

# Heritage, Tourism and Sustainability: An Archaeological Park as a Tool for Local Sustainable Development

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## Abstract

New ways of planning the tourist territory have emerged out of the concept of sustainability. This paper's goal is to show, by means of a case study, the way in which the design of a sustainable tourist product can contribute to the preservation of the natural environment and the local culture, as well as to the development of the communities that dwell therein. This proposal, an Archaeological Park located in Quebrada de Humahuaca (a World Heritage Site in Argentina), is a tool through which the local communities can manage, control and protect their heritage resources. Moreover, it is a way to connect the local culture, which represents an important period of human history, with the global culture. The results achieved demonstrate that the concept of sustainability is highly strategic and operative to reach key issues related to the social, economic and ecological/environmental aspects of the design of sustainable, innovative and effective solutions.

## Introduction

Tourism is increasingly being regarded as a positive force for the preservation of nature and culture; its contributions should bring about benefits for the host community and provide its members with significant resources and incentives to look after and maintain their *Heritage*.<sup>47</sup> The strategic alliance between culture and tourism refers to the use of the concept of *Sustainability*<sup>48</sup> as a linking concept between these two areas in terms of planning and management. On the basis of this general concept, this paper adheres to the notion of *Sustainable Tourism*, regarded as a conceptual and operative basis that allows for a sustainable use of heritage assets.

The World Tourism Organization (UNWTO, 2004) has set the guidelines for sustainable tourism development and sustainable management practices based on social, economic and ecological aspects.<sup>49</sup>

According to Salinas and Osorio (2006) economical sustainability ensures an efficient tourist growth (more jobs, income and an optimal cost/benefit ratio of resources, among others); socio-cultural sustainability strengthens the culture and values of the local community while preserving its identity and seeking social equality; and ecological/environmental sustainability guarantees the preservation of ecological processes, bio and geo-diversity together with a rational use of natural resources.

At the Globe'90 Conference Tourism Stream: Action Strategy for Sustainable Tourism Development held in Vancouver (Canada) in 1990, sustainable tourism was defined as:

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<sup>47</sup> *Heritage*, conceived of as the identifying set of natural and cultural assets (both tangible and intangible) of a society, is a resource with great potential for local tourist development. In 1999, ICOMOS stated the breadth and richness of this concept in the International Cultural Tourism Charter (Managing Tourism at Places of Heritage Significance).

<sup>48</sup> The concept of sustainability is based on three main goals: social, economic and ecological. CNUMAD, 1992. Rio '92. *Agenda 21*, Rio de Janeiro, pp. 427.

<sup>49</sup> These guidelines focus on making an optimal use of environmental resources, respecting the socio-cultural authenticity of host communities and ensuring viable, long-term economic operations. (UNWTO,2004)

*a way of development intended to improve the quality of life of host communities, provide a top quality experience for the visitors and preserve the quality of the environment, which both depend upon (1990 cited in Venturini 1999)*

In recent years, the concept of sustainable tourism has been widely debated from different perspectives, theories and conceptual frameworks pertaining to different disciplines. It is defined as "eco-tourism", "environment-friendly tourism" or "responsible tourism".<sup>50</sup> Buckley (2002 cited in McDonald 2006) defines sustainable tourism as "tourism at any scale with practical and proactive design, engineering, and management to reduce environmental impacts." Butler also tackles the issue of a sustainable tourism industry (1993 cited in McDonald 2006) and states that it involves:

*tourism which is developed and maintained in an area (community, environment), in such a manner and at such a scale, that it remains viable over an indefinite period and does not degrade or alter the environment (human and physical) in which it exists to such a degree that it prohibits the successful development and well being of other activities and processes.*

On the basis of the aims inherent to the notion of sustainable tourism development, it is possible to think of "ways of using tourist resources" and "ways of using the tourist space" that will create alternative ways, where the transformations of the environment are of a more "rational" nature.<sup>51</sup>

This paper centers on the Yacoraite Archaeological Park project<sup>52</sup>, located in Quebrada de Humahuaca<sup>53</sup> in Argentina (Fig. 1). It was created as a strategic initiative intended to place value on a historical space that is defined by the significance of its archaeological, historical and natural heritage value and regarded as a major cultural resource with scientific, social and economic dimensions. The term archaeological park does not have a generally accepted definition, which indicates a lack of agreement regarding its meaning and content.<sup>54</sup>

## **Yacoraite Archaeological Park as a case study**

The case study focuses on the area around Yacoraite River (and Yacoraite Narrow) and its mouth into Rio Grande. This area has an impressive natural environment and different archaeological sites that represent important periods of human history (Fig. 2). The increase of visitors to these sites of Quebrada de Humahuaca reveals a growing interest in Cultural Tourism.<sup>55</sup> The park was thought as a master plan which includes in its surface area the local communities (Angosto de Yacoraite, San José and Chucalezna)<sup>56</sup>

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<sup>50</sup> McDonald (2006) thoroughly reviews the different interpretations that derive from the concept of sustainability, especially those that relate to tourism, and the perceived problems associated with those different interpretations.

<sup>51</sup> See Venturini, E., 1999.

<sup>52</sup> This project was designed by Architects Luciana Repiso, Natalia Ravagnini and Emma Puch Sleive and coordinated by Architect and Landscape Specialist Guillermo Lange (along with various other advisors from different areas).

<sup>53</sup> Quebrada de Humahuaca was declared a World Heritage Site in 2003 and included in the category Cultural Landscape. See official documents at: <http://whc.unesco.org/en/list/1116>

<sup>54</sup> According to Ojeda (2002), this lack of definition applies to an archeological site (as in the case of the Archeological Park of Fregellae in Italy), a road (as the famous Via Appia) and an area (as the Archaeological Zone of Las Médulas). Ojeda further explores the concept on the basis of the definitions provided by various authors and the guidelines included in the documents and briefs produced by two international organizations: The European Council and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

<sup>55</sup> This tourist modality was defined by the UNWTO as any movement of people aimed at satisfying the human need for diversity, intended to raise the individual's cultural level and allow for new insights, experiences and exchanges among individuals (Venturini, 2003).

<sup>56</sup> The Yacoraite Archaeological Park project covers an area of 8.000 has. and includes a reserve as an environmental protection area.



Figure 1: Location of the Yacoraite Archaeological Park in the Province of Jujuy (Northwestern Argentina)

The program includes different areas (Fig. 3 and 4): an archaeological area, a botanical area, a rural area, an adventure area, a research area, and inhabited areas (the local community will provide accommodation services and offer typical local food along with a knowledge of the local celebrations, customs and traditions). There will be three architectural typologies: a Visitor's Centre (Fig. 5), an Interpretation Centre and a Research Centre. Appropriate linkages (road networks, footbridges), tourist information points (Fig. 6), viewpoints and terraces are also part of the proposal.



Figure 2: Pictures of the main territorial elements. a) Archaeological site Los Amarillos b) Centinela Hill c) Women from local communities (taken from *First Magazine*) d) Panoramic view of the area from Pucara de Yacoraite.



Figure 3: Plan of the Yacoraite Archaeological Park



Figure 4: Cross section of the Park from the Yacoraite River



Figure 5. a) Plan of the Visitor's Centre and the Community Centre b) Perspective view of the entrance to the Visitor's Centre c) Cross section view of the Visitor's Centre.

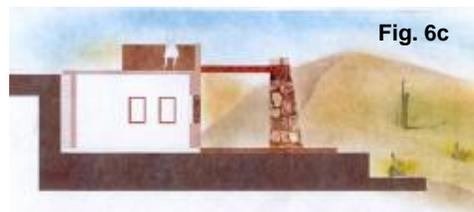
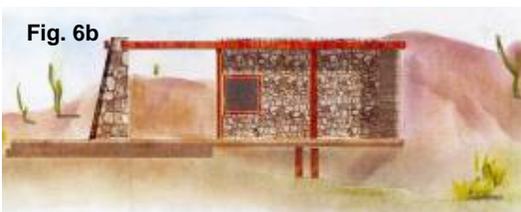


Figure 6 a) and b) Views of the Information Office Los Amarillos c) Cross section of the Information Office Yacoraite.

When designing the Park, landscape and facilities, *contextual/environmental criteria (related to the natural and socio-economic/environment)* together with *functional, formal and technological criteria* were reviewed. These criteria were later adopted when it came to taking project design decisions. These criteria involve taking a stand on the future desirable environmental results and the spatialization of the sustainable elements of the project.

**Contextual/environmental criteria.** Consideration was given to the deep-seated cultural relations and peculiarities of the natural environment of Quebrada de Humahuaca. (Fig.7) In order to boost sustainable design, natural factors were identified and environmental goals were set, these include: controlling, transforming, rejecting, releasing and storing, depending on the environmental factor involved.

**Functional criteria.** After studying the functional organization, continuity and form of spatial prehispanic articulation, the park was created as a functional unit with a continuous sequential space (Fig. 8). The generating idea for this Park stems from an intensive technical and sensory-perceptual diagnosis of the natural and cultural system of the intervention site. Central to this project is the notion of Territory-EcoMuseum.<sup>57</sup>

**Formal criteria.** The design logics<sup>58</sup> were based on the reinterpretation, recovery and redrawing of the order and expressiveness of the different natural components and the basic characteristics of archaeological sites (Fig. 9). Besides, they involved a sensitive approach to the landscape aimed to grasp its essential conditions. The goal was to generate a new built form that would stand out in the landscape but blend in with the surroundings. (Fig. 9c)

**Technological criteria.** Appropriate technologies and local resources were used: building materials, manpower, building traditions (with their meaning and economic value), current technologies that optimise traditional ones adding comfort and environmental quality (Fig. 10 y Fig. 11) As part of the Scientific Area, an experimental area concerned with agricultural/productive research was designed. This area includes alternative energies (a solar panel system) and a sewage processing system, among others (Fig. 12).

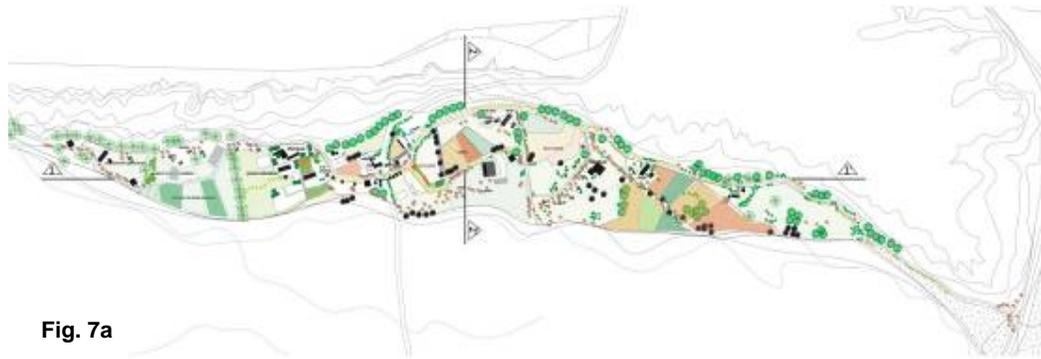


Fig. 7a



Fig. 7b



Fig. 7c



Fig. 7d

Figure 7. Rural Area. a) Plan of a rural sector b) and c) Views of the rural area d) Handcraft activities in the rural area.

<sup>57</sup> The objective of a Territory-EcoMuseum is to know, value, protect, preserve and promote the heritage asset, energizing the relationships between local society actors and the tourists and their relationships with the territory. This concept represents the sequence and articulation between time and space.

<sup>58</sup> This topic was developed in a poster presentation at the International Seminar "Hipótesis de Paisaje 5": "Landscape as a cultural construction. Exploring design methodologies. Archeological Park Project, Archaeological Site Los Amarillos, Quebrada de Humahuaca, Jujuy". REPISO, Luciana Inés; RAVEGNINI, Natalia and PUCH SLEIVE, Emma. 20-23 September 2005. Córdoba, Argentina.

**Fig. 8**



Figure 8: Territory-Ecomuseum: discovering the environment in a continuous sequential space. Approach to archaeological site Los Amarillos located at the foot of Centinela Hill.

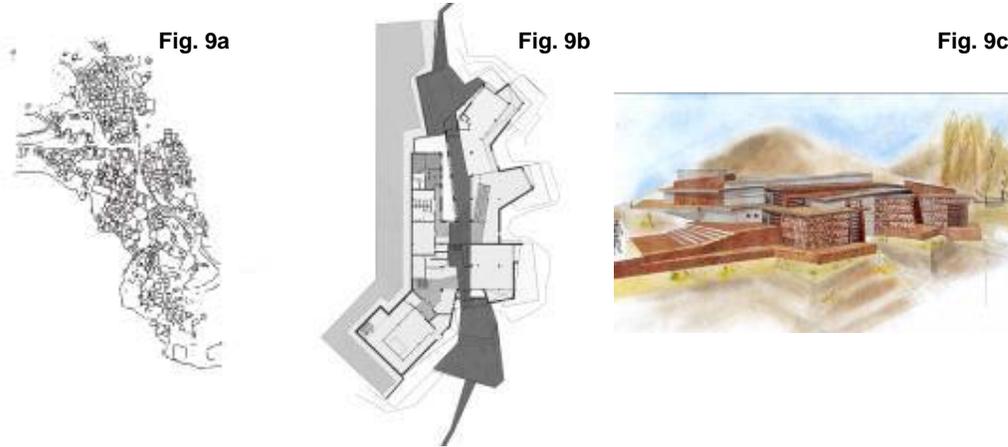
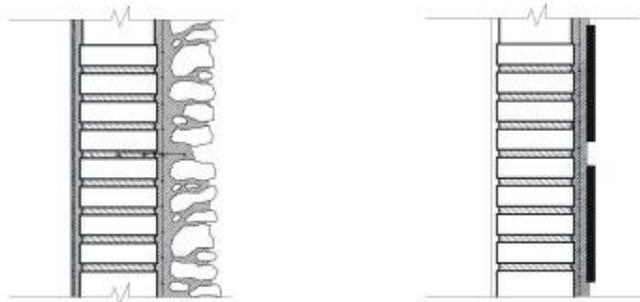


Figure 9 a) Plan of Los Amarillos Archaeological Site. b) Interpretation Centre c) Perspective view of this centre.

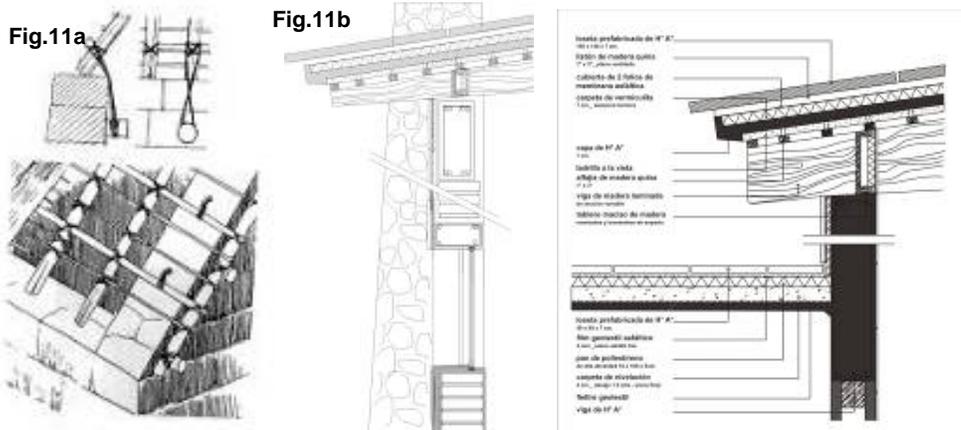


Adobe bricks reinforced with concrete and natural local stones. Wide wall.

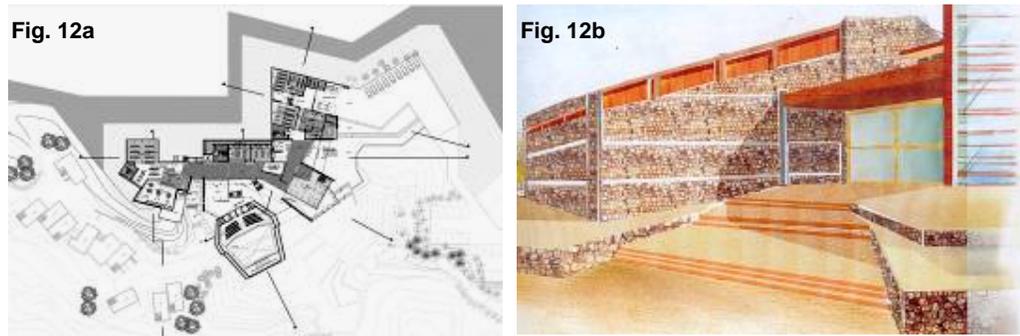
Adobe bricks reinforced with concrete and prefabricated concrete brick.

Figures 10: Two cross sections of accumulator walls for heat storage purposes (thermal inertia)

Figure 11.a) Image of a prehispanic roof. b) Details of a semi-dry roof of the



Visitor's Centre and Interpretation Centre.



Figures 12 a) Plan of the Research Centre b) Perspective view of the entrance to this centre.

## Results and Conclusions

On the basis of the key principles and numerous basic and operative guidelines on sustainable tourism and planning of protected areas that have been internationally developed (such as the guide produced by WCPA/IUCN/UNWTO in 2002), it is possible to discuss the sustainability of an architecture project in terms of its social, economic and ecological/environmental sustainability.

As regards the *socio-economic dimension*, the following aspects are key in the development of the guidelines for a sustainable tourist product:

**Community Participation.** The link between planner and local community results from the goal of respecting the socio-cultural authenticity of host communities, preserving their construction modes, living style, cultural heritage and traditional values. Community participation grows stronger through the different stages, from the planning and design stages to the construction stage.

The local indigenous communities, who own archeological sites and the surrounding lands, are in charge of managing the Park projected. In the case study the local community was involved in the development of the proposal.<sup>59</sup>

**Relationship between local community and global culture.** Locally-based tourist products represent a great opportunity in the face of global demand. Tourists visit world heritage sites to understand and appreciate the value that made those sites be included on the world heritage list, thus deriving personal benefits.<sup>60</sup> According to Venturini (2003), the tourist experience is one of culture and communication between visitor and tourist, a spatial experience of "symbolic consumption", which requires planners and designers to carry out a sensitive study of such interaction settings.

Sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices amongst them." (UNWTO, 2004)

**Research/promotion/interpretation of the territory** (interdisciplinary work) Including an information research, development and production area within the intervention area is a strategy that aims at establishing a direct connection between researchers, the territory under study (the local community) and the tourists (following promotion and interpretation). **Management and administration.** The native communities, who should hold the right to manage archaeological sites, will administer the Park. This will create new working opportunities. The creation of cooperative

<sup>59</sup> The community was consulted on several meetings coordinated by the archaeologist Axel Nielsen within the framework of a project aimed at recognizing the value and fostering community management of the ruins of Los Amarillos (*Proyecto de Puesta en Valor y Gestión Comunitaria de las ruinas de Los Amarillos*, 2001). In this project, the working areas were defined as impact mitigation, value development (development of infrastructure and interpretative material, human resources training) and community management. This modality follows the Participatory Management model fostered by the provincial government at a regional scale and originates from the request for the inclusion of Quebrada de Humahuaca on UNESCO heritage list. The local communities became directly and actively involved in this process.

<sup>60</sup> When it comes to tourism development at world heritage sites, Rätz and Puczkó (2003) argue that the site's environment should retain the original spirit of the place.

organizations allowing for the manufacturing of local products and the possibility of obtaining funding through micro loans, makes it possible to think of new income-generating ways.

**Political sustainability.**<sup>61</sup> This a desirable aspect in all development projects. In this case, the project is framed within province of Jujuy's Tourism Development Plan. That is to say, the project is framed within an integrated management plan for Quebrada de Humahuaca heritage resources. Another point that should be highlighted is the "alliance between actors". Tourism sustainable development requires the informed participation of all the important actors together with a firm political leadership to build a comprehensive collaboration and reach a consensus.

As regards the ecological/environmental dimension, both the planning scale and the project are related to the "Design with nature" principles.<sup>62</sup>

Taking into account the case study criteria stated and considering the operative guides used as a reference (e.g. WCPA, 2002), the principles of sustainable and bioclimatic design and the contribution of tourist typologies such as the ecolodges<sup>63</sup>, the following topics are considered to be of key importance:

**Landscaping and Site Design.** It is necessary to develop a master plan and a site plan to establish a balanced relationship with the landscape, factoring in vegetation, topography, water drainage and cultural aspects.

**Built Facilities and Linkages.** Consideration should be given to the environmental conditions, adjusting the scale and proportion of the human-made environment to the natural environment and to what has been previously built.

**Preservation and Consumption of Resources.** Any sustainable project should make a commitment to minimize the use and production of water, energy (encouraging the use of renewable sources of energy), waste, sewage and noise, among others.

**Technologies and Materials.** The project should make use of appropriate technologies: local resources, such as building materials, manpower, building traditions (with their meaning and economic value). This ensures an efficient use of every material while involving low maintenance costs. Besides, current technologies should be incorporated to optimise the use of traditional technologies adding comfort and environmental quality.

New trends in the construction of tourist territory may be identified on the basis of the concept of sustainable tourism. This case study presents an experience in terms of planning and design that makes it possible to think of a sustainable use of heritage resources and their relationship with tourist space design. Moreover, this proposal sets a precedent and may be applicable to other projects, with the necessary adaptations depending on the particular contextual circumstances. The concept of sustainability has to be instrumental for thinking of feasible ways of implementing it, in this case ways to connect heritage and tourism. This should be understood in relationship with the persistence in time and the current and future conception of the human-made environment.

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<sup>61</sup> Several international organizations, such as the UNWTO, the International Council for Local Environmental Initiatives (ICLEI) and the International Union for Conservation of Nature and Natural Resources (IUCN) have developed various publications on the role local authorities play in the promotion of sustainable tourism.

<sup>62</sup> According to the World Commission on Protected Areas (WCPA) (2002) the construction of visitor facilities in protected areas should secure the integrity of both the built and natural environment, which should be aesthetically pleasing and incorporate environmentally-friendly technologies for the provision of water and energy and the processing of waste materials.

<sup>63</sup> There are several authors who explore and apply this concept to different case studies. The article "Back to the Future: The Ecolodge An Alternative Futuristic Eco-Friendly Tourist Facility" by Ashraf M. Salama is but one example.

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