Development

Many authors point to the advantages and disadvantages of implementing heritage interpretation programs in areas of sustainable development (including [25,39,42]).

Bill Bramwell and Bernard Lane [25] and Katherine Tubb [26] indicate that a good heritage interpretation program should be, above all, an effective tool for managing the movement of visitors to a heritage area. This is achieved by building the so-called filter centres, distracting the visitor traffic around the area, pointing to present many different

attractions located in the area and thus influencing the flow of tourist streams both in time and space. These activities aim to draw tourists away from the places most vulnerable to the pressure of tourism, by directing them to alternative attractions, sightseeing routes and heritage areas.

Heritage interpretation by communicating the historical, scientific and aesthetic values of heritage sites to visitors, as well as influencing compliance with standards of behaviour in heritage areas, reduces the adverse impacts of uncontrolled mass tourism on heritage resources [39]. Gianna Moscardo [42] emphasises that to be able to interpret heritage properly, tourists should be in a state of “mindfulness”. To enable this, they should be provided with the comfort of safety, the area should be well marked, interpretation panels should be set up, various and multisensory forms of activity should be offered, and topics and stories should be interpreted that combine the knowledge possessed by the visitors with the content that is new to them.

Interpreting the area’s heritage benefits the local economy: it attracts tourists to lesser-known places (that might otherwise be missed), encourages them to stay longer in the area, and encourages the use of local entrepreneurs [25]. Interpretation also benefits the local environment, building an understanding of the local heritage and community among visitors, and thus makes them aware of their value, shaping appropriate attitudes and influencing behaviour change [13]. Neil Silberman [5] believes that it is also beneficial for visitors to involve local communities in decisions about heritage interpretation. These decisions should concern not only “whether to interpret and what to interpret” but also “for whom and how”. Shaping the visitor’s understanding and respect for heritage sites and the residents themselves contributes to reducing exploitation and increasing mutually rewarding interactions (between guests and hosts).

The implementation of heritage interpretation programs also entails many pitfalls and dangers. These include, for example, the domination of sustainable development by an economic imperative, that is, putting economic development ahead of the well-being of the local community and the environment [43]. Another threat is the selective choice of content and simplification of interpretation caused, for example, by the lack of time that visitors can devote to visiting the area. Another threat may be overinterpretation, i.e., interpretive activity carried out in an overly intrusive manner, overloaded with educational content that may obscure the beauty of the visitors and prevent them from noticing the unique features of the area [25].

A serious problem is also disturbing the peace by tourists and influencing the life of local communities by penetrating inappropriate places at the wrong time (e.g., private properties, places of worship, etc.) [44]. Another danger is that the interpretive infrastructure creates “peculiar” tourist landscapes, which results from the desire to meet the demand for something unique, spectacular and extraordinary [45]. A threat to reliable interpretation is also politics and ideology that may appear in the interpretive message. This is a great danger because an ideological interpretation may cause great dissatisfaction among the visitors [5,46].

Last, but not least, the threat is the elitism of interpretation. Although interpreting heritage for well-educated people, heritage enthusiasts, is easy and pleasant, the real challenge is the interest of people with low cultural capital and poorly educated—i.e., the “mass tourist” [6,47].

### 3.2.2. Assessment of the Effectiveness of Heritage Interpretation in the Areas of Sustainable Development

Gianna Moscardo [27] (p. 376), in a very frequently quoted article, argues that interpretation is the key to ensuring the quality of the tourism experience, and most importantly proves that “successful interpretation is critical both for the effective management and conservation of built heritage sites and for sustainable tourism”. G. Moscardo adapted and applied Langer’s [48] mindfulness theory to tourist settings arguing that interpretation is likely to be more effective if it encourages and supports visitors to engage in the deeper processing referred to as mindfulness [49] (p. 1177).

Furthermore, Ballantyne, Packer, and Falk [29], who, relating to wildlife tourism, contrast the concept of reflective engagement, defined as “feeling an emotional connection with the animals, reflecting on new ideas about animals and their environments, discussing new information with companions, experiencing something surprising or unexpected, and feeling sad or angry about environmental problems” (p. 1247). In both these approaches, effective interpretation is no longer seen as solely based on the extent of knowledge transmission and attitude change, but rather is defined as whether or not the interpretation encourages mindful and reflective engagement [49] (p. 1177).

In turn, K.N. Tubb [26] (p. 476) argues that heritage interpretation, if carefully designed, is capable of contributing to the goals of sustainable tourism development by achieving knowledge restructuring and resulting in behavioural intentions of visitors, and that “interactive material played a vital part in the effectiveness of interpretive messages”.

The truth of these theoretical guidelines was confirmed by empirical research by Healy, van Riper and Boyd [28]. The research was carried out among visitors Cliffs of Moher Visitor Centre: low-intensity interpretation was preferred to high-intensity, technologically driven displays. Healy et al. [28] (p. 574) argue also for “greater emphasis to be placed on the interpretation that incorporates the perspectives of visitors and residents throughout all phases of the planning process”.

However, the effectiveness of the various forms of interpretation depends on the cultural context. For example, research conducted in the Danxia Shan National Natural Reserve and Geo-Park (China) demonstrates that self-guided interpretation using the “western” scientific approach with signage, an information centre and a geological museum, is ineffective and is ignored by the majority of visitors [50] (p. 117). In Chinese conditions, guided tours are more appropriate, employing an “aesthetic” approach to interpretation, using stories, art and poetry to emotionally engage visitors with the landscape, appear more appropriate, culturally relevant and effective. As stated by Xua et al. [50], guides during the tour should include numerous adjectival words, figurative or metaphorical landscape descriptions and exaggeration of the landscape’s beauty.

Walker and Moscardo [49] (p. 1189) also developed the Value Model of Interpretation (VMI), which identifies the basic elements necessary for ecotourism experience to be effective in facilitating a state of visitor mindfulness. The model “identifies the most common interpretive and experiential elements that facilitate participants’ identification of personally significant values, and which are most likely to influence an individual’s subsequent intentional behaviours”. They also suggest that “mindfulness is a necessary condition for value identification which in turn contributes to influencing post-experience behavioural intentions”. The VMI offers a summary of the foundation elements and pathways between them that are required to facilitate ecotourism’s contribution to sustainability. It is the deliberate linkages of behaviour that assume the role of conceptual to operational interpretation in ecotourism experiences in contributing to sustainable development.

Despite the many examples of empirical research cited above, Moscardo [6] (p. 462) claims that “there is only limited evidence that interpretation is effective. There are only few important findings in this area and even where there are some sound and useful conclusions, they still do not address some of the more fundamental concerns about interpretation more broadly”. Similar conclusions were drawn by Benton [51] (p. 7) as a result of research carried out at Lake Fort Smith (LFS) State Park. She stated that all four conceptions of interpretation (connecting visitors to resources, conveying agency mission and influencing behaviour, encouraging environmental literacy, and promoting tourism), did not trickle down into interpretive practice because it was not recalled by visitors in programs.

### 3.2.3. Planning the Development of Sustainable Tourism in Heritage Areas

One should agree with Eman Helmy and Chris Cooper [31] that tourism should be an important element of the area’s sustainable development plan. Along with other economic and social activities carried out in a given area, tourism brings benefits to the

local community and contributes to the protection of the natural and cultural environment. This is especially important in areas where the implementation of short-term economic goals dominates over long-term planning.

In planning the sustainable development of the region, it is necessary to maintain a balance between the authenticity of the place and the development of various forms of heritage interpretation [32]. Plans for the development of heritage interpretation should take into account the needs of heritage conservation, a pluralistic view of heritage, and should enable the local community to build a sense of shared ownership of heritage [52,53]. Interpretation plans should reveal to visitors the history and nature of the site, and be tailored to tourists' requirements by combining education and entertainment to ensure a variety of experiences and satisfaction [54–56]. The priority should be the “negotiable” nature of both authenticity and interpretation, seen as interactive and dynamic processes involving both hosts and guests [57–60].

Gemma McGrath [33] also argues that the interpretation of heritage should play the role of a buffer in the relationship between tourism and heritage. Heritage interpretation also helps build links between tourists and communities living in heritage areas. Active involvement of the local community in shaping the interpretation strategy and creating interpretative messages can significantly help in shaping the sense of local identity. Many authors believe that the process of selecting themes, concepts and messages of interpretation is an important way of involving local society in planning tourism development in cultural heritage areas [31,61,62].

Colin Hall and Simon McArthur [30] point to the possibility of conflicts between the stakeholders of the region's development. While there is consensus, they say, that the management of heritage sites should maximise the quality of the visitor experience while minimising the impact on heritage assets, in many cases, there is a direct conflict between area managers who wish to limit the number of visitors to avoid harm, residents (who want to profit from tourism) and local governments (who want to use the image of the area's heritage as part of the region's promotion).

In the process of planning tourism in heritage areas, it is important to establish criteria for assessing the sustainable development of the area. Eman Helmy and Chris Cooper [31] argue that to reliably assess the state of implementation of tourism development plans in the areas of sustainable development, it must be done on three levels: policy and strategy, plans and programs, and techniques.

A set of indicators for the development of sustainable tourism in heritage areas was also developed by Elizabeth Agyeiwaah et al. [63]. The authors assumed that instead of creating extensive lists of indicators that are largely ineffective, a smaller number of real and more practical features should be selected. Thus, based on the literature review, they proposed a set of four main groups of indicators (economic, social, environmental and cultural) and three specific groups of indicators (political, managerial-institutional and technological).

#### 3.2.4. The Role of a Tourist Guide in the Sustainable Development of a Heritage Area

There is no doubt that how the guide-interpreter guides the visitors through the heritage area has a huge impact on their experiences, perception of local culture, inhabitants and behaviour during the visit. Wei Hu and Geoffrey Wall [35] claim that the activity of guides moderates the impact of tourism on the local environment, its culture and economy, as well as on the inhabitants of the area. Therefore, interpreter guides play a vital role in the sustainable development of the area and especially in providing tourists with a high-quality experience. The guides also affect the standard of living of local communities by appropriately targeting tourists' expenses and supporting activities that protect and preserve the natural, cultural and physical values of the area. In their work, guides should therefore take into account both the needs and sensitivity of the hosts and guests, as well as the resources of the area, as well as the broadly understood tourism industry, of which they are an element. In other words, guides can make an important contribution to the

sustainable development goals by actively managing the tourist experiences and helping to manage and protect heritage resources and promote the local economy.

Gemma McGrath [33] lists several advantages (potentials) of the guide as a heritage interpreter. These include the potential of the pace and information provided to visitors (the ability to adapt to the conditions and different needs of guests—as opposed to non-verbal techniques), the potential to adapt materials to ensure that they are up-to-date and credible (thanks to the constant updating of the information provided and new scientific data) or the potential of enlivening the place and satisfying the curiosity of visitors. It is important, especially for sustainable development, to create awareness among visitors, deeply understand the heritage and awaken the need to protect it.

Hanqin Zhang and Ivy Chow [34] also argue that tour guides play the role of intermediaries in promoting local economic development. The functioning of the tourism economy in many areas depends to a large extent on the activity of tourist guides, who create the image of travel agencies and visited places, and also affect the level of tourists' satisfaction, their willingness to return to visited places and make new purchases. In addition to contributing directly to the tourism economy in heritage areas, tour guides also stimulate the demand for local products and services. During the tours, guides will familiarise their clients with the local environment and local specialities. They inform tourists and recommend places worth visiting, products worth buying, and they also suggest periods of stay. In this way, they support the local economy by creating an opportunity for local people to offer their products to tourists and by encouraging tourists to buy these products [64]. The diverse activities of the guide-interpreter can be captured in three dimensions: managing the visitor experience, managing the area's resources, and promoting the local economy.

Wei Hu and Geoffrey Wall [35] developed a set of recommendations for guides interpreting heritage in areas of sustainable development. According to the recommendations, the professionalism of the services provided by the guide consists of treating each tour as a serious obligation, not changing the route without the consent of the participants and the travel agency (tour operator) and conducting the tour politely, the essence of which is enthusiasm, support and assistance to customers. The guide should take responsibility for the smooth and safe conduct of the tour and the comfort and satisfaction of visitors by providing them with reliable information and explaining and interpreting the heritage of the area.

The guide should also observe the regulations, know and observe the rules and customs of local communities (codified or customary), know and observe the rules and regulations in force in all places and heritage sites to which visitors are led, and inform and help visitors understand and comply listed [35].

Wei Hu and Geoffrey Wall [35] also emphasise that the guide should implement the principles and practice of minimal impact: do not misinform tourists, be objective, present tourists with factual information, and clearly distinguish between what is truth, legend or opinion. It should show understanding and respect for the local community and its culture, convey to visitors the values of the local environment and culture, promote recognition for local traditions and environments, and explain the rules of behaviour in the places visited. It should set an example by applying positive empowerment and taking necessary action where necessary to enforce visitors to these rules. It should also act to reduce the consumption of energy, natural resources and the amount of waste, thus contributing to the reduction of pollution and the application of environmentally sustainable practices.

### 3.2.5. The Importance of Creativity in the Interpretation of Heritage

Many authors pay attention to the role played by creativity in the interpretation of heritage. Particularly, many voices concern the importance of creativity in the interpretation of archaeological heritage [36–38,65,66]. Sara Perry [66] points out that creativity in interpretation is key to enabling visitors to gain an in-depth understanding of heritage. The author cites many examples of the importance of creativity in the interpretation of archaeological resources: geophysics and imaging [67], heritage and games [68], heritage and

“auralization” [65] in excavations and drawings [69], in various archaeological practices related to art [70] as well as in mapping and various forms of painting, installation and performance [71].

Alice Elizabeth Watterson [72] (pp. 100–101) cautions against the dangers of modern technology, significantly reducing the involvement of archaeologists in the personal and creative interpretation of heritage, “effectively removing archaeologists working in the field from their artefacts”. Therefore, as S. Perry [66] believes, it is the skilful and creative interpretation of heritage that should be an element connecting people, technology and archaeological sources, and the lack of interpretation, i.e., the voice of archaeologists—at this crucial moment when inspiration and creating meanings are necessary “Strangles archaeology”, as Perry puts it. The aforementioned Watterson [72] (p. 100) is also in favour of adopting a mixed—creative and experimental—approach to interpretation. According to such, archaeologists should “for a moment abandon their scanners, microscopes and other research instruments and just stay in heritage sites and interpret the otherwise passive data collected with these devices and bring them to life in embodied encounters with place and landscape”.

Sara Perry [66] further calls for the introduction of creative heritage interpretation into the daily work of archaeologists. She recommends doing this in several ways: collaborative expression (e.g., oral, written or visual brainstorming, speaking aloud protocols, drawings, modelling), arts and crafts workshops, performance, prototyping, games and other types of social interaction. These methods can be used by visitor groups to develop creative thinking, create new meanings, explore unknown concepts, raise awareness and create positive effects (examples of applications can be found both in the cultural heritage sector and beyond—e.g., [73–75]).

David Ross and Gunjan Saxena [36] also noted the extraordinary opportunity offered by the archaeological heritage to interpreters. They argue that the physically damaged archaeological heritage implicitly forces creativity, offering interpreters a new dimension of the narrative being built: the appeal of loss. The physically damaged heritage is the impetus for what Melotti [76] (p. 83) calls “the emotional and sensory function of archaeological tourism”. It consists in the fact that a given “object is no longer important in itself, because of its historical significance or as a key to understanding the culture and society it expresses, but it is important (...) due to its ability to create an atmosphere where you can have a specific experience”. In this sense, as proved by Ross and Saxena [36] (p. 11), participatory co-creation of the archaeological heritage, implemented through the creative narrative of guide-interpreters, on the one hand, encourages visitors to participate more in the co-creation of experiences and narratives, and on the other hand, locates affect and emotions as key constitutive elements of heritage creation.

A practical example of the above is the use of problem situations in the interpretation, during which guides ask visitors how and why they would act in a rescue archaeology situation (e.g., when it was necessary to save the archaeological heritage in areas flooded by dams). In this way, they stimulate the involvement of visitors, referring to the charm of the lost heritage. Besides, thematic activities such as reconstructions or experimental archaeology workshops serve as a creative starting point for both site hosts and tourists and are an effective way of commemorating physically lost heritage, often using surviving local heritage resources [36].

The model of lost heritage and co-creative archaeological tourism developed by D. Ross and G. Saxena [36] made it possible to identify three factors determining the success of archaeological attractions. The first are entities stimulating cultural tourism and using strategies of co-creation and creative activities. The second is a constructivist approach to interpretation, based on an individual understanding of heritage, identity and diversity of interpretation of archaeological heritage and requiring site managers (archaeologists, guides, interpreters) to negotiate a variety of viewpoints. The third is to understand that the role of archaeological heritage and its value for tourism is not limited

to the material dimension. Therefore, despite the loss of archaeological heritage, there is still great potential for creative and artistic interpretations.

### 3.2.6. Visitor Traffic Management in Heritage Areas

There are two basic interpretative strategies used in heritage areas in the literature: (1) informing visitors about the value of heritage (i.e., heritage interpretation) and (2) encouraging visitors to change their behaviour to minimise their negative impact on heritage resources [41,77]. However, as noted by Fernando Enseñat-Soberanis et al. [39], as a result of research carried out in the most important archaeological heritage sites in the world, in the practice of managing heritage sites, the priority is the regulation, control and redistribution of visitor traffic, and only then the interpretation of heritage. They also found that among the most widely used forms of interpretation of archaeological heritage, there is a tourist centre that serves both as a museum and a heritage interpretation centre.

The power of influencing visitors through heritage interpretation is related to the level of authority or pressure exerted in the communication process, in which there is coercion on the one hand and persuasion on the other [40]. The first is to enforce the applicable rules and regulations in a mandatory manner, while the second tries to persuade visitors to change their behaviour by explaining to them the reasons for these prohibitions. Both are part of the same continuum, and for best behavioural change outcomes, they should be used together, especially in large areas with limited behavioural monitoring capabilities. In such situations, heritage interpretation, which at the same time informs and persuades visitors to follow the rules and regulations regarding behaviour in a given area, is irreplaceable in its role.

F. Enseñat-Soberanis et al. [39] proposed a heritage site management model with the primary goal of preserving the heritage value and at the same time providing an optimal visitor experience. The model includes three strategies for managing the visitor traffic in heritage areas: restrictive, redistributive and interpretive, which should be applied progressively.

In the first phase, the authors recommend applying a restrictive strategy consisting of limiting the number of people visiting the area and using the heritage resources by specifying the maximum number of people visiting the area during the day or in a specific time unit. For this purpose, it is necessary to develop a method for estimating the maximum tourist capacity of the heritage area. The redistribution strategy consists of dispersing people visiting the heritage area in time and space with the help of road and service infrastructure, introducing a system of compulsory booking and pre-sale of tickets, as well as increasing the open space available to visitors and developing a network of paths and routes. It also includes the modernisation of roads leading to attractions, parking lots and rest areas for an appropriate number of guests. Finally, the third strategy is to interpret the heritage of the area, conveying information about the value of heritage to viewers and convincing them to behave responsibly in the area of heritage. In this phase, the authors recommend planning the construction of an interpretation centre for the area's heritage [39].

## 4. Conclusions

The purpose of the present study was to identify the current trends in heritage interpretation in areas of sustainable development. This was done through a systematic literature review, topic extraction and content analysis.

The contribution of this article to the knowledge of heritage interpretation is to identify the main areas of knowledge present in the field of sustainable development. Although the literature on the interpretation of heritage is relatively rich, the majority is instructional—methodological studies on what and how to interpret. This study, to some extent, fills this gap by systematically compiling recommendations on the ways of interpretation in the areas of sustainable development.

Identifying topics using a self-organising map of words made it possible to identify thematic areas present in the literature, such as opportunities and threats related to the implementation of heritage interpretation programs in the areas of sustainable development, assessment of the effectiveness of heritage interpretation in the areas of sustainable development, planning the development of sustainable tourism in heritage areas, the role of a tourist guide in the sustainable development of a heritage area, the importance of creativity in the interpretation of heritage, and visitor traffic management in heritage areas.

As a result of the literature review, several practical conclusions can be formulated.

Interpretation of heritage, despite over 70 years from the formulation of its principles by Freeman Tilden [11], has a great potential both in improving the quality of tourist experiences and influencing the behaviour of visitors and thus managing areas of sensitive heritage. Despite the many threats associated with introducing interpretive programs, it seems that the benefits outweigh the potential threats. The most important of the threats is the omission of residents in designing interpretations, conflicts between guests and hosts, and unskilful interpretations (e.g., overinterpretation, ideologisation).

A tourism development planning process must take into account both environmental sensitivity and the provision of diverse and authentic visitor experiences through heritage interpretation. It is essential in this process to establish indicators of the development of sustainable tourism [62].

The role of a tourist guide-interpreter in the sustainable development of the region is crucial. Despite the extensive use of modern technologies, the role of a living guide remains unquestionable. The guide remains a central agent between the visitor and the visited area [35].

The importance of creativity and co-creation in the practice of interpretation is particularly strong these days. The concepts of the experience economy and service-based logic indicate that now it is the consumer who participates in the co-creation of value. Currently, tourists co-create experiences by actively participating in the co-production process, engaging in heritage on a psychological and emotional level by independently selecting and discovering selected aspects of heritage according to their interests [78]. These concepts are still rarely used in heritage interpretation programs. Creativity in interpretation is particularly important in the case of archaeological heritage—irretrievably lost [36,38].

The management of cultural and natural heritage resources should be done by managing the traffic and experiences of visitors. Visitor traffic management in heritage areas should include three stages: restrictive, redistributive and interpretive, which should be applied progressively [39].

An important task of heritage interpretation is also the promotion of the local economy and culture and the development of respect and mutual attitudes towards each other among guests and hosts, as well as the protection and authentic representation of local culture, customs, traditions and the natural environment.

No issues related to the use of new forms of heritage interpretation in the management of visitor experiences and their co-creation (VR and AR, serious games, digital storytelling) were found. This proves the necessity to research this area: applicability and the effectiveness of new forms of heritage interpretation.

In addition, several theoretical conclusions can be made.

The effectiveness of heritage interpretation in the areas of sustainable development is relatively poorly documented. Although many authors write about the advantages of interpretation in managing visitor traffic, the results of empirical research are quite rare. The influence of interpretation on the satisfaction and experiences of some people is more often indicated than the change of their behaviour under the influence of interpretation [78]. This problem concerns not only behaviour in areas of sustainable development but in general the effectiveness of interpretation.

The above remarks induce attention to the need to perform meta-analyses on the impact of interpretation on the experience, knowledge, attitudes and behaviour of visitors to

the areas of sustainable development. Such work, consolidating a lot of empirical research, could significantly strengthen the theoretical foundations of heritage interpretation.

The most important limitations of the conducted research include the linguistic scope of the literature—only texts in English were analysed. The scope of the analysed literature in this work is limited to peer-reviewed scientific texts, although, as we know, heritage interpretation is a practical activity. Therefore, subsequent analyses should also include sources outside the databases of peer-reviewed scientific texts.

#### *Future Research*

After analysing the literature on the subject, several directions for further research and development of heritage interpretation in the areas of sustainable development can be indicated:

1. Influence of interpretation on behaviour, attitudes, experiences, knowledge in the context of sustainable development.
2. Analysis of intergenerational differences in perception and interpretation effectiveness in the areas of sustainable development.
3. The effectiveness of new forms of interpretation such as: “electronic field trips” that reach audiences around the world, storytelling, digital storytelling, chatbots, serious games and virtual heritage interpretation centres.
4. Identification and understanding of people and reasons why they avoid interpreting heritage in areas of sustainable development.
5. Analysis of the economic effectiveness of the interpretation in comparison with other methods of managing the traffic of visitors in the areas of sustainable development.
6. The impact of interpretation on the visitors’ experience and the importance of co-creating experiences, the interpretation of digital and intangible heritage, the importance of constructivist learning theories in interpretation, the importance of VR, AR and games in the interpretation of the heritage of sustainable development areas.
7. Research on the degree of implementation of heritage interpretation guidelines, e.g., ICOMOS Charter [4] or recommendations from regional or national heritage interpretation associations.

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#### References

1. Nowacki, M. *Heritage Interpretation*; Wydawnictwo AWF w Poznaniu: Poznań, Poland, 2012.
2. Moscardo, G.; Ballantyne, R. Interpretation and Attractions. In *Managing Visitor Attractions*; Garrod, B., Wanhill, S., Eds.; Routledge: Oxford, UK, 2008.
3. Beck, L.; Cable, T. *Interpretation for 21st Century. Fifteen Guiding Principles for Interpreting Nature and Culture*; Sagamore Publishing: Champaign, IL, USA, 1998.
4. ICOMOS. *The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites*; Ratified by the 16th General Assembly of ICOMOS; ICOMOS: Quebec, QC, Canada, 2008.
5. Silberman, N.A. Heritage interpretation and human rights: Documenting diversity, expressing identity, or establishing universal principles? *Int. J. Herit. Stud.* **2012**, *18*, 245–256. [CrossRef]
6. Moscardo, G. Interpretation. In *Encyclopaedia of Tourism*; Jafari, J., Xiao, H., Eds.; Springer: London, UK, 2014.
7. Interpret Europe. Available online: <http://www.interpret-europe.net/feet/home/heritage-interpretation/> (accessed on 18 January 2021).
8. About AHL. Available online: <https://ahi.org.uk/about/> (accessed on 18 January 2021).
9. What Is Interpretation? Available online: [https://www.interpnet.com/NAI/interp/About/About\\_Interpretation/What\\_is\\_Interpretation\\_/nai/\\_About/what\\_is\\_interp.aspx?hkey=b5ddef3-03a8-4000-bf73-433c37c8a7af](https://www.interpnet.com/NAI/interp/About/About_Interpretation/What_is_Interpretation_/nai/_About/what_is_interp.aspx?hkey=b5ddef3-03a8-4000-bf73-433c37c8a7af) (accessed on 18 January 2021).
10. What Is Interpretation? | Interpretation Australia. Available online: <https://interpretationaustralia.asn.au/about-interpretation-australia/what-is-interpretation/> (accessed on 18 January 2021).

11. Tilden, F. *Interpreting Our Heritage: Principles and Practices for Visitor Services in Parks, Museums, and Historic Places*; University of North Carolina Press: Chapel Hill, NC, USA, 1957.
12. Nowacki, M. Interpretacja dziedzictwa w XXI wieku: Kreatywność, ko-kreacja i publiczny dyskurs w ekonomii doświadczeń. *Tur. Kult.* **2020**, *3*, 12–40.
13. Ham, S.H. *Environmental Interpretation: A Practical Guide for People with Big Ideas and Small Budgets*; Fulcrum Publishing: Golden, CO, USA, 1992.
14. Moscardo, G.; Ballantyne, R.; Hughes, K. *Designing Interpretive Signs: Principles in Practice*; Fulcrum Publishing: Golden, CO, USA, 2007.
15. Rahaman, H.; Kiang, T.B. Digital Heritage Interpretation: Learning from the Realm of Real-World. *J. Interpret. Res.* **2017**, *22*, 53–64. [[CrossRef](#)]
16. Dochy, F. A guide for writing scholarly articles or reviews for the Educational Research Review. *Educ. Res. Rev.* **2006**, *4*, 1–21. [[CrossRef](#)]
17. Fernández-Sotos, P.; Torio, I.; Fernández-Caballero, A.; Navarro, E.; González, P.; Dompablo, M.; Rodríguez-Jimenez, R. Social cognition remediation interventions: A systematic mapping review. *PLoS ONE* **2019**, *14*, e0218720. [[CrossRef](#)] [[PubMed](#)]
18. PRISMA. Available online: <http://www.prisma-statement.org/> (accessed on 3 April 2021).
19. Text Mining—Wikipedia. Available online: [https://pl.wikipedia.org/wiki/Text\\_mining](https://pl.wikipedia.org/wiki/Text_mining) (accessed on 4 February 2021).
20. NVivo. Available online: <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home> (accessed on 4 March 2021).
21. KH Coder. Available online: <https://kncoder.net/en/> (accessed on 4 March 2021).
22. Kohonen, T. *Self-Organizing Maps*, 3rd ed.; Springer: New York, NY, USA, 2001.
23. Li, Q.; Li, S.; Zhang, S.; Hu, J.; Hu, J. A Review of Text Corpus-Based Tourism Big Data Mining. *Appl. Sci.* **2019**, *9*, 3300. [[CrossRef](#)]
24. Higuchi, K. KH Coder 3 Reference Manual. Available online: [https://kncoder.net/en/manual\\_en\\_v3.pdf](https://kncoder.net/en/manual_en_v3.pdf) (accessed on 3 August 2017).
25. Bramwell, B.; Lane, B. Interpretation and Sustainable Tourism: The Potential and the Pitfalls. *J. Sustain. Tour.* **1993**, *1*, 71–80. [[CrossRef](#)]
26. Tubb, K.N. An Evaluation of the Effectiveness of Interpretation within Dartmoor National Park in Reaching the Goals of Sustainable Tourism Development. *J. Sustain. Tour.* **2003**, *11*, 476–498. [[CrossRef](#)]
27. Moscardo, G. Mindful Visitors. *Heritage and Tourism. Ann. Tour. Res.* **1996**, *23*, 376–397. [[CrossRef](#)]
28. Healy, N.; van Riper, C.J.; Boyd, S.W. Low versus high intensity approaches to interpretive tourism planning: The case of the Cliffs of Moher, Ireland. *Tour. Manag.* **2016**, *52*, 574–583. [[CrossRef](#)]
29. Ballantyne, R.; Packer, J.; Falk, J. Visitors’ learning for environmental sustainability: Testing short- and long-term impacts of wildlife tourism experiences using structural equation modelling. *Tour. Manag.* **2011**, *32*, 1243–1252. [[CrossRef](#)]
30. Hall, C.M.; McArthur, S. *Integrated Heritage Management. Principles and Practice*; Stationery Office: London, UK, 1998.
31. Helmy, E.; Cooper, C. An Assessment of Sustainable Tourism Planning for the Archaeological Heritage: The Case of Egypt. *J. Sustain. Tour.* **2002**, *10*, 514–535. [[CrossRef](#)]
32. Loulanski, T.; Loulanski, V. The sustainable integration of cultural heritage and tourism: A meta-study. *J. Sustain. Tour.* **2011**, *19*, 837–862. [[CrossRef](#)]
33. McGrath, G. *Tour Guides as Interpreters of Archaeological Sites: Heritage Tourism in Cusco, Peru*. Ph.D. Dissertation, School of Management Studies, University of Surrey, Guildford, UK, 2005.
34. Zhang, H.; Chow, I. Application of importance-performance model in tour guides’ performance: Evidence from mainland Chinese outbound visitors in Hong Kong. *Tour. Manag.* **2004**, *25*, 81–91. [[CrossRef](#)]
35. Hu, W.; Wall, G. Interpretative guiding and sustainable development: A framework. *Tour. Manag. Perspect.* **2012**, *4*, 80–85. [[CrossRef](#)]
36. Ross, D.; Saxena, G. Participative co-creation of archaeological heritage: Case insights on creative tourism in Alentejo, Portugal. *Ann. Tour. Res.* **2019**, *79*, 102790. [[CrossRef](#)]
37. Thomas, A.; Lee, D.; Frederick, U.; White, C. Beyond Art/Archaeology: Research and Practice after the Creative Turn. *J. Contemp. Archaeol.* **2017**, *4*, 121–129. [[CrossRef](#)]
38. Ross, D.; Saxena, G.; Correia, F.; Deutz, P. Archaeological tourism: A creative approach. *Ann. Tour. Res.* **2017**, *67*, 37–47. [[CrossRef](#)]
39. Enseñat-Soberanis, F.; Frausto-Martínez, O.; Gándara-Vázquez, M. A visitor flow management process for touristified archaeological sites. *J. Herit. Tour.* **2018**, *14*, 340–357. [[CrossRef](#)]
40. Moscardo, G. Critical reflections on the role of interpretation in visitor management. In *Visitor Management in Tourism Destination*; Albrecht, J.N., Ed.; CABI Publishing: Boston, MA, USA, 2017; pp. 170–187.
41. Gándara, M. La divulgación significativa como estrategia de comunicación educativa. *Educ. Temática Digit.* **2018**, *20*, 622–667.
42. Moscardo, G. Understanding tourist experience through mindfulness theory. In *Handbook of Tourist Behaviour: Theory and Practice*; Kozak, M., Decrop, A., Eds.; Routledge: New York, NY, USA; London, UK, 2009; pp. 99–115.
43. Luke, T.W. Neither sustainable nor development: Reconsidering sustainability in development. *Sustain. Dev.* **2005**, *13*, 228–238. [[CrossRef](#)]
44. Yang, J.; Ryan, C.; Zhang, L. Social conflict in communities impacted by tourism. *Tour. Manag.* **2018**, *35*, 82–93. [[CrossRef](#)]
45. Ringer, G. *Destinations: Cultural Landscapes of Tourism*; Routledge: London, UK; New York, NY, USA, 2013.

46. Meskell, L. *Archaeology under Fire: Nationalism, Politics and Heritage in the Eastern Mediterranean and Middle East*; Routledge: London, UK; New York, NY, USA, 2002.
47. Burns, P. Paradoxes in planning Tourism Elitism or Brutalism? *Ann. Tour. Res.* **1999**, *26*, 329–348. [[CrossRef](#)]
48. Langer, E.J. Mindful learning. *Curr. Dir. Psychol. Sci.* **2000**, *9*, 220–223. [[CrossRef](#)]
49. Walker, K.; Moscardo, G. Encouraging sustainability beyond the tourist experience: Ecotourism, interpretation and values. *J. Sustain. Tour.* **2014**, *22*, 1175–1196. [[CrossRef](#)]
50. Xu, H.; Cui, Q.; Ballantyne, R.; Packer, J. Effective environmental interpretation at Chinese natural attractions: The need for an aesthetic approach. *J. Sustain. Tour.* **2013**, *21*, 117–133. [[CrossRef](#)]
51. Benton, G.M. Multiple Goal Conveyance in a State Park Interpretive Boat Cruise. *J. Interpret. Res.* **2011**, *16*, 7–22. [[CrossRef](#)]
52. Caffyn, A.; Lutz, J. Developing the heritage tourism product in multiethnic cities. *Tour. Manag.* **1999**, *20*, 213–221. [[CrossRef](#)]
53. Waitt, G. Consuming heritage: Perceived historical authenticity. *Ann. Tour. Res.* **2000**, *27*, 835–862. [[CrossRef](#)]
54. Chhabra, D.; Healy, R.; Sills, E. Staged authenticity and heritage tourism. *Ann. Tour. Res.* **2003**, *30*, 702–719. [[CrossRef](#)]
55. Henderson, J. Ethnic heritage as a tourist attraction: The Peranakans of Singapore. *Int. J. Herit. Stud.* **2003**, *9*, 27–44. [[CrossRef](#)]
56. Carr, A. Mountain places, cultural spaces: The interpretation of culturally significant landscapes. *J. Sustain. Tour.* **2004**, *12*, 432–459. [[CrossRef](#)]
57. Cohen, E. Authenticity and commoditization in tourism. *Ann. Tour. Res.* **1988**, *15*, 371–386. [[CrossRef](#)]
58. McIntosh, A.; Prentice, R. Affirming authenticity: Consuming cultural heritage. *Ann. Tour. Res.* **1999**, *29*, 589–612. [[CrossRef](#)]
59. Tucker, H. Tourists and troglodytes: Negotiating for sustainability. *Ann. Tour. Res.* **2001**, *28*, 868–891. [[CrossRef](#)]
60. Richards, G.; Wilson, J. Developing creativity in tourist experiences: A solution to the serial reproduction of culture? *Tour. Manag.* **2006**, *27*, 1209–1223. [[CrossRef](#)]
61. Cooper, C.; Westlake, J.N. Developing and Managing Tourism: An Enlightened Technique for Destination Planning. *Insights July 1991*, A1–A8.
62. Nuryanti, W. *Tourism and Heritage Management*; Conference Proceedings from Tourism and Heritage Management (ICCT); Gadjah Mada University Press: Yogyakarta, Indonesia, 1997.
63. Agyeiwaah, E.; McKercher, B.; Suntikul, W. Identifying core indicators of sustainable tourism: A path forward? *Tour. Manag. Perspect.* **2017**, *24*, 26–33. [[CrossRef](#)]
64. Gurung, G.; Simmons, D.; Devlin, P. The evolving role of tourist guides: The Nepali experience. In *Tourism and Indigenous Peoples*; Butler, R., Hinch, T., Eds.; International Thomson Business Press: London, UK, 1996; pp. 107–128.
65. Murphy, D.; Shelley, S.; Foteinou, A.; Brereton, J.; Daffern, H. Acoustic Heritage and Audio Creativity: The Creative Application of Sound in the Representation, Understanding and Experience of Past Environments. *Internet Archaeol.* **2017**, *44*. [[CrossRef](#)]
66. Perry, S. Why Are Heritage Interpreters Voiceless at the Trowel’s Edge? A Plea for Rewriting the Archaeological Workflow. *Adv. Archaeol. Pract.* **2018**, *6*, 212–227. [[CrossRef](#)]
67. Ferraby, R. Geophysics: Creativity and the Archaeological Imagination. *Internet Archaeol.* **2017**, *44*. [[CrossRef](#)]
68. Coppstone, T.; Dunne, D. Digital Media, Creativity, Narrative Structure and Heritage. *Internet Archaeol.* **2017**, *44*. [[CrossRef](#)]
69. Gant, S.; Reilly, P. Different Expressions of the Same Mode: A Recent Dialogue between Archaeological and Contemporary Drawing Practices. *J. Vis. Art Pract.* **2017**, *17*, 100–120. [[CrossRef](#)]
70. Bailey, D. Disarticulate—Repurpose—Disrupt: Art/Archaeology. *Camb. Archaeol. J.* **2017**, *27*, 691–701. [[CrossRef](#)]
71. Pálsson, G.; Aldred, O. En-Counter-Maps. *Epoiesen* **2017**. [[CrossRef](#)]
72. Watterson, A.E. Engaging with the Visual: Re-Thinking Interpretive Archaeological Visualisation. Ph.D. Dissertation, Glasgow School of Art, Glasgow, Scotland, 2014.
73. Pujol, L.; Roussou, M.; Poulou, S.; Balet, O.; Vayanou, M.; Ioannidis, Y. Personalizing Interactive Digital Storytelling in Archaeological Museums: The CHESS Project. In *Archaeology in the Digital Era, Proceedings of the 40th Annual Conference of Computer Applications and Quantitative Methods in Archaeology, Southampton, UK, 26–29 March 2012*; Amsterdam University Press: Amsterdam, The Netherlands, 2012; pp. 77–90.
74. Malinverni, L.; Pares, N. Learning of Abstract Concepts through Full-Body Interaction: A Systematic Review. *J. Educ. Technol. Soc.* **2014**, *17*, 100–116.
75. Schaper, M.-M.; Pares, N. Making Sense of Body and Space through Full-Body Interaction Design: A Case Study. In *Proceedings of the 15th International Conference on Interaction Design and Children*; ACM: New York, NY, USA, 2016.
76. Melotti, M. *The Plastic Venuses: Archaeological Tourism in Post-Modern Society*; Cambridge Scholars Publishing: Newcastle upon Tyne, UK, 2011.
77. Weaver, D. *Sustainable Tourism: Theory and Practice*; Routledge: New York, NY, USA, 2013.
78. Moscardo, G. Interpretation and tourism: Holy grail or emperor’s robes? *Int. J. Cult. Tour. Hosp. Res.* **2014**, *8*, 462–476. [[CrossRef](#)]