Geodiversity, marketing and photographic images: the Basque Coast UNESCO Global Geopark (Spain) as a geotouristic destination

Geodiversidade, marketing e fotografia: o UNESCO Geopark Costa Basca (Espanha) como destino geoturístico

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Abstract

Photography is an important instrument in tourism marketing, which aims to encourage consumption and consolidate the image of a tourist destination in consumers' minds. The elements of geodiversity with aesthetic and cultural values are commonly used as differentiated products in tourism destinations. This article discusses the relation between geodiversity, tourism marketing, and the use of photographs to consolidate the image of a destination, focusing on geotourism practices. The case study analyzes photographs from tourism promotion materials of the Basque Coast UNESCO Global Geopark (Spain), seeking to understand the techniques, fieldwork, symbols and narratives present therein. The methodology involves a theoretical discussion, fieldwork and a qualitative description of the photographs with physical attributes. Basque Coast's geological and geomorphological features are shown in photographs, highlighting a singular geoheritage that sustains environmental and cultural conservation, a principle that every geopark should construct and transmit.

Keywords: Geoheritage, Geotourism, Geoparks, Tourism marketing.

Resumo

A fotografia é um importante instrumento no marketing turístico, uma vez que auxilia na concepção e consolidação da imagem do destino turístico. Elementos da geodiversidade que dispõem de valores estéticos e culturais são comumente utilizados como produtos nos destinos turísticos. Nesse contexto, o presente artigo tem como objetivo discutir a relação entre geodiversidade, marketing turístico e o uso de fotografias de paisagem na consolidação da imagem do destino turístico, tendo como foco especial as práticas geoturísticas. O estudo de caso analisou fotografias presentes em materiais de promoção turísticas do UNESCO Geopark Costa Basca (Espanha), visando entender as técnicas, os símbolos e as narrativas presentes. A metodologia partiu de uma discussão teórica, trabalho de campo e análise qualitativa dos atributos físicos das fotografias. Elementos geológicos e geomorfológicos da Costa Basca são retratados nas fotografias, evidenciando um geopatrimônio singular que sustenta a preservação ambiental e cultural, princípio que todo geoparque deve construir e transmitir.

Palavras-chave: Geopatrimônio; Geoturismo; Geopark; Marketing Turístico.

1. INTRODUCTION

Geodiversity is endowed with a range of quantifiable services and values, such as economic and scientific, and important subjective ones, such as aesthetic and cultural (GRAY, 2004; WEBBER et al., 2006; MOCHIUTTI et al., 2012). Therefore, understanding, studying, and deepening the approach of geodiversity along these subjective lines, which vary according to the perception and history of social groups, is a relevant pursuit in the popularization of this new paradigm of geosciences which has sustainability as its foundation (GRAY, 2008).

Socioeconomic development strategies focused on geodiversity, especially those associated with geotourism and geoparks, are established in territories that have scientific, cultural, and aesthetic value (ZOUROS, 2004; DOWLING, 2010; UNESCO, 2016). Expanding the analysis, it is notable that most global tourist destinations commercialize geomorphological and geological features as products, since their scenic appeal is capable of capturing a specific audience.

One of the strategies employed by the tourist trade in the promotion and consolidation of a tourist destination image is the use and dissemination of photographs in specialized guides and sites (URRY, 2001; MOLINA; ESTEBAN, 2006; LO; MCKERCHER, 2015). Images of beaches, waterfalls, mountains, volcanoes, and caverns, all elements of geodiversity, are widely promoted by tourism marketing as the differentiated products of a given destination (BEERLI; MARTÍN, 2004).

The objective of this article is to discuss the relation between geodiversity, tourism marketing, and the use of photographs in consolidating the destination image, focusing on those based on geotourism practices. It provides a case study, analyzing photographs utilized in the tourism promotion materials from Basque Coast UGGp (UNESCO Global Geopark), Spain (Figure 1), in order to understand the techniques, symbols and narratives chosen by the managing agency in creating the location's image as a geotourism destination.

2. MATERIALS AND METHODS

The methodology involves a theoretical discussion of the themes of geodiversity, geoheritage, geoconservation, tourism marketing, geotourism, geoparks and photography. The case study comprises a qualitative analysis of images found on the official site of Basque Coast UNESCO Global Geopark (UGGp)ⁱ and in the downloadable travel brochures, as well as a field visit to the geopark and its geosites.



Figure 1 - Map of Basque Coast UGGp.
Authorship: Basque Coast UGGp.

Due to the number of images present in the Basque Coast UGGP official website, it was not possible to analise the entire set. Thus, photos covering the natural characteristics of both major geological-geomorphological environments in the area, the coastal zone and the interior zone (carste). Images focused in architectural and gastronomic aspects, also present but in a smaller expression were not selected.

The analysis was conducted by a professional with expertise in the area of photography, based on basic elements such as the use of composition rules, presence of textures, color balance, contrast, and depth of field.

A field work performed in January 2020 visited routes in the located in the coastal line and made available by the park management service. However, it is valid to emphasize that the author Asier Hilário Órus is the geopark's scientific director, having participated in the inventory, evaluation and promotion of geosites, as well as daily activities in the local community.

3. THE BASQUE COAST UGGP: GEOLOGICAL SETTINGS

The Basque Coast UGGp has approximately an area of 90 km² and 20 thousand inhabitants, spread over the municipalities of Deba, Mutriku, and Zumaia, in the autonomous community of

Basque Country, Spain (Figure 1). Despite its small area, making Basque Coast UGGp one of the smallest in the world, it has 54 points of geological interest (Figure 2) distributed by two sectors (HILARIO *et al.*, 2013).

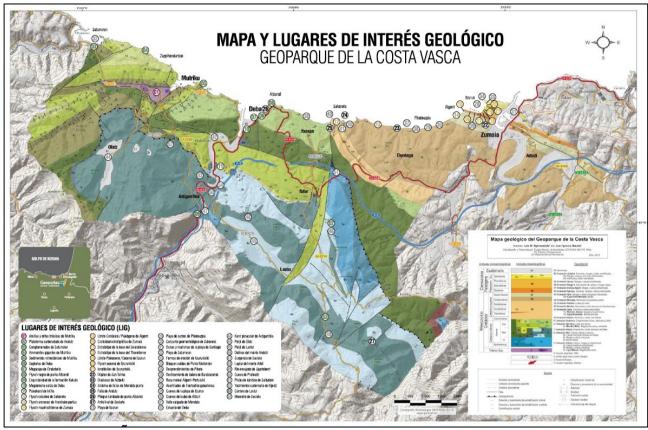


Figure 2. Geological and places of geological interest map. **Authorship:** Basque Coast UGGp.

The first is the Bay of Biscay coastline composed of the Flysch formation, which represents 60 million years of geological history in its strata(ÓRUS, 2008). This is its area of greatest scientific importance, including two global stratotypes, the boundaries between the Selandian-Thanetian (S-T) and Danian-Selandian (D-S) periods, as well as the Cretaceous-Paleogene (K-Pg) boundary, which marks the extinction of the dinosaurs and the Paleocene – Eocene boundary, defined by one of the greatest warming events in the Earth's history (ÓRUS, 2008; HILARIO *et al.*, 2013) [77, 78]. The second sector is an inland zone with extraordinary karst relief, with over 200 caves, poljes, and sinkholes (HILARIO *et al.*, 2013).

The scientific relevance, in conjunction with the scenic appeal of its features, has led to the Basque Coast UGGp flysch formation being used on the cover of several geoscience books, such as "Geoheritage: assessment, protection and management" by Reynard and Brilha (2018), in addition to providing the main image on the webpage of the International Commission on Stratigraphyⁱⁱ. Beyond its scientific importance, which congregates researchers from all over the planet, the aesthetic value alone of the geological and geomorphological features also brings recognition to the geopark. The

flysch zone is the scenario of various films, such as "Ocho apellidos vascos" which saw huge success in Spain in 2014 and television series, such as "Game of Thrones" (2011-2019) of worldwide fame. In harmony with the spectacular natural landscape, the distinctive cultural aspects of the Basque Country, such as architecture, language, and cuisine, are conserved.

4. GEODIVERSITY: A PARADIGM IN EVOLUTION

Articles that address the paradigm of geodiversity have gained popularity in the context of environmental sciences thanks to its relevance in the development of holistic nature conservation strategies (SERRANO; RUIZ-FLAÑO, 2007). In short, the concept of geodiversity rises as a counterpoint to the concept of biodiversity, and is understood as the variety of abiotic elements and processes existent in a landscape (SHARPLES, 1993; GRAY, 2004) and the basis for the development of all forms of life (NIETO, 2001).

The theme of geodiversity exhibits an environmentalist character due to the historic moment of its formulation, the United Nations Conference of 1992 (BORBA, 2011). Studies in this area, in addition to characterizing the abiotic nature of elements, also emphasize the services they provide to society. Gray (2004), in justifying the study of geodiversity, defined six categories of value, as follows: intrinsic or existence value, cultural value, economic value, aesthetic value, functional value, and research and educational value.

Elements of geodiversity that are notable for one or more of the values listed can be termed heritage (BROCX; SEMENIUK, 2007; MIKHAILENKO *et al.*, 2017). Thus, a concept that complements the study of geodiversity is geoheritage, which is defined as the set of geodiversity elements that stand out for their scientific, cultural, or educational value (CARCAVILLA *et al.*, 2008). They are elements that, due to their relevance as a register of the evolutionary history of the planet or their relationship to cultural components, should be the target of specific conservation strategies, in order that future generations may also enjoy their potentialities. The conservation measures oriented to elements of geodiversity or geoheritage encompass geoconservation, whose philosophical basis rests in the paradigm of sustainability (HENRIQUES *et al.*, 2011).

Geotourism stands out among the geoconservation strategies disseminated nowadays and has an integrating character because it disseminates, in the context of environmental conservation, economic, cultural and aesthetic approaches (DOWLING, 2013; WILLIAMS *et al.*, 2020). Hence, geotourism is a dynamic activity that allows the use of elements of geodiversity in accordance with the fulfillment of sustainability postulates and the strengthening of local identities (GORDON, 2012). There are a variety of definitions for geotourism in the literature (HOSE, 1995; NEWSOME; DOWLING, 2006; ÓLAFSDÓTTIR; TVERIJONAITE, 2018). Herein we adopt the concept found in the Arouca Declaration (AROUCA, 2011), which defines it as "tourism which sustains and

enhances the identity of a territory, taking into consideration its geology, environment, culture, aesthetics, heritage and the well-being of its residents".

In geotourism, the elements of geodiversity and the stories they tell are themselves the main tourist attractions. Waterfalls, caverns, fossils, mountains can be commercialized by the tourist trade, achieving the status of tourism product (MICCADEI *et al.*, 2011; COBOS; ALCALÁ, 2018). The presence of aesthetic potential, expressed by its rarity, dimension, existence of curiosities, among other characteristics, following a well-constructed narrative, causes the spaces designated for geotourism to be desired by the consumer, that is, the tourist.

The aesthetic value of geodiversity denotes the importance of abiotic elements to the scenic landscape composition, on different scales. It is associated to the subjective 'beauty' built by those elements (GORDON, 2018). In general, the aesthetic appeal of a place is intrinsically related to its abiotic diversity, with emphasis on geomorphological features, and is probably of the utmost importance in geotourism, as "beautiful" landscapes are the main attractions for tourists. Thus, we can say that places with high aesthetic value may facilitate development of geotourism, serving as an initial enticement to visit a region's geoheritage.

It is unlikely that ordinary tourists will be particularly fascinated by outcrops in a road cut, even if it is an important stratotype. Indeed, these tourists are more easily drawn to geomorphological features that, even without any high scientific value, present greater scenic appeal (MIKHAILENKO *et al.*, 2017). It is important to understand that the spaces organized for geotourism do not always converge with those marked for research and/or educational activities.

In general, tourism practices should be understood as an economic activity geared to profit, regardless of conservationist orientation. Without the sale of spaces, without income generation for managing agents, without political will and action, and, above all, without consumers, it is difficult to develop geotourism. Locally-based tourism, among which geotourism is included, seem to be the best road to sustainable tourism, but even that can generate spatial, cultural, and economic inequalities; hence, planning and management are fundamental from the very beginning.

5. MARKETING AND DESTINATION IMAGE: TOOLS AND THE PROMOTION OF GEOTOURISM

Tourism, as an economic practice, is in constant reformulation in its pursuit of new consumers (URRY, 2001; MACCANNELL, 2002). Since the second half of the 20th century, its participation in the world economy has expanded, through improvements in modes of transportation, the rise of the middle class, and the consolidation of the idea of leisure time (SEZGIN; YOLAL, 2012; DUJMOVIĆ; VITASOVIĆ, 2015). Within this context, tourist destinations multiply and competition

increases, resulting in the need for differentiated products and experiences and in greater involvement of marketing strategies, as a means of building an attractive narrative directed at the consumers of tourism.

Marketing is a subject of study, a set of techniques and instruments geared to the facilitation and concretization of exchanges of goods, services and values, and resembles a spectrum (PEREIRA et al., 2009). Among the lines of thought and methodological approaches to marketing, Kotler et al. (2011) point out that, beyond the classical notion of communication and sale, it must be understood as a set of strategies that aim to create wants and satisfy needs of the clients. Marketing presents itself as a social process based on creation, supply, and exchange of products among people, groups, and companies.

Tourism marketing is defined as the set of actions aimed to satisfy, through products and experiences, the wants and needs of consumers, to build a perfect exchange relationship, and to allow a profitable economic activity (SANTOS; SANTOS, 2011). Tourism marketing is systematic and coordinated, requires a good knowledge of the exigencies and trends of the market, the orientation of the supply of tourism products according to the size and structure of the demand (SOFRONOV, 2019), and can be employed in the public as well as the private arena and on scales that range from local to international. It should be noted that despite its ordered character, tourism marketing can also make use of spontaneous situations for the development of its strategies.

Haywood (1990) emphasizes that tourist marketing should address and motivate the relationship between receptive communities and clients (tourists), aiming to diminish the possible impacts of social and economic crisis. It should plan strategies that include the local population in tourist activities and increase the satisfaction of the different groups involved. The key to developing geotourism is the philosophy of integrating different tourist trade actors and the community, and should emphasize that close tourist-community relation as a positive differential aspect in its marketing actions.

Tourism is marked by diversity, since its main actors, the tourists, present varying desires (MAHIKA, 2011). Marketing must adapt to tourism segments (SOFRONOV, 2019), inserting the most suitable tools and language. Flexibility in tourism allows for the coexistence of traditional practices, such as "sun and beach", with specialized activities, directed at a public that, in the context of post-modernity, is not content with conventional ways of consuming tourist spaces and products (URIELY 1997; DUJMOVIĆ; VITASOVIĆ, 2015) . Thus, segments (or activities) with their own identities, such as rural tourism, ecotourism or geotourism, take shape, requiring equally specialized viewpoints in terms of marketing strategies.

One of the roles of tourism marketing is to consolidate the destination image, that is, the construction of an *a priori* thought about the destination that generates consumption desires. The

literature includes a variety of studies that discuss the factors influencing the destination image and help us to understand the tourist behavior (UM; CROMPTON, 1990; MACCANNELL, 2002; BEERLI; MARTÍN, 2004; MAHIKA, 2011; LOPES, 2011). Silva and Perinotto (2016) state that the destination image is qualified by past recollections the tourist has of the destination as well as mental perceptions and representations of the future. This image begins to form prior to visiting the place, by means of imaginary icons, which allow the tourist to formulate a concept through information acquired in printed texts or oral communications, or through pictures, which show what the destination is in fact like.

Chagas and Marques (2010) reinforce that the destination image is also an important strategic tool in the process of differentiation, increasing competitiveness, satisfaction, and consumer destination loyalty, culminating in satisfactory tourism development. Hence, the construction of this image should be considered and developed by the different actors of the tourist trade. For what activities do we want to be known? What are our mottoes? What products do we offer? What sets us apart from other destination options? These are some of the questions to be answered in the destination image construction process.

As discussed, a destination image well established in the consumers' mind is a differential in the competitive tourism market. According to Gândara (2008) there has been a change in paradigm, favoring destinations that include segments concerned with nature conservation, among them geotourism. A destination's capacity to offer environmental quality is becoming an important differentiating element as more and more tourists seek that characteristic.

The destination image should be tied to the slated tourist activity and directed toward the target audience. Images of geotourism destinations need to respond to the postulates of the practice, the pillars of which are cultural valorization, environmental education, nature conservation, and improvement in socioeconomic indices (in the conception of locally-based tourism), with geodiversity being the thread that connects these different facets.

The marketing of a geotourism destination must take into account the abiotic elements of the landscapes and their connections to biotic and cultural aspects; it needs to present among its products activities in which geodiversity is the key element, since that is its differential. Destinations where geodiversity and geoheritage are not evidenced in the promotional and valorization materials, where there are no tours or guided activities, where only enjoyment of a view is offered without the establishment of a deeper connection to the territory, cannot be designated geotourism destinations.

Geoparks are prominent among the global strategies that aim at establishing geotourism as a tourism segment and staking out a unique image for geotourism destinations. Thus, it is worth discussing some of the history of this vision of territorial management, particularly because a geopark was chosen for the case study that will be presented herein.

Geoparks were formulated as a management and territorial development strategy in 2000, through the establishment of the European Geoparks Network, which provided an exchange of experiences among four European territories (Vulkanaifel Geopark, Germany; Geological Reserve of Haute-Provence, France; Petrified Forest of Lesvos, Greece; and Maestrazgo Geopark, Spain) (ZOUROS, 2004). These areas had at their disposal touristic resources, expressed by spectacular geodiversity and culture, but were undergoing socioeconomic problems, in particular depopulation and impoverishment (MCKEEVER; ZOUROS, 2005). Therefore, a strategy was formulated with the purpose of bringing socioeconomic improvements in conjunction with environmental conservation (BRILHA, 2018).

Geoparks are territories that contain geoheritage sites of scientific international relevance, rarity, aesthetic or educational importance, but also, considerable historical, archaeological, cultural, and ecological heritage (EDER; PATZAK, 2004; UNESCO, 2014). Geoparks are a strategy of sustainable development based on valorization of geodiversity characteristics and a holistic vision of the natural, cultural, and historical characteristics of the territory, providing protection, conservation, education, and promotion of geotourism for local economic development (HENRIQUES; BRILHA, 2017).

The dynamicity of geoparks as a strategy of sustainable territorial management was recognized rapidly on a global scale. This resulted in its expansion to the Global Geoparks Network – GGN under the auspices of UNESCO, in 2004 (JONES, 2008). During the 38th UNESCO General Conference, which took place in 2015, the organization's Member States approved the Program UNESCO Global Geoparks - UGG, and the world's geoparks now had a specific program with direct support from the organization (BRILHA, 2018). In less than twenty years, the number of geoparks grew from four to 161 territories, in 44 countries (as of July 2020), demonstrating that they are not just a fad, but rather an effective strategy of territorial management.

Being a geopark does not mean it is a protected area – the term *park* is what generates this confusion. In fact, the absence of a legal framework is indicated as a positive point for the success of the initiative on a global scale, since the territories do not have their management tied to legal limitations. What can and should effectively be protected by specific legislation are the geosites, which include the places of geological interest and where tourist attractions are located.

While not being protected areas, geoparks do take on similar duties. According to Moura-Fé (2015) geoparks should conserve the geoheritage for future generations, develop educational activities linked to the geosciences, ensure sustainable development by means of geotourism, protect and promote aspects of culture and identity, provide new sources of income generation for the local population and attract private capital.

Geoparks exhibit a conservationist slant while simultaneously needing to be managed as a business devoted to local development. Building and promoting a touristic image, in the manner presented, is a necessity for geoparks that aim to become a geotouristic destination, since that is what generates desires, which can then be turned into consumption.

6. PHOTOGRAPH: TOOL FOR THE CONSUMPTION OF GEOLOGICAL LANDSCAPES

Among the forms of representing a location, photography stands out for its capacity to capture the moment. From its origin in the 1830s (MAUAD, 1996), various facets have been attributed to it. At the same time, photography is considered an artistic expression, an academic tool in different areas of the sciences, or, simply a day-to-day element that provides reminders of times past.

Photography is an important instrument in tourism marketing. Humans, as visual beings, are attracted to the photographic image for the creation of their consumer desires. The capacity to portray something real leads tourism marketing to utilize this tool for the creation and consolidation of the destination image, including those related to the geotourism segment.

It is hard to pinpoint when humans began to make natural landscapes an object of photography, but the enjoyment of landscapes with an emphasis on geodiversity for recreation and sightseeing predates the invention of photography. Doughty (2008) presents the Giant's Causeway, in Northern Ireland, as one of the first cases of tourist activity geared to geodiversity. In the 17th century, the place was already the target of excursions interested in viewing the singular geological formations. However, it was after the invention of photography that the aesthetic value of landscapes, especially geomorphological ones, began to be commercialized through the dissemination of postcards and images in travel brochures. Photography began to act as a valorization and promotional tool of abiotic nature, a role previously performed by painting.

The importance of photography in the most diverse areas has intensified over time. Fontenelle and Matos (2015) make the point that society nowadays goes beyond the appreciation of photographic images, understanding them and consuming them as products. They have the capacity to sell desires, concepts, and experiences, making it essential to build quality graphic materials during the process of tourism planning. Photography in tourism marketing acts as a tool to guide the eye of the tourist, selecting the points to be visited and the targets of consumer devotion. Santillán [19] agrees, affirming that photographs found in travel guides and brochures are the engine of the tourism narrative, as they guide the eye to the natural and cultural resources of a destination, displaying them from their most favorable angle.

Valencia (2009) points to the power of institutional support in what she defines as "sanctification" of the tourist visit, that is, the choice of specific activities or spaces that reflect best

and/or most pleasantly the image of the place. These spaces become *sacred*, symbols oftentimes greater than the destination itself, and which tourists always seek to visit, photograph, and form a memory: going to Paris and taking a picture in front of the Eiffel Tower, going to Rome and photographing the Coliseum, going to Athens and bringing home images of the Parthenon ruins or going to Rio de Janeiro and photographing Christ the Redeemer. Valencia (2009) goes further, saying that photographic representations made by tourists in the places they visit are not neutral, instead they act purposefully, according to a bias and in a historic, intellectual, and even economic context.

Beyond planned strategies of the tourist trade, photographs can be involuntary or spontaneous marketing tools. With the popularization of social media and networks, the act of photographing and sharing images has been redefined, new symbols and imagetic appeals have been inserted in the capitalist dynamic, reformulating consumer "needs" and from among them, the resulting tourist travel experiences acquire prominence. Beyond traveling, it is essential to disseminate the experience to the greatest number of people possible; traveling becomes, then, a status to be shared.

Nowadays, classic marketing tools, such as travel guides or brochures (MOLINA; ESTEBAN, 2006; MAAIAH; MASADEH, 2015), share space with sites, online tools, and social media (ANDRLIC; ALWIS, 2016), specialized or otherwise, in establishing consumer desires and touristic images. One example connected to geodiversity is that of the Hill of Seven Colors in Peru. The place, located 100 km from Lima in the district of Pitumarca, saw tourism jump from a few dozen people a day in 2016, to over 1000 tourists in 2018, thanks to the dissemination of photos on social networks and on international travel sites. The curiosity generated by the pictures, which show a terrain with various colors caused by the oxidation of different minerals, was enough to overcome the hard access conditions and low temperatures, considering that the site is located above 5.200 meters high.

Photographs for tourism marketing present different objectives and aesthetics from artistic photographs. For example, an image used in touristic marketing should not present exaggerated modifications concerning colors, proportions, and object insertion or elimination during post-production, which are common artistic practices and may help the author to transmit his particular and subjective point of view, sometimes hardly understood by the general public. They may be subject to editing techniques, but care must be taken not to distort the reality. The photograph must preserve anthropological, environmental, cultural, and social aspects in their essence, so that the image of the place is legitimately associated with its actual reality. The photographic representation of a location, when it does not coincide with its true image, may chase away the tourist or frustrate them definitively (FONTENELLE; MATOS, 2015).

The touristic markating actions also use photographs to represent the host community. As well as the exposition of physical spaces, the local population receptivity should respond as much as

possible to the reality avoiding to stereotypes and extrapolations risking to make the experience disappointing to the visitor (NAZARIADLI *et al.*, 2019).

As highlighted, building a destination image is important to the success in any tourism typology. One way of cementing this image in the tourist's mind is through tourism marketing, where using photographic images is one of the most important tools, since they have the capacity to transcend the imagination by graphically representing the potentialities of a location. Geotouristic destinations must construct a visual and imaginable narrative that contributes to the consolidation of their touristic image as a space for contact with local culture and nature through products that embrace the abiotic aspects of the landscape.

7. NARRATIVES AND TECHNIQUE: ANALYSIS OF THE PROMOTIONAL PHOTOGRAPHIC IMAGES OF THE BASQUE COAST UGGp

In laying out the importance of photographs in tourism marketing, the relevance of presenting a case study becomes clear. The idea, then, is to analyze photographs in promotional materials of the Basque Coast UGGp, Spain, a territory recognized for its geotourism products. The intention is to pinpoint the photographic techniques employed and understand the story told by the photographs, detailing the influence they have on the construction of its image as a geotourism destination.

One differential of the geopark is a variety of guided activities ranging from boat trips to flysch geosites, to trails in the karst zone, to Basque cooking workshops. Additionally, the territory provides tourist activities by themed routes (flysch route, karst route, geopark viewpoints tour), five walking georoutes and two proposed itineraries (one-day and three-day).

The photographs employed on the site to illustrate the products offered, as well as those registered in the graphic materials available for download on the same digital domain, address the integration of the landscape potential with the scientific and local cultural value. Thus, it is valid to analyze some physical attributes present in the photographic images and understand how their use contributes to emphasize the destination image of the Basque Coast UGGp as a profound and distinguishable experience with nature and culture. The pictures we selected for analysis represent both geological sectors of Basque Coast UGGp (flysch and karst relief) and the related touristic products. Thus, the seven selected images summarize the local heritage potentials.

The first photograph analyzed is the main tourist and geological attraction of the Basque Coast UGGp, the flysch formation. The photo is attractive due to the overall high contrast between light and dark tones employed (Figure 3). The lighter sky in the upper third contrasts with the darker tones in the rocks that dominate the lower third. The water mirror reflecting the sky on the left side accentuates this contrast.



Figure 3. Abrasion platform in the Basque Coast UGGp flysch. **Authorship:** Basque Coast UGGp.

Contrast can be defined as a difference between the more luminous and the darker tones in an image. Low contrast values imply less tone variation in the shadows as well as in the highlights. The human visual system is more attracted to zones of high contrast because the capacity of man, and also other animals, to perceive object details in a scene is determined basically by the skill to distinguish contrast, i.e. luminance differences of adjacent areas, respecting a threshold of minimum and maximum contrast (SANTOS; SIMAS, 2001)

Next, the observer is captivated by the structure (and texture) of the sedimentary strata, laid out diagonally and converging toward the upper central portion where there is a cloud formation accentuating the sensation of depth (Figure 3 – lines in red). It is important to note that the horizon is in the upper third, giving greater space to the rocky formations of the abrasion platform (Figure 3 – magenta line). Thus, the eye circles, following the convergent diagonal lines towards the sky and can then return to the foreground. This composition construction keeps the observer's attention on the image longer as there are no distracting elements towards the edges and outside.

The coastal landscape of the Basque Coast UGGp gets the most focus in the promotional materials available on the webpage. Despite seeking to diversify the tourist routes to the inland areas of the geopark, the base tourist products are linked to the flysch. Panoramic photos are commonly used in the representations, as seen in Figure 4. In the photo the coast outlined to the right presents strong color contrast with the ocean, which occupies the left portion, where the two regions are split diagonally, thereby increasing interest. The ocean occupies two thirds on purpose, since it brings a notion of depth from the foreground. A division in equal parts of land and sea would have weakened the composition. The aerial view and in perspective, with the distant horizon, increases the idea of spatial amplitude.



Figure 4. Panoramic photographic image of the Deba-Zumaia flysch. **Authorship:** Basque Coast UGGp.

The karst zone is represented, mostly, by panoramic images that demonstrate the interaction of natural and cultural elements. In Figure 4 one can see that the image's main point of attraction is the cultivated field over hilly terrain, which is split by a gentle diagonal line and surrounded by darker vegetation that functions as a frame guiding the observer. The eye seeks to navigate along this diagonal line starting from the left extremity, which comprises a small river and reflects the image title "tradition and landscape in an *environment sculpted by water*". The presence of a single house in the middle of "nature" gives the idea of a place with a traditional population in symbiosis with its surroundings. Hence, the space can be commercialized as an ideal refuge for immersing in nature.



Figure 5. Photographic image of the karst zone in the interior of the Basque Coast UGGp. **Authorship:** Basque Coast UGGp.

Beyond the use of natural landscapes, photographs that focus on architecture and on the tourist products offered by the Basque Coast UGGp are also employed. This is the case of Figure 6a, utilized for marketing a guided tour of the karst region. The photo uses a simple construction, showing people in the center and foreground, with a grassy field in the background. Here, there is a lost opportunity to valorize the specificities of the geopark, because, strictly speaking, a photo like this can be obtained

in any grassy field. However, the presence of the figure of the guide, who appears with educational materials in hand and in a position of prominence, separate from the group and occupying the entire left third of the photo, transcribes a differential of the commercialized activity. These facts tell a visual story, informing the tourist that by purchasing this experience they will take advantage of special information about the territory, going beyond mere appreciation of the landscape.



Figure 6. a) Promotional image of the Basque Coast UGGp karst route; b) Promotional image of the boat route along the Deba-Zumaia flysch.

Authorship: Basque Coast UGGp.

Figure 6b also functions as specific tourist product marketing and constructs the same narrative as the previous image, using the figure of the interpreter. However, in this photograph, the landscape of the Basque Coast UGGp is emphasized along with the tourist activity by exhibiting the flysch cliffs in the upper portion. The composition remains simple in that the rule of thirds and any other framing preparation are neglected.

Figure 7 addresses the archaeological value of the Basque Coast UGGp. However, in the photograph, the visualization of the primitive paintings is negatively affected by the direct illumination used in producing the image. This type of light produces reflections on the surface and lighter low-contrast areas (red circle). More adequate illumination would have the capacity to enhance the textures of the rock and the painting.

In relation to framing, the drawings take up most of the image, excluding from the frame a spatial contextualization of the paintings, making it impossible, therefore, to judge the size of the art, for example. The image demonstrates the importance of using illumination techniques, well-balanced colors, adequate contrast, and suitable photographic scales in touristic marketing, since a touristic product, even with the highest scientific, archeological, and historical relevance, will have its attraction capacity diminished when badly represented.

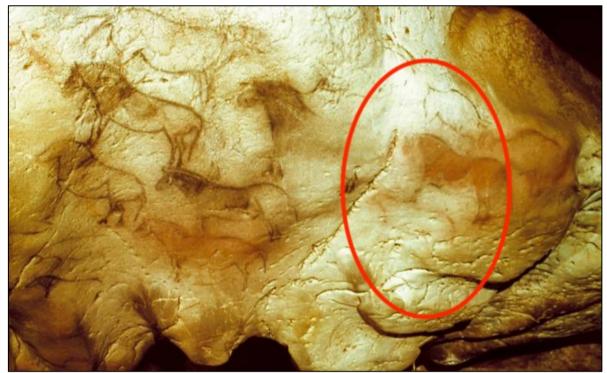


Figure 7. UNESCO World Heritage primitive painting located in the Ekain cavern (Basque Coast UGGp). **Authorship:** Basque Coast UGGp.

Similar framing to the previous photo is found in images from the georoute brochures. The five brochures, in addition to presenting the trails that interconnect points of geological interest of the Basque Coast UGGp, present concisely the geological, geomorphological, and cultural description of those points, functioning as mini atlases about the geopark. Thus, in addition to diagrams and panoramic photos of the landscape, images with greater detail are used to focus in on specific elements of the geoheritage (Figure 8). These photos are not a tourism marketing tool, but rather an educational instrument, fulfilling the objectives of another pillar of the geopark.

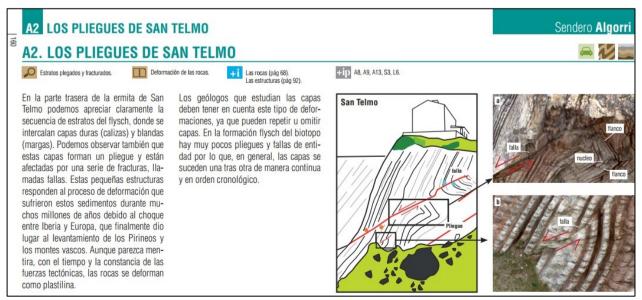


Fig. 8 Example of interaction between diagram and interpretive images with zoomed framing in descriptive georoute brochures.

Authorship: Basque Coast UGGp.

8. CONCLUSIONS

The photographic images found in the promotional materials of the Basque Coast UGGp follow certain trends. First, many panoramic photos are used, as such images best cover the landscape and confer a sense of depth. Another tendency is the ample use of high contrast images, producing good separation between dark and light tones and between land and sea, seeking to capture attention and also helping to emphasize the notion of depth. Finally, images aiming to show the integration between people and natural landscape are frequent, confirming to us that the marketed touristic products go beyond the landscape contemplation and configure a local culture immersion. These images, more than show the landscape, sell touristic products and experiences. It is memorable the presence of a character in the geopark management responsible to guide the activities and promote a better experience.

The photographs present harmonious compositions, using the well-known rule of thirds and the presence of vanishing points to enhance the perspective, as we can see in the Figures 3, 4, 5 and 6. These photographs tell stories of the activities that take place in the ambit of the geopark and have the capacity to draw in the tourist unfamiliar with the area, making them wish to be a part of the experience. Approaches like these should be replicate and enlarged in touristic marketing actions of geoparks around the world, as these actions connect the public to the destiny, feeding the psychoaffective criteria in the touristic destiny consolidation.

The various photographs that portray the flysch formation and its aesthetic potential are also a marketing strategy. This happens because in addition to being the zone of greatest scientific relevance, this portion of the geopark is easily identified by the public because it has appeared in other media, as previously mentioned, so that when people come across this landscape of world-renowned beauty, many will feel impelled to visit. It should be emphasized that not all geoparks present internationally known geoheritage features or even such great scenic appeal as the Basque Coast flysch. Nevertheless, the function of territory management is to develop tools and narratives that make viable the promotion of touristic potentialities.

The case of the Basque Coast UGGp affirms the potential of photographic images as a tool for consolidating and shaping the destination image. It is valid to emphasize that many techniques used, as the rule of image texts, depth and roughness already are widely used marketing strategies in touristic advertising of several destinies in the world and even in daily photographs. However, the good use of these techniques in conjunction with the exhibition of conserved environments, of spectacular coastline landscapes, of an inland zone that blends natural resources with cultural wealth, of villages and their local products, creates a visual narrative that, in conjunction with the promotional texts, consolidates the image of the geopark as a sustainable locally-based tourist destination.

The geology and, principally, the geomorphology of the Basque Coast UGGp are evidenced in the photographs, showing the presence of singular geoheritage that sustains the activities of environmental and cultural conservation, a principle that every geopark, as a locus of geotourism, should construct and transmit. The geoheritage and its conservation and use to the sustainable economical development are the base to the geoparks, so they should be the focal point in the promotion and touristic marketing strategies.

The present work shows that the photographs employed in tourism marketing, in special areas devoted to geotourism, go beyond the scientific value; rather, they are founded on the scenic appeal of the features. Thus, the expansion of research that addresses the aesthetic value of geoheritage means there is a need to attract more non-scientists to the discussions on this subject. We should learn from the biological sciences professionals who have employed aesthetic appeal and mass marketing in their conservation strategies for several decades (CROFTS, 2014). Geoscientists should remain pure from the scientific viewpoint but must understand that the management of a geopark is more than geology and needs the involvement and teamwork of professionals in marketing, management, communication, education, and other areas.

REFERENCES

ANDRLIC, B.; ALWIS, AC. Social media in destination marketing. **International Journal of Management and Applied Science**, v. 2, p. 121-125, 2016.

AROUCA (2011). Arouca declaration. Available: http://aroucageopark.pt/documents/78/Declaration Arouca EN.pdf. Accessed: 12 July 2020

BEERLI, A.; MARTÍN, J.D. Factors influencing destination image. **Annals of Tourism Research** 2004, 31(3), 657-681. https://doi.org/ 10.1016/j.annals.2004.01.010.

BORBA, A. W. Geodiversidade e geopatrimônio como bases para estratégias de geoconservação: conceitos, abordagens, métodos de avaliação e aplicabilidade no contexto do Estado do Rio Grande do Sul. **Pesquisas em Geociências**, v. 38, n. 1, p. 3-13, 2011.

BRILHA, J. Geoheritage and geoparks. In: REYNARD, E.; BRILHA, J. (ed). **Geoheritage:** assessment, protection and management. Elsevier, Amsterdam, 2018, p. 323-335.

BROCX, M.; SEMENIUK, V. Geoheritage and geoconservation: history, definition, scope and scale. **Journal of the Royal Society of Western Australia**, v. 90, p. 53–87, 2007.

CARCAVILLA, L.; DURÁN, J. J.; LOPEZ-MARTÍNES, J. Geodiversidad: concepto y relación con el patrimonio geológico. **Geo-Temas**, v. 10, p. 1299-1303, 2008.

CHAGAS, M. M.; MARQUES, S. Análise da relação causal entre imagem, qualidade, satisfação e fidelidade: um estudo sobre a percepção do turista nacional no destino turístico Natal/RN. **Turismo em análise**, v. 21, n. 2, p. 494-516, 2010.

COBOS, A.; ALCALÁ, L. Paleontological Heritage as a Resource for Promoting Geotourism in the Rural Setting: El Castellar (Teruel, Spain). **Geoheritage**, v. 10, p. 405-414, 2018.

CROFTS, R. Promoting geodiversity: learning lessons from biodiversity. **Proceedings of the Geologists' Association**, v. 125, n. 3, p. 263-266, 2014.

DOUGHTY, P. How things began: the origins of geological conservation. In: BUREK, C. V.; PROSSER, C. D. (ed). **The History of Geoconservation**. The Geological Society, London, 2008, p. 7-16

DOWLING, R. K. Geotourism's global growth. Geoheritage, v. 3, p. 1-13, 2010.

DOWLING, R. K. Global geotourism: an emerging form of sustainable tourism. Czech Journal of Tourism, v. 2, p. 59-79, 2013.

DUJMOVIĆ, M.; VITASOVIĆ, A. Postmodern society and tourism. **Journal of Tourism and Hospitality Management**, v. 3, n. 9, p. 192-203, 2015.

EDER, F. W.; PATZAK, M. Geoparks-geological attractions: a tool for public education, recreation and sustainable economic development. **Episodes**, v. 27, n. 3, p. 162-164, 2004.

FONTENELLE, C. H. S.; MATOS, F. O. Turismo e fotografia: elementos para o conhecimento da paisagem de Camocim-CE. **Caminhos de Geografia**, v. 16, n. 53, p. 65-80, 2015.

GÂNDARA, J. M. G. A imagem dos destinos turísticos urbanos. **Revista Eletrônica de Turismo Cultural**, v. 1, p. 1-22, 2008.

GORDON, J. E. Rediscovering a sense of wonder: geoheritage, geotourism and cultural landscape experiences. **Geoheritage**, v. 4, p. 65-77, 2012.

GORDON, J. E. Geoheritage, geotourism and the cultural landscape: enhancing the visitor experience and promoting geoconservation. **Geosciences**, v. 8, n. 136, p. 1-25, 2018.

GRAY, M. **Geodiversity: valuing and conserving abiotic nature**. John Wiley and Sons, Chichester, 2004.

GRAY, M. Geodiversity: developing the paradigm. **Proceedings of the Geologists' Association**, v. 119, p. 287-298, 2008.

HAYWOOD, K. M. Revising and implementing the marketing concept as it applies to tourism. **Tourism Management**, v. 11, n. 3, p. 195-205, 1990.

HENRIQUES, M. H.; REIS, R. P.; BRILHA, J.; MOTA, T. Geoconservation as an emerging geoscience. **Geoheritage**, v. 3, p. 117–128, 2011.

HENRIQUES, M. H.; BRILHA, J. UNESCO Global Geoparks: a strategy towards global understanding and sustainability. **Episodes**, v. 40, p. 349-355, 2017.

HILARIO, A.; MENDIA, M.; AGIRREZABALA, L. M.; ARAMBURU, A.; ARRIOLABENGOA, M.; ORUE-ETXEBARRIA, X.; MONGE-GANUZAS, M.; MUGERZA, I. Lugares de interés geológico Geoparque de la Costa Vasca: inventario y propuestas de actuación. Geoparkea, Basque Cournty, Spain, 2013.

HOSE, T. A. Selling the story of Britain's stone. Env. Interpret, v. 10, p. 16-17, 1995.

JONES, C. History of geoparks. In: BUREK, C. V.; PROSSER C. D. (ed) **The History of Geoconservation.** Geological Society, London, 2008, pp. 273-277

KOTLER, P.; BOWEN, J. T.; MAKENS, J. C.; MADARIAGA, J. G.; ZAMORA, J. F. Marketing turístico. 5 ed. Madrid: Pearson Educación, 2011.

LO, I. S.; MCKERCHER, B. Ideal image in process: Online tourist photography and impression management. **Annals of Tourism Research**, v. 52, p. 104-116, 2015.

LOPES, S. D. F. Destination image: Origins, Developments and Implications. **Pasos**, v. 9, n. 2, p. 305-315, 2011.

MAAIAH, B.; MASADEH, M. The brochures as a tool for tourism marketing: the case of Petra. **International Journal of Business and Social Science**, v. 6, p. 98-106, 2015.

MACCANNELL, D. The ego factor in tourism. **Journal of Consumer Research**, v. 29, n. 1, p. 146-151, 2002.

MAHIKA, E. C. Current trends in tourism motivation. Cactus Tourism Journal, v. 2, p. 15-24, 2011.

MAUAD, A. M. Através da imagem: fotografía e história interfaces. **Tempo**, v. 2, p. 73-98, 1996.

MCKEEVER, P. J.; ZOUROS, N. Geoparks: celebrating earth heritage, sustaining local communities. **Episodes**, v. 28, n. 4, p. 274-278, 2005.

MICCADEI, E.; PIACENTINI, T.; ESPOSITO, G. Geomorphosites and Geotourism in the Parks of the Abruzzo Region (Central Italy). **Geoheritage**, v. 3, p. 233-251, 2011.

MIKHAILENKO, A. V.; NAZARENKO, O. V.; RUBAN, D. A.; ZAYATS, P. P. Aesthetics-based classification of geological structures in outcrops for geotourism purposes: a tentative proposal. **Geologos**, v. 23, n. 1, p. 45-52, 2017.

MOCHIUTTI, N. F.; GUIMARÃES, G. B.; MOREIRA, J. C.; LIMA, F. F.; FREITAS, F. I. Os valores da geodiversdiade: geossítios do Geopark Araripe/Ceará. **Anuário do Instituto de Geociências**, v. 35, n. 1, p. 173-189, 2012.

MOLINA, A.; ESTEBAN, A. Tourism brochures: usefulness and image. **Annals of Tourism Research**, v. 33, n. 4, p. 1036-1056, 2006.

MOURA-FÉ, M. M. Geoturismo: uma proposta de turismo sustentável e conservacionista para a região Nordeste do Brasil. **Sociedade e Natureza**, v. 27, n. 1, p. 53-66, 2015.

NAZARIADLI, S.; MORAIS, D. B.; BUNDS, K.; BARAN, P.; SUPAK, S. Rural tourism microentrepreneurs' self-representation through photography: a counter-hegemonic approach. **Rural Society**, v. 28, n. 1, p. 29-51, 2019.

NEWSOME, D.; DOWLING, R. K. The scope and nature of geotourism. In: DOWLING, R.K.; NEWSOME, D. (ed). **Geotourism**. Elsevier Butterworth Heinemann, Oxford, 2006, pp 3-25

NIETO, L. M. Geodiversidad: propuesta de una definición integradora. **Boletín Geológico y Minero**, v. 112, n. 2, p. 3-12, 2001.

ÓLAFSDÓTTIR, R.; TVERIJONAITE, E. Geotourism: A Systematic Literature Review. **Geosciences**, v. 8, n. 234, p. 1-16, 2018.

ÓRUS, A. H. El Flysch de Zumaia y Centro Algorri: divulgación geológica y gestion de un afloramiento espectacular (Zumaia, Pais Vasco). **De Re Metallica**, v. 10, p. 1-9, 2008.

PEREIRA, C. B.; TOLEDO, G. L.; TOLEDO, L. A. Considerações sobre o conceito de marketing: teoria e prática gerencial. **Revista O&S**, v. 16, n. 50, p. 519-543, 2009.

REYNARD, E.; BRILHA, J. (ed). Geoheritage: assessment, protection and management. Elsevier, Amsterdam, 2018.

SANTILLÁN, V. L. La fotografia como creadora de la imagen de um destino turístico. Buenos Aires a través de sus tarjetas postales. **Pasos**, v. 8, n. 1, p. 71-82, 2010.

SANTOS, A.V.; SANTOS, M. T. **Marketing turístico**. Centro de Educação Tecnológica do Amazonas, Manaus, 2011.

SANTOS, N. A.; SIMAS, M. L. B. Função de sensibilidade ao contraste: indicador da percepção visual da forma e da resolução espacial. **Psicologia: Reflexão e Crítica**, v. 14, n. 3, p. 589-597, 2001.

SERRANO, E.; RUIZ-FLAÑO, P. Geodiversity: A theoretical and applied concept. **Geographica Helvetica**, v. 62, p. 140-147, 2007.

SEZGIN, E.; YOLAL, M. Golden age of mass tourism: its history and development. In: Kasimoglo, M. (ed) Visions for global tourism industry: creating and sustaining competitive strategies. InTech, Rijeka, Croatia, 2012, pp. 73-90

SHARPLES, C. A. Methodology for the identification of significant landforms and geological sites for geoconservation purposes. Report to Forestry Commission Tasmania, Tasmania, 1993.

SILVA, M. L.; PERINOTTO, A. R. C. A imagem do destino turístico como ferramenta de diferenciação e promoção do turismo: caso de Barra Grande/PI, Brasil. **Pasos**, v. 14, n. 2, p. 417-431, 2016.

SOFRONOV, B. The development of marketing in tourism industry. **Annals of Spiru Haret University**, v. 19, n. 1, p. 115-125, 2019.

UM, S.; CROMPTON, J. L. Attitude determinants in tourism destination choice. **Annals of Tourism Research**, v. 17, n. 3, p. 432-448, 1990.

UNESCO. Guidelines and Criteria for National Geoparks seeking UNESCO's assistance to join the Global Geoparks Network (GGN). UNESCO, Paris, 2014.

UNESCO. UNESCO global geoparks: Celebrating earth heritage, sustaining local communities. UNESCO, Paris, 2016.

URIELY, N. Theories of modern and postmodern tourism. Annals of Tourism Research, v. 24, n. 4, p. 982-985, 1997.

URRY, J. Globalizing the tourist gaze. Cityscapes Conference, Graz, 2001.

VALENCIA, V. R. Lugares comunes: fotografía y turismo. Ankulegi, v. 13, p. 33-43, 2009

WEBBER, M.; CHRISTIE, M.; GLASSER, N. The social and economic value of the UK's Geodiversity. English Nature Research Report 709, 2006.

WILLIAMS, M. A.; MCHENRY, M. T.; BOOTHROYD, A. Geoconservation and geotourism: challenges and unifying themes. **Geoheritage**, v. 12, n. 63, 2020.

ZOUROS, N. The European Geoparks Network: geological heritage protection and local development. **Episodes**, v. 27, p. 165-171, 2004

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i https://geoparkea.eus/en/ accessed on 29 May 2021.

ii Available at https://stratigraphy.org/ accessed on 29 May 2021.