

ORIGINAL ARTICLE

Tourist signage: design proposal based on representative elements of the Jama-Coaque culture

Señaléticas turísticas: propuesta de diseño en base a elementos representativos de la cultura Jama-Coaque

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This study aimed to design a proposal for tourist signage for the Jama canton based on representative cultural elements of its culture. Through a qualitative approach, a literature review was conducted, complemented by fieldwork that included direct observation. The results indicated that the need for signage was hindering the economic and social development of the region. The developed proposal included three main types of signage: informational billboards, approach signs, and tourist totems. These designs adhered to national regulations and incorporated indigenous cultural symbols to reinforce the community's sense of identity and belonging. The study concluded that implementing this signage system could boost tourism, contribute to the canton's sustainable development, improve its residents' quality of life, and increase the visibility of its natural and cultural resources nationally and internationally.

Keywords tourist signage, Jama-Coaque culture, graphic design, cultural identity, sustainable development, rural tourism.

El objetivo de este estudio fue diseñar una pro-Resumen puesta de señalización turística para el cantón Jama basada en elementos culturales representativos de su cultura. A través de un enfoque cualitativo, se realizó una revisión bibliográfica complementada con trabajo de campo que incluyó observación directa. Los resultados indicaron que la carencia de señaléticas obstaculizaba el desarrollo económico y social de la región. La propuesta desarrollada incluyó tres tipos principales de señalización: vallas informativas, señales de aproximación y tótems turísticos. Estos diseños se ajustaron a las normativas nacionales e integraron símbolos culturales autóctonos para reforzar el sentido de identidad y pertenencia en la comunidad. El estudio concluyó que la implementación de este sistema de señalización tendría el potencial de dinamizar el turismo, contribuir al desarrollo sostenible del cantón, mejorar la calidad de vida de sus habitantes y aumentar la visibilidad de sus recursos naturales y culturales tanto a nivel nacional como internacional.

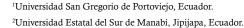
Palabras clave señalética turística, cultura Jama-Coaque, diseño gráfico, identidad cultural, desarrollo sostenible, turismo rural.

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Introduction

The canton of Jama, located in the province of Manabí, faces an evident social need due to the lack of an efficient visual communication system that optimizes the information and signage of its tourist attractions. This deficiency limits the interest of both national and international visitors, negatively affecting the area's visibility (Gambarota & Lorda, 2017). This issue directly impacts the canton's economic and social development, as no graphic resource has been implemented to highlight and promote the tourist points of interest in the region.

This study aimed to design a tourist signage system that helps visitors identify and locate the natural riches and points of interest in the canton of Jama. This proposal seeks to positively impact the region's limited economic development, focusing on benefiting the local inhabitants. The economic dynamization resulting from this project could significantly improve the population's quality of life, fostering sustainable and equitable development for the canton.

Methodology

The research was developed using a qualitative approach, integrating relevant concepts and theories that facilitated a comprehensive understanding of the design and implementation of tourist signage in the Jama canton. To achieve the objectives, fieldwork was conducted, including the direct collection of data and information at the study site, which allowed for the identification of the canton's daily dynamics and an analysis of how these are affected by the lack of appropriate tourist signage. The proposal development included vernacular elements that highlight the history of the canton's ancestral cultures while promoting local tourist attractions and contributing to the region's economic and so-cial development.

Results and discussion

In the province of Manabí, the lack of tourist signage represents a significant obstacle to its localities' economic and social development. Although the Provincial Strategic Plan for Sustainable Tourism in Manabí (2008) proposes improving roads and providing them with horizontal and vertical signage, including tourist signage, field observations revealed a notable discrepancy with these guidelines. Many areas lack an adequate signage system to help residents and visitors navigate, limiting the region's national and international tourism potential. This issue reflects the urgent need to address this aspect to boost tourism and foster regional

progress (Gambarota & Lorda, 2017).

Promoting tourism in a region requires resources aimed at both visitors and the services they demand. One key element is the proper implementation of a visual communication system. This ensures that tourists have clear and safe access to information, highlighting the importance of signage as a critical factor for the development of tourism in an area (Baloch et al., 2023).

Tourist signage, especially in rural areas, facilitates orientation and encourages visitor arrivals, positively impacting the local economy. Additionally, by installing strategic billboards, a place's tourist attractions can be identified and highlighted, providing visitors with the necessary information for a more enriching and seamless experience. Signage guides tourists on their journey and helps them better understand the surroundings, contributing to the safety and efficiency of tourist transit (Huete-Alcocer & Valero-Tévar, 2021).

An important aspect of signage is its influence on human behavior, as it establishes functional relationships between orientation signs in space and individuals' responses. Proper signage implementation can modify people's perception and attitude towards a territory, improving their interaction with their surroundings. In this sense, the Cantón Jama, historically overlooked, could greatly benefit from a signage system that enhances its tourist and regional attractions (Meis & Kashima, 2017).

Signage is a universal language that provides quick and practical solutions to informational and directional problems. Its primary function is to meet tourists' orientation and information needs, helping them reach their desired destinations (Alamineh et al., 2023). This system spans various areas of everyday life, such as transportation, security, health, and leisure, and its growing demand has been driven by the need for clear and accessible visual communication in different contexts.

Some approaches to signage adopt a more functional perspective, emphasizing its practical role in orientation and communication. In this regard, some authors suggest that signage, through symbols, labels, and marks, conveys clear messages and guides behaviors in specific spaces (McDonagh et al., 2005). This research adopted a more comprehensive perspective, considering signage as part of a visual communication system that responds to specific codes designed to solve problems of location and territorial recognition.

This approach is particularly relevant in the tourism context, where the guidelines from the Ministry of Tourism of Ecuador establish rules for designing and implementing sig-



nage at the national level. With this in mind, we propose designing a signage system for Cantón Jama that aims to contribute to revitalizing tourism in the province of Manabí. In the current context, marked by the effects of the COVID-19 pandemic, tourism has been one of the most impacted sectors, making this proposal even more relevant. The implementation of a signage system, along with an advertising campaign, could encourage the arrival of both national and international tourists, aiding the region's economic recovery (Vallejo & Álvarez, 2022).

The design of the signage system for Cantón Jama is based on the guidelines of the Manual of Tourist Signage (2014), which establishes requirements to ensure the official validity of signage. However, this proposal also incorporates elements from the native Jama-Coaque culture to strengthen territorial belonging and reflect the cultural identity of the canton, contributing to the design discipline.

Cantón Jama, located in the province of Manabí, has a population of 23,253 inhabitants and an economy focused on shrimp and fish exportation, although it also has agricultural and livestock potential. The region is known for its varied cuisine, such as tonga and chicken broth, and its coastal geography, with beaches surrounded by cliffs, where hotels offer stunning views. The tropical primary forests and their fauna also contribute to the canton's tourist appeal.

Given the geographic and ecological diversity, implementing an adequate signage system is crucial for helping tourists and locals navigate and promoting visits to the canton's various destinations. This proposal would improve the visitor experience and contribute to the canton's economic and sustainable development, benefiting the community and the tourist businesses (Santamaría-Freire & López-Pérez, 2019).

Tourist signage is essential for communication and orientation, helping tourists interact with their surroundings and providing immediate trust and information. It is also key for space management and tourism promotion, as it provides information about location and available destinations, creating a harmonious relationship with the environment (Moreno-Quispe et al., 2023).

In Jama, inadequate signage affects local economic development because there is no efficient system to guide tourists and facilitate their destination access. An example of previous signage includes the three-dimensional letters, which have deteriorated due to social and natural factors, such as the 2016 earthquake.

The proposed system followed the guidelines from the Ministry of Tourism of Ecuador and was complemented with elements from the native Jama-Coaque culture. It consisted

of three types of signs: informational billboards, placed at the canton's entrances to welcome visitors; tourist approach signs, indicating proximity to points of interest; and tourist attraction totems, providing detailed information about tourist routes, such as the Spondylus Route, and incorporating the route's logo to strengthen regional identity.

The informational billboards (Figure 1) should have a green background and welcome visitors upon entering the canton. They should be placed at the entry points of the canton's jurisdiction. The recommended font is Helvetica Neue (Bold), known for its good readability even from a distance. The billboards should be covered with reflective material to ensure visibility at night. The text is distributed across two centered lines, with the welcome message on the first line.



Figure 1. Informational billboards.

It is recommended to use anodized aluminum sheets of 2 mm, on which retroreflective material is applied. The base is supported by a concrete cube of $1200 \times 1200 \text{ mm} \times 2000 \text{ mm}$, reinforced with an iron frame consisting of 12 rods, each 2000 mm in length and 24 mm in diameter. The tubular structure of the post should have a diameter of 780 mm and a length of 12,200 mm, with the height achieved by stacking sections of tubes measuring 1.22 m in height, made from black iron plates of 1.22 x 2.44 m.

For the development of the approach tourist signs (Figure 2), it is recommended to use segments of treated and sanded teak wood with a thickness of 40 mm and at least two coats of teak oil applied. The bases can be supported by cyclopean concrete cubes measuring 300 x 300 mm and 500 mm deep, which are cast on-site after leveling the posts. The sign pa-



nels feature a joining structure made up of two segments of teak wood measuring 80 mm x 40 mm x 1000 mm, attached to the substrate with 2.5" (63.5 mm) screws, concealed by teak wood plugs.

The pictograms should adhere to the colors and designs established by the Ministry of Tourism, with brown, which represents natural and cultural attractions, being the recommended color. The pictograms should be placed at a height of 1500 mm. The posts should be round eucalyptus trunks treated for immunity, with a minimum diameter of 120 mm at their thinnest part. It is important to select uniform trunks to ensure stability and consistency in the installation.



Figure 2. Tourist approach signs.

The tourist attraction totems (Figure 3) are designed using specific materials to offer high visibility and durability. The typography is Helvetica Neue (Bold), chosen for its readability even from a distance. The totems are covered with reflective material to facilitate nighttime visibility. The legend is placed in two centered lines, with the first being a welcoming phrase.

The totem is composed of two sheets of triple galvanized steel, 1.5 mm thick, fixed to the square tubes of the structure with flat screws so that they are not visible from the front of the screen. The panels are attached with rivets or screws to the folds of the outer structure, also made of galvanized steel, with their fixings not visible from the front. The background is a printed vinyl adhesive sheet in full color and

high resolution, covered with a UV sheet and 10 mm thick tempered glass, sealed hermetically with silicone to prevent condensation.

The outer structure of the totem is made from a galvanized iron sheet measuring 1.20 x 2.40 m, with a width of 200 mm and a thickness of 2 mm. The edges of the structure are bent an additional 20 mm, creating 90° angles that serve as the front support for mounting the panels. If more than one sheet of steel is needed, they should be welded cleanly and smoothly to ensure the stability and appearance of the totem.

Several factors must be considered when implementing tourist signage. Visual appeal is one of the most important, as the signs must capture the attention of tourists using easily noticeable colors, shapes, and structures. Location plays a key role, as the signs must be placed strategically to ensure good visibility, allowing visitors to orient themselves quickly. The design and dimensions must comply with the regulations of the Ministry of Tourism.



Figure 3. Tourist totems.

Conclusions

Tourist signage is essential for guiding, mobilizing, and informing visitors. It ensures efficient routes to points of in-



terest and facilitates tourist activities in natural and cultural settings. These infrastructures enhance the visitor experience and benefit the socio-economic situation of residents. In the case of the Jama canton, the proposal to incorporate archaeological symbols into the signage enriched their cultural value and promoted interest in local history. This initiative contributes to the economic revitalization of Jama canton by strengthening tourism and intensifying the local economy.

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Conflicts of interest

The authors declare that they have no conflicts of interest.

Author contributions

Conceptualization: José J. Macías, Orlando R. Lazo. Research: José J. Macías, Orlando R. Lazo, Vladimiro X. Jácome. Methodology: José J. Macías, Orlando R. Lazo, Vladimiro X. Jácome. Software: Orlando R. Lazo, Vladimiro X. Jácome. Supervision: Orlando R. Lazo. Validation: Orlando R. Lazo. Visualization: José J. Macías. Writing the original draft: José J. Macías, Orlando R. Lazo, Vladimiro X. Jácome. Writing, review and editing: José J. Macías, Orlando R. Lazo, Vladimiro X. Jácome.

Data availability statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Statement on the use of AI

The authors acknowledge the use of generative AI and AI-assisted technologies to improve the readability and clarity of the article.

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