

# CHAPTER 30 Managing Rock Art Sites

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## ABSTRACT

This chapter will focus on aspects of existing approaches to the management of rock art sites and potential areas for improvement. The reasons for using current management approaches will be explained in detail, including the processes that this implies, starting from the definition of significance and value to the development of management strategies. Some of the management processes will be illustrated using real-life situations in different parts of the world, including some examples of rock art sites inscribed in UNESCO's World Heritage List.

Over the past few decades, conservation of cultural sites has shifted from focusing essentially on the material fabric of sites (particularly among Western traditions of heritage conservation) to approaches that include the broader meanings that make a place important. This wider perception of heritage has enabled the inclusion of tangible and intangible aspects, which may be of relevance to a wide variety of stakeholders. Conservation professionals have therefore sought new tools to look after heritage places. Management planning was one of the answers, and it has become an essential methodology, enabling the preservation of the significance of heritage sites, while at the same time aiming for a more effective and sustainable use of resources.

One of the practical results of management is the development of a written plan, which, when properly formulated, can become the vital strategic document for achieving and maintaining conservation and management objectives, understanding the significance of a place, and executing actions for the overall conservation of the site. As we will see below, producing such a written document is based on a thorough and broad analysis of the site; otherwise, it can end up as a useless piece of paper.

Different management approaches for heritage sites, often values-based, have been developed in Australia, Canada, New Zealand, the United Kingdom, and the United States of America, although these are increasingly being tested and implemented in other parts of the world in a wide variety of contexts. In many countries, the tradition has often been what we will call a conventional approach, in which decision-making follows a top-down model, with decisions depending on more or less centralized government bodies. This model offered overall protection for the sites, including legal and administrative frameworks for their conservation, which are extremely important; however, this system was also sometimes found to be limited, as it tended to consider the significance of places only from the point of view of “experts.” We will therefore explore other approaches that have been developed, and sometimes applied in combination with conventional systems.

From an overall point of view, rock art sites can be managed as any other type of heritage, and the methodology we will explore in this chapter is therefore applicable to all heritage places. However, the specificity of rock art lies in its fragility. Many sites around the world are exposed to the elements: rain and other sources of humidity, fluctuation of temperature, biological growth, all of which contribute to the deterioration of the sites. However, vandalism and looting are frequently a much more pernicious threat to rock art sites in many parts of the world. Conservation is often not within easy reach, as sites are dispersed in regions that may not be easily accessible. Hence the importance of good planning and management, which we will now explore in detail.

## WHAT IS CULTURAL HERITAGE MANAGEMENT?

Management of cultural heritage essentially is the use of methods and tools developed for the protection, conservation, use, and enhancement of sites. These include strategic planning, both for day-to-day activities and for medium- and longer-term initiatives within a specific site or group of sites. Management and planning should aim at managing change, rather than trying to freeze a site in a given moment. The main idea is therefore to find the most appropriate solutions for the well-being of a site and its users, taking into consideration its broader context, and keeping in mind its sustainability. World Heritage Sites must have, as a requirement for their inscription, an adequate management system (UNESCO 2008).

Management also aims at using the existing resources (human, financial, and infrastructure) in the most efficient manner, while taking into consideration the social and cultural context of the site. Therefore, management activities will be specific for each site, as they will need to take into consideration the characteristics, possibilities, and constraints of that site. There may be various levels in management, depending on how the site is and will be used, on its significance, and on the existing level of knowledge, resources, and legal protection.

Management planning (both process and products) may be summarized in a written document (often called a management plan), which should preferably be short and clear, for ease of reference of the various people involved in the plan. This document will need to be reviewed periodically, in order to adapt strategies and activities to how the site evolves. Experience has shown that when a specific plan is

devised for a site, reviews should be made frequently in the first year, in order to make any necessary improvements. Once the system becomes operative, reviews may be done on a yearly basis.

## SITE SIGNIFICANCE

We care about rock art sites, and cultural sites in general, because we value them for a number of reasons. Understanding the significance of a site means exploring and comprehending all those reasons for which a site is considered to be valuable to society (ICCROM 1999; Marquis-Kyle and Walker 2004; Copithorne et al. 2008). Significance will depend on the perception of the site by a given community, or parts of the community. Therefore, cultural significance will often be as complex and variable as society's changing views, and there may frequently be differences (and contradictions) in perception between the points of view of owners of sites, researchers, managers, traditional users, and the public (ICCROM 1999).

Understanding a site, and articulating its importance (why and to whom it is important), allows a better decision-making process. The degree to which a site is valued will often dictate the effort and resources attributed for their management and conservation. If the significance of a site is not fully understood, well-intentioned choices made for its management could inadvertently lead to the destruction or alteration of important aspects of the site. Important meanings attributed to a site may reflect past traditions, or there may be continuity in the way these have been used. There will often also be values associated with our current perception of the site, and the use we make of it.

It is therefore essential to understand:

- why the site is important – and to whom, considering all stakeholders; and,
- what attributes of the site contribute to its importance.

For sites inscribed in UNESCO's World Heritage List, there is a specific requisite for establishing the outstanding universal value (OUV), stating the cultural and natural significance of each site for "which it is so exceptional as to transcend natural boundaries and to be of common importance for present and future generations of all humanity" (UNESCO 2008). A series of six criteria have been defined for the inscription of sites in the World Heritage List.

### Defining significance

The process of significance assessment can be undertaken at various levels. It can be based on local knowledge of the site, or it can be a broader process, involving a larger expertise, including heritage professionals (anthropologists, archaeologists, historians, conservators, and geologists) as well as local people.

There are many approaches to the definition of significance, mostly developed by heritage authorities in different countries, and sometimes by conservation professionals. They all tend to focus on similar components, which serve as guidance for the identification of all those elements that make the site important, including those which give it a unique character.

- Compilation of information on the site: status of site (defining if there is a designation as national heritage; consulting lists and inventories); physical evidence (site survey; recording of elements; identification of material objects); oral and documentary evidence (local or traditional owner information; maps; earlier recordings; research photographs; unpublished material; stored oral histories).
- Definition of the extent, nature, history, and development of the site.
- Analysis and definition of the cultural context: current use; significance to local communities, oral history; historical, technological, design, etc.; significance to other stakeholders.
- Comparative analysis of the site, based on the information above: comparison with other sites of similar type; definition of how and why the site is different or distinctive.
- Coordination and analysis of the previous information: identification of important missing information.
- Assessing types of significance and their degree: definition of the type and degree of significance, by comparison.
- Writing a statement of significance: evaluation of the adequacy of the statement.

In the following paragraphs, I give a more detailed description of values and significance, including references to authenticity and integrity.

## Values

The concept of values is not a new one, and the word as such may be conflictive as it can have different meanings in various cultural contexts. For some, values may be considered to be intrinsic to heritage sites, especially when referring to spiritual or religious values (Wijesuriya 2010). For others, and particularly in Western cultures, significance derives from a cultural judgment, and should likely be more appropriately named judgment of values, rather than values alone. References to values are abundant in this context, the most well-known probably being those defined by Riegl (1984), and those that appeared in the Athens Charter (1931) and in the Venice Charter (ICOMOS 1964). Those initial values, which mostly focused on historic and aesthetic aspects, have been broadened, and are presented below.

In order to define the significance of a site, and to write a statement of it, the analysis can be subdivided by focusing on themes, which may help in clarifying the different perspectives that need to be taken into consideration.

- Sites may have an important *social, spiritual, or religious value* to a local group or to society in general.
- They may have an *historic or cultural value*, by illustrating evidence of people's cultural development, or providing evidence of a specific period or phase.
- Most rock art sites have *artistic or aesthetic values*. Often in combination with their setting, they offer breathtaking experiences for anyone visiting them, which in turn can be a source of enjoyment and inspiration.
- They can have *research values* for a number of different disciplines, including archaeology, history, anthropology, and conservation. The sites may provide evidence about past or current cultures, and about local history.

- The sites may have an *economic value* for the community, or, at a larger scale, for the country.
- The site may have a *technological value*, representing specific ways of life, with technological solutions or innovations within a group.
- Most sites have an *educational value*, as sources of inspiration and knowledge on human history.
- Rock art sites usually also have an *environmental value*, given the importance of the natural setting in which they are found.
- As already mentioned, in the case of World Heritage Sites, values are reflected through a series of six criteria (UNESCO 2008: criteria i–vi).

All values may have a strong impact on how a site is managed: for instance, some sites may not be open to the public, as this would upset traditional beliefs and uses. On the other hand, a good understanding of those same values can offer a much more enriching experience for visitors at a site. There may be cases when the conservation of one value may compromise other values: placing a shelter over elements of an archaeological site may offer protection from the weather, but could affect the perception of the landscape.

Detailed understanding of the significance of the site to society is essential, so that appropriate management (which conserves the values) can occur. Knowing the site's significance provides managers with the tools to consider management alternatives.

The level of significance assessment and how much effort is placed in it will need to match realistic resource and financial costs. Given that assessments are based on a critical judgment in a given moment in time, there will be a need for a review of the assessment, as some of the values or aspects of management may change over time.

### **Authenticity**

Authenticity refers to the truthfulness of a site and its characteristic elements and processes (attributes), and their current capacity to reflect correctly all the values of a site. The evaluation of the authenticity of a site vastly changed after the creation of the Nara Document on Authenticity (1996), and now many more aspects are considered, including the social and cultural context (including spirit and feeling), the use and function of the site, the environment (location and setting), the form and design, materials and execution of its elements in various periods, as well as traditions, techniques, and management systems (UNESCO 2008).

### **Integrity**

The integrity of a site and its elements refers to their completeness, and how well preserved they are. The analysis of the integrity will take into consideration the conditions of the site (and whether it includes all necessary elements to express its values), while keeping in mind the foreseeable future with its threats and opportunities.

In summary, we need to clearly understand a site and its significance before making any decision about it. Writing an objective statement of all the reasons why a site is important is made based on a synthesis of information and points of view of all stakeholders. It will be the reference document to guide all management policies for its conservation, use, and research. The greater the level of physical intervention proposed

(work for presentation of the site to the public, conservation, or archaeology research, among others), the more detailed the assessment of significance should be.

A statement of significance should be a brief, but comprehensive statement of all the reasons for which a site is significant to different stakeholders. It is important that it does not simply become a list of reasons for significance that have been found during the preliminary research. Instead, it must articulate clearly and unequivocally the major reasons why the site is important, and identify all attributes (physical or process related) that reflect the values (ICCROM 1999). Attributes connect values to the site. They affect and are affected by the site's integrity and authenticity (Copithorne et al. 2008).

There is an agreed format for the preparation of the Statement of Outstanding Universal Value in the case of World Heritage Sites, which could form the basis for management of any type of heritage site.

## SIGNIFICANCE AND MANAGEMENT

The statement of significance, summarizing the cultural significance of the site, will be crucial to guide and make any decision about the site, but it is separate from understanding the site's problems, including management problems, the condition of the site, the needs of the local community, or any other challenges it may have.

Once the statement of significance is established, a series of processes need to be made, starting with the condition assessment of the site, and followed by the definition of conservation and management policies, which will take into consideration all attributes that reflects the values of the site. This will then allow the formulation of specific objectives and strategies (leading to a plan) for the management of the site, considering all the constraints, requirements and possibilities of the site (ICCROM 1999).

There may be a need for weighting the values of the site with a range of management issues. This is best achieved with a broad participation of stakeholders in the decision-making and planning process. Stakeholders include all individuals, groups, or organizations who have a legitimate ownership or an interest in the site, and who can influence its conservation and management.

The site manager (or the staff directly attached to the site) will often be a pivotal figure, but there may sometimes be a need for a mediation process to keep all stakeholders fully involved, and to allow for reaching solutions that are agreeable to all, in a consensus. A participatory approach is often confused with simple consultation, rather than a full-fledged participation in the management by the local community or other stakeholders. And this is often a major reason why management plans fail: they simply do not reflect the needs felt by stakeholders or they do not consider the real possibilities of a site.

## DIFFERENT MANAGEMENT APPROACHES

There have been numerous approaches to the management of sites, each with different objectives. The main systems are summarized below (Wijesuriya and Thompson 2010).

### **Conventional approaches**

Conventional approaches have a tendency to care essentially for the tangible, historical aspects of the site. The main focus is on the material fabric of the site. The essential concern is therefore in heritage as a non-renewable resource. The system tends to use top-down approaches, where heritage agencies or authorities make all decisions about what is best for the site (Stovel 2004). While this system provides the overall necessary framework for legal and administrative protection of heritage sites, it also tends to assume that the past belongs only to the past, and should be exclusively understood and interpreted by “experts.”

### **Values-based/significance-based**

The values-based approaches (not to be confused with the strict identification of values described above) identify and assess what is important about a site or place, and devise strategies, processes, and actions that concentrate on how to preserve those values. The main focus is therefore on the values identified for the site (De la Torre et al. 2005). This system often involves the participation (or consultation) of stakeholders; that is, groups with legitimate interests in the site. There will often still be a strong role played by the heritage authorities responsible for supervising the input of the various stakeholders in a top-down approach.

### **Living heritage approaches**

Living heritage approaches identify the existing traditions around a site. A large emphasis is placed on continuity of care and use of a site. The focus is therefore on the people dealing with the site.

Living heritage is seen as a sum of all expressions resulting from the interaction between people and nature. Such tangible and intangible processes are seen and safeguarded as an inseparable unity. Heritage forms an integral part of the life of the community in terms of (community) identity, pride, self-esteem, structure, well-being, and sense of heritage ownership/custodianship (most of the times formally/legally established). It is a community-based, bottom-up, and interactive approach (Wijesuriya and Thompson 2010). Within this system, material fabric may be seen as renewable. The criteria for the conservation and management of the site may be established by community members and conservation professionals together.

### **Advantages and disadvantages**

Each of these systems has advantages and disadvantages. Conventional approaches have been favored by many governments, as it is a fairly straightforward system, allowing them to be in control of all aspects related to the site (at least apparently). However, this system has limitations in a vast number of sites, sometimes with lessons learnt the hard way, as we will see in the examples shown at the end of the chapter.

Changing this tight top-down approach for bottom-up systems, or hybrid systems, required a shift in attitudes and opened a series of new challenges. However, adopting more participatory approaches has resulted in a larger number of benefits. These

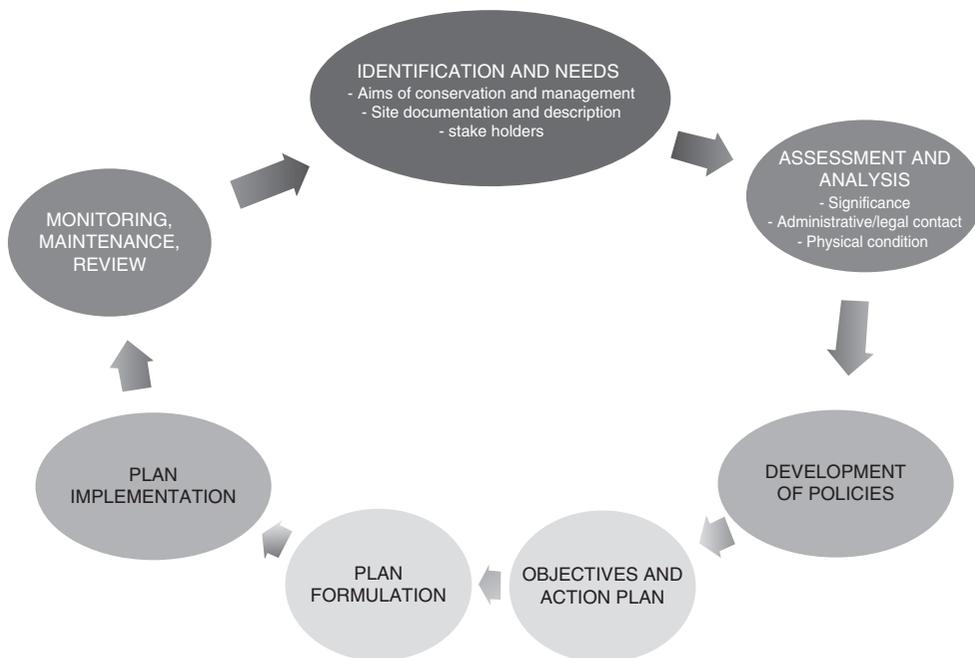
tend to translate into longer-term and more sustainable strategies and solutions for the sites. These approaches are much less straightforward, and are by no means easy. Working with numerous actors, usually of different backgrounds, who see the site from very different perspectives can be extremely enriching, but also extremely challenging. Good mediation will be fundamental, but it will be important to always keep in mind that without the involvement and a sense of belonging, conservation and management projects cannot be sustained.

There is now, therefore, a preferred trend to favor participatory approaches, such as the living heritage one. A change in scale has also occurred. While in the past, sites were often seen in isolation, there are now also much more defined efforts to try to link them with broader national (and sometimes international) systems.

### MAIN ELEMENTS OF MANAGEMENT

Although there is no “magic recipe” for management, there are some guiding principles that can be followed, coupled with common-sense elements, which offer a logical sequence when devising the management for a site or series of sites (Figure 30.1).

*Step 1 Identification of the site:* It is important to identify the nature of the site and its stakeholders. It is also fundamental to ensure that the cultural needs of all



**Figure 30.1** The management process is never linear. The best representation would be that of a cyclical and iterative process, in which new information and review can help continuously to reassess the situation of a site.

stakeholders, and especially all relevant local groups, are met. This may include the right of local and indigenous people to be in control of the decisions concerning their heritage places (ICCROM 1999).

*Step 2 Identification and understanding of the significance of the site:* It will be fundamental to reach agreements on what is important about the site (as this will define the most appropriate course of action). Another essential aspect will be the identification of the attributes that represent the various values, as it helps to clearly identify the tangible and intangible elements for which the site is important, and which should therefore be preserved.

*Step 3 Understanding and analyzing the existing conditions at the site:* physical location of the site and its boundaries; ownership of the site; legal status, legal protection; management structures (previous plans and their effectiveness; staff and/or people responsible for the site; available financial and infrastructure resources; other resources); condition of the site in its broader context, including vulnerability, risks, and opportunities (physical condition; larger environmental context; regional context and planning; identification of problematic areas, and issues of concern for the future); community needs (community planning); users' needs; current and projected visitor patterns; restrictions deriving from the significance of the site.

The above list may vary according to the site and given contexts, and can be considered as various factors affecting the sites. In the assessments, it is important to identify not only negative impacts but also the positive ones. In addition, there is a need to understand whether the effects are coming from the sites or outside, and whether they are current or future. When works are to be undertaken near a heritage site, a specific impact assessment can be made. This involves assessing the need and the justification for the work; identifying the potential impact of the work on the significance of the site; defining whether negative impacts can be mitigated through a better design; and, finally, making a decision, which may involve modifying the original project (Clark 2004).

*Step 4 Definition of policies or guiding principles:* Policies for a site can be defined for the various activities at the site aimed at preserving the values (and maintaining authenticity and integrity in the case of World Heritage Sites) as elaborated in the statement of significance (SoS, or Outstanding Universal Values in the case of WHS) in relation to the conditions assessed in the previous section. Policies will identify the most appropriate ways of preserving the values of a site, and will serve as guide for its future care and development. The policies may also be considered as rules or guidelines for the development of goals and objectives that would lead to actions.

Policies are the critical link between the assessment of values, condition, and management context, on one hand, and the objectives and strategies developed for the site on the other. Policies may include aspects such as appropriate use of the site; level and type of conservation interventions; visitation and interpretation; research and excavation; maintenance and monitoring; type of facilities and infrastructure; type and level of consultation, among others.

*Step 5 Definition of goals and objectives for management:* The development of goals and objectives will be based on all the information gathered in all the previous steps. As for all major decisions, they must be defined as the result of close cooperation with stakeholders for the site. The purpose of the management objectives is to state overall actions tending to the conservation of the cultural significance of the

site, both in the long and short term. While policies may be of a broader nature for a number of sites, objectives will be specific to each activity.

Goals are general statements of long-term desired outcomes. They are sometimes referred to as “mission statements.” Objectives are used to express shorter-term goals, and they can be linked to milestones, which will tell whether the objectives are being met. There are a number of tools and methods that can be used for this purpose, such as the SMART process (Strategic planning, Marketing, Advertising, Research, Technology).

Both goals and objectives need to take into consideration the implications of the statement of significance, be acceptable to the owners and authorities of the site, pay due attention to the needs and desires of the community, and be financially feasible. They should also be sufficiently flexible to allow for review and improvement. Finally, objectives should be clear and practical and they should be understandable by all.

*Step 6 Action plan:* An action plan for achieving various objectives may outline personnel, resources, management structures, and technical requirements, and may detail the timing and sequence of particular management or conservation actions. The actions should be listed in order of priority, so that, preferably, the most important things are done first.

When planning and designing, it will be important to try to maintain a balance between very general statements, such as “rock art will be protected,” and too much detail, such as “every site in the area will be located by X date and by X person,” so that specific roles may be assigned, but with some flexibility on how to actually implement it (ICCROM 1999). Careful planning of actions is essential for management, but there is no recipe for all situations; each site will have different requirements and a number of possible and acceptable solutions.

Actions may include various types of activities at a site, including recording and documentation, physical conservation, maintenance and monitoring, controlling development, research, visitor/interpretation practices, ongoing consultation with relevant groups, use of the site, facilities and infrastructure, and funding. All actions will be aimed at meeting the management objectives, but they must remain realistic and sustainable.

*Step 7 Implementation of action plan:* Implementation is probably the trickiest part, and the real test for how planning and management were done. Of utmost importance is the clear definition of roles, and particularly of responsibilities, for each of the actors in each of the strategies, including the required resources, the schedules, and expected outcomes. It often helps to define measurable targets to verify whether the objectives are being met.

*Step 8 Monitoring, evaluation, review and correction of action plan:* Monitoring is another key aspect of good management, but an often forgotten item. Monitoring and evaluation are key elements to defining the performance of a management system, and for identifying potential corrective measures in the system, or in the strategies. Fundamental aspects of monitoring and evaluation include regular inspections and the possibility of replicating the recording methods (UNESCO 2004).

Given the iterative nature of management, each of these steps may require reviews and reconsideration over the years. Time spent discussing the results and approaches during each research and analysis phase will be one of the most beneficial aspects of the work, and will often reduce later difficulties in the management of a site. Examples

from around the world have shown the impossibility of keeping a narrow professional perspective when it comes to managing rock art sites (and heritage sites in general). Broader contexts will need to take into consideration global changes as well, which could be seen as an opportunity, where conservation and management of sites can play an active role for social inclusion and development.

Three case studies are presented below to illustrate the successes and failures resulting from the use or neglect of some of the above-mentioned methods and tools.

## CASE STUDIES

### **Domboshawa (Zimbabwe)**

The site of Domboshawa is located some 34 km from Harare, the capital of Zimbabwe. It is located on an extended granite hill. The site was designated as a National Monument in 1934. Domboshawa is a rock-shelter with paintings representing some of the finest examples of animal and human figures in the region (this site is not on the World Heritage List). The rock art attracted all the official attention for a long time. However, the site includes a sacred forest, and part of the rock-shelter was also important and traditionally used by the local communities to conduct rain-making ceremonies (Taruvinga and Ndoro 2003).

Once the site was declared a National Monument, the rock art was given legal protection, and a small museum was built in the vicinity of the rock-shelter. For some time after that, the communities continued with the traditional rain-making ceremonies; however, the government soon banned the use of the site for such purposes, for fear of damage to the rock art. These ceremonies included, among other things, the production of fire in a hole inside the shelter, whose smoke was then interpreted to predict the presence of rain. The importance of the site within the communities' life was such that, for some time, they overlooked the official ban, and continued with the rain-making ceremonies, at night.

After Zimbabwe became independent in 1980, the communities restarted the ceremonies. However, the ban was reinstated in 1985, and in order to avoid any breach, the ceremonial hole was concealed with cement. Following a series of droughts in the region in the 1990s, the rock art was vandalized by the local communities. The major interest in managing the rock art overlooked and dismissed the spiritual values and use of the site. Locals thought that by obliterating the art, it might mean that the site would no longer be inscribed, and thus that the rain-making ceremonies could be re-established. The painted graffiti over the rock art was later removed, but this example shows the importance of fully understanding the meanings of a site before attempting any conservation decision. Different elements of significance require different management strategies.

The conventional approach used at the site overlooked the need for a full significance assessment, including a thorough understanding of the values for all stakeholders. This case study also clearly illustrates the need for discussion, analysis, and compromise for the best preservation of the site, including its broader values, and not, as in this case, basing the judgment solely on the material aspect of a rock art site. As at Domboshawa, rock art sites are not only comprised of shelters and paint, but also all the rituals and practices associated with them, and the broader landscape – in this case including the sacred forest – may also play an important role.

Currently, there is an ongoing process in Domboshawa for the management of the site, including the needs of the community, and a new visitor center has been created. Reconciling different points of view that have been antagonized is not easy, but a road for dialogue has been opened.

### **Sierra de San Francisco (Mexico)**

The Sierra de San Francisco is located in northwest Mexico in a desert mountain range. It was inscribed in the World Heritage List in 1993, for the quality and values of the more than a hundred rock art sites. These are characterized by large-size paintings depicting human and animal figures. At the same time as the inscription, a management system was devised for this extensive and scarcely populated area: the sites are essentially located on tuff rock-shelters at the bottom of steep cliffs, many of which are only accessible by means of pack animals (mules and donkeys). The system included a participatory approach for the establishment of an action plan. This included a series of meetings to which all stakeholders were invited, the first case of such an approach to be used in this region. The meetings resulted in the drafting of a very concise written plan, which defined targeted activities, responsibilities, and tasks for all stakeholders, and specific time-frames. Pivotal to these meetings, and for the consensus for all decisions, was the presence of a neutral figure in the discussions, the head of a local NGO, who had the trust of all the groups involved. The plan focused essentially on defining specific conditions to visit the rock art sites, involving the participation of a few government employed custodians (or rangers) and the local inhabitants of the Sierra. It also contained provisions for archaeology and conservation research and activities to be undertaken within the Sierra.

The resulting management system became operative at the end of 1993, and has been operational ever since (Gutiérrez et al. 1996). It was essentially a mixture of a conventional approach with a participatory system, which worked well for the daily running of the site, and for the management of visitors. It has had the full involvement of local stakeholders, but has often been seen as an oddity in the conventional system of government agencies. They tolerated this planning system as long as no controversies arose, and let it go its way. However, this system has been increasingly jeopardized by strong economic interests in the region, mainly aimed at larger-scale tourism associated with marine resorts on the adjacent Gulf of Cortes. The lack of official backing was felt, as the plan by itself had no means to stop developers. Fortunately, the pressures have been kept at bay, so far, by joint efforts between the Sierra de San Francisco, and the larger Biosphere Reserve which is also located in this region (Magar in press).

### **Foz Côa (Portugal)**

The Côa Valley, located in northeast Portugal, is the setting for rock art sites containing thousands of engraved animal motifs. The site was inscribed (together with Siega Verde in Spain) in the World Heritage List in 1998, considering the significance of this Paleolithic open-air ensemble. The engravings in the Côa Valley were discovered in the late 1980s, during surveys for the construction of a major dam project, which, if completed, would have almost entirely submerged the rock art. No impact assessment had been made at the time.

An international campaign of scientific and media pressure (under the slogan “Petroglyphs can’t swim”) was launched. In this case, stakeholders included a very broad community of the general public in Portugal, and the international community of rock art researchers. The pressure was such that they managed to stop the construction of the dam. As a result, the Côa Valley area became a designated archaeological park (in 1996), with legal protection and the development of a specific management plan for visitation of the sites. After broad initial interest to visit the rock art sites, the visitor numbers have significantly decreased, jeopardizing the sustainability of the park. The site is now managed with a conventional top-down system, but the interesting lesson was again the importance of public interest, which led to its protection.

## FINAL COMMENTS

Management requires a thorough understanding of a rock art site and a conscientious use of the existing resources. A good management assessment may not immediately solve existing problems at a site. There may be real conflicts between different stakeholders, and different expectations of why the site is important and how it should be used. There will frequently be no easy solutions, but being aware of the problems and having procedures to bring these to light are essential prerequisites to a satisfactory outcome (ICCRROM 1999).

We have underlined that there is no one-size-fits-all approach, but there is much to be gained for the protection of a rock art site by starting with a comprehensive understanding of all the factors affecting it (both positive and negative), rather than taking reactive or ad hoc decisions. Rock art management is a dynamic process, and can never be adequately achieved in a cultural or geographical vacuum.

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