

EXTENDED ABSTRACT

LANDSCAPE INTERPRETATION IN INCLUSIVE TOURISM PRACTICE: ADAPTED RESOURCES FOR PEOPLE WITH VISUAL DISABILITIES

Sara Beatriz Santana-Santana

Universidad de Las Palmas de Gran Canaria
sarabeatriz.santana@ulpgc.es
<https://orcid.org/0000-0002-7292-2034>

M^a Pilar Correa Silva

Universidad Tecnológica Metropolitana. Santiago de Chile
pcorrea@utem.cl
<https://orcid.org/0000-0003-4074-5472>

Juan C. Cantillana Reyes

Universidad Tecnológica Metropolitana. Santiago de Chile
juan.cantillana@utem.cl
<https://orcid.org/0000-0002-4872-1478>

Emma Pérez-Chacón Espino

Universidad de Las Palmas de Gran Canaria
emma.perez-chacon@ulpgc.es
<https://orcid.org/0000-0002-1448-8364>

This research is focused on the search for inclusive material to be presented as a mediation tool for visually impaired people to discover, understand and enjoy the landscape. The proposal focuses on designing and elaborating tactile material as an instrument for the knowledge and enjoyment of the most representative geographical attractions of areas of high landscape value, promoting the understanding of the most characteristic elements of the selected areas.

We present a work that proposes to complete the chain of universal accessibility in areas with high landscape value, given the obvious lack of inclusive materials in them. Secondly, the aim is to know if these proposals for landscape interpretation, aimed at people with visual disabilities, are technically possible through the transfer and application to the tourism field, of the methodological knowledge derived from the research activity of the Tactile Cartography Center (CECAT) of the Universidad Tecnológica Metropolitana del Estado de Chile (UTEM) in the area of inclusive education. The basis for this is the work focused both in the area of special geographic representation through tactile mapping and the development of standardized symbology, as well as the design of the tactile image as a tool for understanding the visual landscape, actions that have allowed CECAT to be currently linked to the Commission on Maps and Graphics for Blind and Partially Sighted People of the International Cartographic Association (ICA).

At the methodological level there is a common structure among the three case studies, however, each site involves an adaptation to its own uniqueness. In common there is a four-stage sequence that includes: analyzing the feasibility and necessity of carrying out an intervention of this type in the selected study areas, selecting the contents, designing and elaborating the materials, and finally evaluating the resulting material with visually impaired people.

In order to apply this methodology, three case studies with common characteristics converged: their unique natural value, their prominent landscape attractiveness and their high tourist interest. These places are distant from each other and present specific particularities. The first one is located in Maspalomas (Gran Canaria, Canary Islands, Spain) and the following in the extremes of the continental territory of Chile one in the vicinity of Torres del Paine (Torres del Paine, Magallanes, Chilean Patagonia) and the other in the Moon Valley (San Pedro de Atacama, Antofagasta, Great North of Chile). In the first, the experience was developed by members of the Physical Geography and Environment Group of the University of Las Palmas de Gran Canaria (ULPGC), while the others were developed under the auspices of CECAT and the Tourism Management Engineering program of the Universidad Tecnológica Metropolitana del Estado de Chile (UTEM). The joint work between these institutions was made possible thanks to the Framework Collaboration Agreement between the ULPGC and the UTEM for the development of joint academic and research programs.

In the three case studies, a lack of informative and interpretive resources adapted to the needs of visually impaired people was detected, so it was considered necessary to have maps and tactile sheets to facilitate visitors' appreciation and subjective appropriation of the landscape of each place. Unfortunately, the pandemic conditions of the last years have conditioned the opportunities to put into practice the proposals elaborated for the Chilean case, being so far the work elaborated for the protected natural space of the Maspalomas Dunes, the one in whose case it has been possible to implement all the methodological phases, including a pilot evaluation of the adapted material oriented to the interpretation and dissemination of the heritage elements selected there, under a universal design approach.

This article seeks to highlight the importance of knowing various components of the landscape through touch, considered as one of the primary requirements to be able to speak of universal accessibility in a cultural, artistic or natural environment, in a direct way. Thus, this research has sought to generate materials for visually impaired visitors so that they can, based on their own experience, configure distant spaces.

To understand the context in which this research is developed, it is necessary to consider both the importance of the landscape as part of the tourist activity, the trend towards universal accessibility and the need for appropriation of the landscape by all visitors to a given territory. The landscape is a key resource within the tourist activity, in which universal accessibility must be an essential attribute. According to the World Health Organization, 15.6% of the world's population lives with a disability, a figure that is on the rise due to the aging of the population and the global increase in chronic health problems.

The concept of universal accessibility should be considered as it refers to the condition that environments, products and services must meet in order to be understandable, usable

and practicable by all people in the most autonomous way possible under conditions of safety and comfort, issues recognized both by the Royal Legislative Decree 1/2013 in Spain, enhanced through the actions of the Spanish Network for Accessible Tourism, a platform linked to the World Tourism Organization and the European Network for Accessible Tourism, and also reflected by the creation of the first National Network of Accessible Tourism of the National Tourism Service of Chile.

Inclusive tourism, or tourism for all people, proposes, designs and develops leisure tourism activities and the use of free time so that they can be enjoyed by all types of people, regardless of their personal conditions. This type of tourism will only exist when accessibility and universal design are incorporated throughout its value chain. Therefore, in the case of the enjoyment of the landscape by visually impaired people, the aim is that they can perceive the environment in which they are and, thus, make an appropriation of the landscape using a wonderful tool for knowledge such as their hands. We must understand the need that every visitor has to “catch” the landscape, in the sense defined by the “drive to see”.

The aforementioned proposal developed in Maspalomas was conceived under the idea that the material can be used both *in situ* and *ex situ*. A tactile map of the study area has been prepared in DIN A-3 format, where the most characteristic heritage elements of the place are represented. In addition, a set of six DIN A-4 size sheets have been prepared, showing different keys to explain the heritage of the area. These plates have been made in ink and high relief by thermoforming, allowing to differentiate heights and textures in the elements.

The tactile map represents the surface occupied by the Special Natural Reserve of the Maspalomas Dunes, using a granulated texture that simulates sand and facilitates differentiation from the urban area, thus favoring an immersive experience. The routes along the three trails of the protected area were also reproduced, applying a specific line symbology for each one. The bodies of water are symbolized with parallel wavy lines, simulating the undulation of the sea, while the coastal lagoon was given a slightly lower height than the surrounding elements, to simulate its depth.

According to the experience developed and the theoretical progress in the sectors in process, it allows us to develop proposals aimed at the inclusion of visually impaired people. Thus, it is possible to indicate that each intervention must be adapted to the characteristics of each space, since in universal accessibility there are no universal answers for all situations. Likewise, in order to guarantee universal accessibility to the content, it is advisable to approach simple and straightforward concepts. This is the conclusion reached after analyzing the exercise carried out with the sheets prepared for Maspalomas. There is still work and research ahead, and this is an important step to concretize efforts to comply with the objectives of the Global Code of Ethics for Tourism in aspects of universal access to the various tourist destinations.