

Nature and Anthropos:

Towards an Integrated approach to cultural and natural values^[1]

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Thymio Papayannis and Aphrodite Sorotou

0. Introduction

More and more, the intricate relationship between human beings and nature is being understood and studied in considerable depth. A number of international organisations, both inter-governmental and non governmental, are developing programmes and projects in order to promote a more balanced relationship of humanity to its environment and are considering cultural aspects and values as possible means to achieve this goal. In addition, the realisation that integrated conservation efforts for both the cultural and natural heritage could be mutually beneficial, has given impetus to such activities.

In view of the great variety of cultural values and of biodiversity throughout the world, the work to be done is immense. Activities must be carried out in all parts of the globe, experience must be exchanged, common approaches must be developed.

In the Mediterranean, a region rich both in biodiversity and in culture, such activities have been launched quite recently. In this context, one should point out among various others the following key efforts:

- Technical session on the cultural values of wetlands, Mediterranean Committee on Wetlands, Djerba (Tunisia), May 2000, which led to the approval of Ramsar Resolution VIII.19 on the same theme^[2].
- The consistent work done by SEHUMED^[3] in Spain, including the publication of a book on wetland heritage (Viñals 2002).
- The activities of the Butrint Foundation in both archaeological studies and nature conservation in this coastal site in South-western Albania.

These efforts have not yet resulted in the development of a common approach and methodology to cultural and natural heritage. To assist, the newly-founded Mediterranean Institute for Nature and Anthropos (Med-INA) is proceeding with activities starting in the North-eastern part of the region, that are characterised by:

- emphasis on fieldwork in specific sites;
- close co-operation with local people and structures, involving them in depth in the activities to be carried out;
- use of contemporary information technology to organise, store, manage and disseminate information;
- multi-disciplinary scientific rigour combined with the search of practical applications and results.
- openness to broader networking and collaboration.

The present position paper intends to refer briefly to the theoretical background of these activities and to provide information on certain perspectives for the actual implementation of the work.

Part A. Theoretical considerations

1. Background

cultural values

Humans have been part of the natural world, interacting with other species. Their life has been controlled by the environment as latitude and altitude, landforms and climate have determined the vegetation and animal life. On the natural environment humans have depended during millennia for food, shelter, raw materials, and locomotion. This relationship, besides its

utilitarian aspects, has given rise often to non-material elements –such as delight, awe, inspiration, sociability and self realisation–, which constitute cultural values.

Some characteristic examples will help to illustrate this concept.

The beauty and magnificence of nature, coupled with its destructive forces, has been at the root of beliefs and myths since ancient times, many of which have developed into religions and cults. Even the major monotheistic faiths, although highly anthropocentric, consider the natural world sacred, and bestow upon it the heavily loaded term of 'Creation'. In addition, natural elements (such as some animals and plants, water and the sky) play a major role in their doctrines and practices. This same beauty of nature has provided inspiration for artistic creation in the visual arts, in literature and music.

Human settlements have been located in or close to natural ecosystems, in caves, forests and wetlands, on river banks and lake shores, to benefit better from natural resources. Habitations have used natural materials, have been harmoniously integrated into the natural landscapes and have resulted in characteristic examples of traditional architecture. Family activities themselves have required furniture, household objects, tools and other artefacts, made of natural materials, which are sometimes of intricate form and often rich in decoration.

The exploitation of resources in traditional ways has resulted in modifications of landscapes with various effects on their natural beauty and characteristics. For instance there is clear evidence from many Polynesian islands that the first human settlers devastated the indigenous fauna and flora. Also the Byzantine city of Petra, Jordan was suddenly abandoned in 900 AD after centuries of drastic clearance of forests and shrubbery by the inhabitants. Finally, the human impact on Easter Island was even more catastrophic; palynologists have discovered that this now treeless environment had forests of large palms before human arrival (c. 400 AD).

Besides the huge destructive activities of humans, there are cases that their impact not only assisted the conservation of certain ecosystems, but also increased both their visual and biological diversity. Scientific studies for example in the Prespa Lakes region^[4] have demonstrated that the biodiversity of the area has been enhanced by traditional exploitation activities (such as fishing, reed cutting, grazing and husbandry), which have also increased the diversity of the local landscapes. In turn, rice cultivation in countries of Southeast Asia has resulted in unique landscapes of particular beauty and has contributed to the maintenance of valuable flora and fauna.

Invariably, the methods and tools used for such activities can be considered as cultural elements.

cultural and natural heritage

All of these elements and aspects constitute our cultural heritage. It is necessary to understand that cultural heritage does not refer exclusively to the monumental remains of certain peoples and cultures. The visual and dramatic arts, the various languages, traditional music, spiritual and philosophical systems, festive events, rite and beliefs, traditional medicine, literature, culinary traditions and others can be also recognised as cultural heritage. In general the concept of heritage is an open one, reflecting the living culture as much as that of the past. It can be argued that cultural heritage is inextricably related to the natural heritage, as its origin and inspiration is nature itself. If such a linkage is accepted^[5], the necessary conclusion is that both the cultural and natural heritage must be studied, preserved, enhanced and communicated in a holistic manner. Thus the need of a new approach to integrated management of both the cultural and natural heritage seems to emerge.

At this stage, what is required is the provision of guidelines for such management and the development of appropriate methods and tools. This must be done:

- through joint efforts of all the sectors and disciplines involved,
- at all levels, including theoretical and scientific research, methodological analysis and field applications, with strong exchanges among them,
- in different locations, as culture is usually site-specific.

The knowledge and experience gained must be shared broadly and intensively, so that this integrated approach can be used widely and bring rapidly positive results.

contemporary relevance

In this context, a key question that must be answered concerns the contemporary relevance of both the cultural and natural heritage. Why must it be maintained in a period in which most human activities seem to be often dissociated from nature and culture, and why should it not be sacrificed in the name of development and economic growth? When values seem to lose their resonance and to be replaced with money, possessions and entertainment? In a world where virtual elements are replacing tangible contacts and experiences?

A first answer to these questions may be found perhaps in the Constitution of the United States of America, which includes 'the pursuit of happiness' as one of the basic human rights. The fact that a considerable minority of the human race still finds happiness in nature and culture, while the majority is still searching for meaning and fulfilment, may signify that our joint heritage is still of great significance. A second answer may be found in the need of modern societies, but also of groups and individuals within them, to preserve their identity and specificity in reaction to the increasing globalisation terms. In fact, it is ironic that globalisation itself is providing the tools for a powerful expression of this reactionary forces at the global level^[6].

In the meanwhile, those that consider that human well-being and happiness cannot be dissociated from nature and culture have no other choice but to persevere in their efforts to understand, to preserve and to convince. Whether they will prevail is of theoretical importance only, and should not affect the intensity of such efforts.

Key terms

Without going into a detailed description of often debatable definitions, it would be perhaps useful for the comprehension of the text to include some remarks on how key terms are used in it. These are terms that are not fully explained within the text.

Anthropos: Greek-origin synonym for 'human being' used in such terms as 'anthropology', 'anthropisation', 'anthropoid', 'anthropogenic', 'anthropic' and others.

Biodiversity: The total wealth of a specific area in fauna and flora species, with an emphasis on threatened and endemic ones.

Culture: The totality of socially transmitted behaviour patterns, arts, beliefs, institutions and all other products of human work and thought, which are unique characteristics of a particular community or a population.

Heritage: Natural and anthropic elements from the past, which are of pertinence to current and future generations.

Management: Active and passive measures, within a comprehensive framework, in order to achieve agreed objectives.

Natural resources: Elements of the natural environment, which are of use and value to human beings.

Sustainable use: Obtaining benefits from natural resources, without degrading or destroying them, so that they can continue to serve future generations.

2. Current practices of nature management

The management of the natural heritage has matured considerably during the last three decades of the 20th century. It has become both more effective in reaching concrete objectives and comprehensive in taking into account wider anthropocentric considerations. Although there are variations from region to region, a general approach would include a number of specific steps, which can be combined in different ways.

national policies

The decision to conserve the natural heritage of a country must be elevated at the highest policy-making level and incorporated in a positive form either in specific nature conservation policies, or within the policies that may affect this heritage, such as land use planning, development and sustainability programmes, and major resource use guidelines. A key issue is the environmental state of bodies of freshwater that must be taken seriously into account; thus water resource management policies are of capital importance in conserving the natural heritage. Naturally all these policies must emanate directly from the constitution of the country itself, or at least be in harmony with it.

Such policies, besides their practical implications, have an important function in conferring national priority to conservation objectives and in bringing them to a high level of public awareness.

protection designations

As space is continuous, it would be sensible to manage it in an integrated way, and apply appropriate measures, depending on land uses and the ecological –and/or cultural– significance of each area. In practice, for political and administrative reasons, it has been found appropriate to confer on specific sites various statuses of protection, of national or international character^[7]. These are usually followed by various constraints and incentives, not always of great legal rigour, which renders their implementation problematic.

Within the European Union, a network of protected areas is being established, Natura 2000, incorporating the most unique ecosystems and sites of the continent, in accordance with pre-determined scientific criteria. In spite of strong resistance in certain countries –mainly due to powerful economic lobbies, as well as hunters' associations–, there has been considerable –albeit slow– progress in the development of the network, so that now measures have been discussed for its protection and management. The problem is that all areas left out of Natura 2000 are considered to have no ecological values, and, therefore, could be destroyed with no regret, in spite of their true characteristics. It should be also noted that Natura 2000 does not include yet marine areas.

inventorying and monitoring

Designating sites with a certain protection status is not sufficient. It is necessary to proceed with inventories of sites and of habitats within sites, so that a good knowledge of the natural wealth of a country and region can be established. This can be complemented further by detailed inventories of flora and fauna species, which would then provide a full picture of the biodiversity existing. Applied research is also needed to complete the gaps of knowledge.

Such inventories are invaluable as monitoring benchmarks, for recording in time series the evolution of key ecological parameters, and thus providing objective feedback for the evaluation of threats and of management responses.

In the case of Mediterranean wetlands, a sophisticated but user-friendly MedWet Inventory System has been designed, tested and applied in various countries. The System is based on a clear classification of wetland and habitat types, complete data forms and a digital database. It operates on three levels (hydrological basin, wetland sites and habitats) and can produce reports compatible with the requirements of both the Convention on Wetlands and the European Commission.

jurisdiction and legal framework

In many countries the jurisdiction for the management of the natural heritage is split among various ministries and services, with ministries of environment, agriculture and often water resources or irrigation^[8] playing a major role. However, this situation may often create confusion, duplication of efforts and worse, in the form of inaction and neglect. Clarifying thus responsibilities is a key issue that must be incorporated in national policies concerning nature and natural resources.

Legislation in turn must translate general policies into specific and enforceable measures. It must be effective, easy to comprehend, with a reasonable degree of flexibility and equitable, so that it can be accepted by local populations. Only then there will be good perspectives for its enforcement. In addition, other legislation, which may affect indirectly natural areas in a negative way, must be identified and revised. A better approach would be to develop integrated policies, within which all aspects are taken into account and eventual conflicts minimised.

capacity building and training

The decision-makers and services charged with natural heritage management need to be trained, so that they develop the required capacity. This is a continuous process, since key persons must be able to follow developments in their field and benefit from knowledge and experience gained. Thus well-focused training is an important tool in the management of natural areas. Such training concerns staff in both central as well as decentralised services. It should also involve staff of non-governmental organisations, as well as from research institutions and universities.

For major sites, it is considered appropriate to establish local, multi-disciplinary management bodies. These will also need extensive staff training, as well as more focused efforts on achieving a common vocabulary and approach and eventually a common vision.

management planning

In recent years, management planning has been promoted as the major tool in the conservation and sustainable use of natural systems and resources. In a highly artificialised environment, which is the case of many protected areas, and especially in the Mediterranean with its long and tumultuous history, it is now necessary to institute technical and other measures to maintain the balance required for the preservation of biodiversity. Such measures may concern controlling the height of water in wetlands, averting pollution, removing exotic species, managing the flow of visitors or regulating productive activities. All these measures are included in the management plan of each protected areas, which must be established after a wide consultation with all stakeholders, and must obtain not only formal approvals, but also popular consensus.

It should be noted here that a management plan is just a tool, which must be commensurate with the capacity of those (the management body or other institution) called to implement it. This tool in order to be effective should involve the local community of a protected area in a central role in the management planning and implementation, should be adaptive to lessons and flexible towards the different socio-political and economic circumstances. It is useless to have a complex and ambitious management plan, without the human resources required for its realisation. Naturally, financial and technical resources are also a prerequisite.

public awareness

Obtaining public understanding and consensus is not a simple or automatic task. It requires hard and systematic work of providing information in appropriate forms, cultivating public structured debate on the issues of nature conservation and sustainable use, creating public awareness, and encouraging participation. It is important when local people can realise the connection between the protected area and its values with their own contemporary way of life and even livelihoods. Non-governmental organisations are usually better suited for this task because of their position in civic society and their membership and voluntary nature. They also have a higher degree of credibility among local inhabitants. In all cases, an evaluation of the results of such public awareness efforts must be objectively evaluated^[9].

3. Trends in the preservation and management of cultural heritage

The study of cultural heritage is nowadays closely related to the study of the environment and the study of landscape. One could say that *landscape* occurs from the interaction of *humans* with their *environment*. This interaction is many times complex, while it often incorporates a relationship between a lived reality and a potential for other ways of being between the everyday and conditions which are metaphysical, imagined or idealised. Landscape occurs everywhere and takes many different forms.

Thus, landscape is not only rich in natural values, but it is also culturally influenced. Therefore it is a necessity to study the natural environment not in isolation but in relation with culture and eventually to appreciate the way these elements are associated with each other. Traditional forms of land use may be valuable for the survival of certain species while certain natural areas may be charged with spiritual values to some communities. The study and protection of such landscapes, and of the life ways within them so that they can develop in balance with natural habitats, can be crucial to sustain biological and cultural diversity (Phillips, 2002:6).

It is imperative, before we proceed to any further analysis, to examine some basic terms and issues related to the above and discuss some aspects on the study and management of cultural heritage.

culture and cultural values

The term *culture* has been understood and explained in many different ways through the last few centuries. It first referred mainly to cultivation; to be cultured was to be sophisticated and possess civilised manners and values. Culture was recognized as a discourse of excellence preserving timeless and universal human treasures, and in this way the term actually translated forms of social inequality into cultural capital (Shanks, 2001:287). Nowadays *culture* is mainly perceived as the totality of socially transmitted behavioural patterns; it is the way of life of a society; it is something that is gradually structured and is sprouting from social practice and changing.

Culture, and more specifically material culture, has been many times associated with value. Value is the denominator of commodities that enables us to say how much any one thing is worth by comparison with another, even though these two items may be quite unlike in terms of their physical qualities or potential uses. Of course the labour, the effort that is put on the production of an item, is also a quantitative characteristic of commodities. For many academics and other intellectuals culture has been divided into high culture and low culture. The former was usually delegated to educated elites while the latter was thought to be the product of and for lower working classes.

However, for contemporary social scientists culture is no longer valued in high or low. It is instead *"the social production and reproduction of meaning, the social sphere of making sense which unites production and social relations; a field of signification through which a social order is communicated, reproduced, experienced and explored"* (*ibid*, 289). Therefore our attempt to value culture it is a subjective process. Material and non-material culture is evaluated and experienced in various ways by the different academics, elites, decision makers and local populations. It is imperative to respect all the different opinions and views but one cannot be absolute of what is more or less valuable.

In more practical terms and in the case of the protection of cultural (and natural) heritage it is essential to draw attention to those cultural elements which are of outstanding value for a local community or for all humanity. More than ever before, the study and protection of cultural heritage is important as global cultural forces tend to diminish the value of local cultural aspects of small societies worldwide. During a process of globalisation, local communities adopt, produce, reproduce and circulate global culture supplanting their local character. Social sciences, like anthropology, sociology, history, archaeology, ethnography, together with geography and other disciplines, may offer a fruitful ground of resistance to the ideologies of a standardized world uniform in its space *"with the commodity form and principles of the global market"* (*ibid*, 292). Each of them may provide a series of different cultural studies so as not to

completely set aside global culture but to emphasise the importance of the cultural variations of peripheral communities.

culture and landscape

In the western world, landscape is mainly a visual term, which signifies something separate from ourselves when many non-western societies have no sense of alienation from (their) land. Undoubtedly there is a physical and a symbolic interconnection between culture and landscape. In the first case landscape is more or less the space where people may perform their everyday tasks. In the second case, land may be considered to embody ancestral energies, spiritual forces, memories etc. It is possible that the same location may effectively be a different place for two different persons, especially in the case that they derive from different cultural backgrounds.

As mentioned earlier, landscape is both natural and cultural; it connects values, modes of perception and representation, experiences, cultural and natural histories, memories, dreams and identities. It is a mixture of everything that goes with a living place. Therefore landscape is complicated and beyond any simple conception of surface and linearity of chronology.

Cultural landscapes deserving special recognition are to be found everywhere in the world. Even areas of exceptional natural beauty that were until recently thought to be *untouched* by humans have proved to long inhabited and altered. These are also cultural landscapes and require our attention and careful preservation of their cultural character. It is our responsibility to protect areas like these from destruction and to promote their sustainable development.

destruction and conservation

There are two main destructive factors of cultural heritage and they are both anthropogenic. One is the construction of technical infrastructure works (roads, quarries, buildings etc.) and the other is agricultural intensification, which might be slower, but is much broader in its extent and therefore more destructive. Other reclamation schemes, such as the drainage of wetlands, do not only transform the nature of the environment, but also greatly destroy cultural evidence. Two further human activities that should be considered destructive for the cultural heritage are tourism and the looting of archaeological sites.

As a result, many nations worldwide recognise that it is the public duty of a government to have a conservation policy that applies not only to natural resources and wildlife, but also to cultural heritage. All these nations have established some type of legislation for the protection and conservation of cultural heritage, although it is often far from all-inclusive.

In practice, there are two principal stages in conservation of cultural heritage. The first is gathering the information, so that relevant sites and areas may be located and properly recorded and cultural values identified. The second is the conservation of those sites and areas so that can be effectively protected and their cultural identity and values are preserved.

In order to promote the mechanisms that will contribute to the conservation and protection of the cultural heritage of areas of ecological importance –and especially wetlands– and to the particular research, which will support its effective management, it is essential to understand cultural heritage in relation to nature through a series of multidisciplinary studies. Since landscape contains so much diverse information about the natural world as well as human history, it would be ideal if we could combine the different sciences that study the landscape and reach conclusions in a holistic manner. Archaeology could be a multidisciplinary scientific type of research that has developed a strategy that combines itself several norms, approaches and analyses that study the landscape in a holistic view..

why archaeology

Archaeology, the past tense of social anthropology, in its broadest form can be defined as the recovery and study of the material remains of past societies and cultures; it is the painstaking work of the scientific analyst, the meticulous task of interpretation, so that we can come to understand what the discovered remains mean in terms of human history; it is the conservation of the world's cultural heritage against ignorance and neglect, careless management and destruction; it is the maintenance of memories of the past, as a common goal of all societies and as an inextricable element of their development in time.

Key assumptions in archaeology are that these material remains reflect the culture that produced them, and that human beings do not behave randomly, but follow patterns established within their societies. Tool manufacture, hunting practices, house construction, religious worship etc. are behaviours that tend to be conventional to societal patterns, standards and requirements. The archaeological record reveals, through a multifaceted process, the patterns that led to its formation (Binford, 1978).

Since people's behaviour is not random, they do not behave randomly in space, and they do not use the landscape randomly (Hodder 1978). The location of hunting camps, farming villages, urban centres, and so on are all selected on the basis of cultural and practical requirements that almost always take into account environmental features, such as food and material resources, topography, connectivity and, of course, the availability of fresh water. The way that a group of people utilises an area leaves patterned distributions on that particular landscape (settlement pattern). *'The archaeological reflection of that settlement pattern is called by William Marquardt and Carol Crumley (1987:7) the landscape signature defined as the material imprints left on the earth's surface by particular constellations of human groups'*^[10]. The landscape signature is simply a material representation of the cultural pattern of the use of space.

Archaeologists use a method called site (surface) survey in order to explain a landscape signature and to detect a settlement pattern. A site is a discrete bounded location where humans lived and worked and where evidence of their behaviour can be recovered by the archaeologist. However, focusing on a single site makes it difficult to see the actual nature of a landscape as used by past populations. So, instead of concentrating on the discovery of the archaeologically richest locations and studying them in isolation, it is better to use a landscape or a distributional approach, which try to investigate the relationship between a site and its neighbouring sites, and with its surrounding environment. In such a case the main goal is to understand how human groups used the particular landscape within different time frames.

public awareness

Protecting cultural heritage, –particularly in ecologically sensitive areas, such as wetlands–, is of great significance for future generations. This is a deceptive statement, as it is of just as great significance for the people living in the present as for those who will come in the future. It is important for everyone to have an adequate perception of our place as human beings in the modern world. The past matters. It is where we come from, and it has determined what we are. The understanding of culture *'permits the self-conscious evaluation of human possibilities in the light of a system of values that reflect prevailing ideas about what human life ought to be'* (Honderich, 1995:172)

Therefore, raising public awareness is one of the most essential of all the stages of a project. Publication of results for both research and (in a simpler form) for the information of the public (such as small educational workshops, projects for children and teenagers etc.) can be just a few of the ways of promoting the understanding of the general public, and its alertness towards the protection of the cultural and the natural heritage.

A word of caution concerns the existence of multi-cultural societies, and with minorities with their cultural background (especially indigenous people), whose rights and aspirations must be taken into account and respected.

Part B: Implementation perspectives

4. Towards a common heritage approach

We have described briefly in the previous two sections the methods and tools used up to now in the separate management of the natural and cultural heritage. Although in the past there have been some significant contacts between the two sectors, their collaboration has been rather platonic. What is proposed now is the fusion of the two approaches towards the integrated management of both natural and cultural heritage, based on both theoretical and practical considerations.

defining the objectives

First, agreement must be reached on the objectives of the collaboration. Conservation seems to be the main goal of initiatives focusing on nature, while a greater scientific interest seems to motivate archaeologists and others involved with the cultural heritage. Thus the following common objectives are proposed:

- Improving and documenting our knowledge of the natural and cultural heritage.
- Identifying and investigating the relation between the two.
- Initiating practical methods for the long-term conservation of both.
- Using co-ordinated research to support the management of natural and cultural heritage.
- Appreciating the natural and cultural heritage through a series of survey projects and excavations wherever necessary.
- Increasing the public awareness of natural and cultural values, in order to re-establish the links of local population with their heritage, and to attract visitors to sensitive areas, thus contributing to local income and appreciation.

These objectives in turn should become more specific in reference to concrete sites of natural and cultural importance, and must be realised with the active involvement of local people.

obtaining knowledge

The first step in obtaining knowledge is through an inventory of both natural and cultural characteristics. This could be done through four broad and complementary paths. These are *a*) desktop study (maps and plans, 19th and 20th century documents, previous archaeological records and reports, historical sources), *b*) surface survey, where *artefacts* and *ecofacts*^[11] will be recorded and collected, *c*) geophysical (and/or geo-chemical survey), and *d*) aerial photography. The above will assist on locating and exploring important cultural sites and areas of significant natural beauty within a region while they will promote our understanding of the extent of the cultural heritage of the area under study. One possible option would be the development of the MedWet Inventory System, previously referred in Section 1, so that it incorporates the techniques of archaeological surveying mentioned in Section 2. This will require quite a bit of work, both in methodological planning and in programming to adapt the existing software^[12], and might require considerable time (approximately one year) and resources.

The work should be planned in a progressive way, starting from generalised surface surveys comparable to the hydrological basin level, extending to large sites and finally leading to locating specific cultural sites or natural habitats.

In the meanwhile, simpler methods of inventorying and documentation –for example, through appropriate data sheets^[13] could be used to gain experience and to prepare the ground for more sophisticated applications.

the cultural heritage in the management of protected areas

During the last two decades, considerable experience has been gathered in the management of natural areas under various protected designations, through the tool of management planning, and an extensive bibliography is already available. What is required at present is to adapt this tool so that it incorporates the management of cultural heritage, a task that will require the development of appropriate methodological tools and the training of staff (see below).

training in integrated management

There will be a pressing need for training managers of protected areas and especially of wetlands in the management of the cultural heritage. In turn, archaeologists and other scientists involved with cultural heritage must be trained in ecology and the natural scientists must become sensitive to the cultural aspects of protected areas. It is essential to adopt an interdisciplinary approach that combines the interests of the environmental scientists, the archaeologists, the relevant institutions and the local populations. In a first phase, these training needs do not require, perhaps, a lengthy and in depth application, but a general sensibilisation of the principles and glossary of the corresponding disciplines, so as to ensure a shared understanding by all related persons or institutions of the significance of cultural heritage issues in relation to the environment.

developing common public awareness tools

Very rarely one sees publications that cover equitably both natural and cultural values, although this is quite common in tourist brochures. Presenting the message that nature and culture are inextricably linked through human actions and attitudes is not a simple matter. An effective way would be to revive traditional cultural events related to nature, such as the El Rocío procession at the Doñana area of Andalusia, or the Tarabuso festival in Diaccia Botrona of Central Italy.

streamlining the legal and administrative framework

In the future, it will be necessary to attempt the integration of central and local services responsible for both the natural and cultural heritage. This would be a difficult task, as it will be necessary to overcome inertia, bureaucratic antagonisms and lack of mutual understanding. That is why it is better to start with a careful sensibilisation campaign, focussing on specific sites, in order to demonstrate the advantages of a common approach, and to familiarise the corresponding officials with the integrated approach.

In a second phase, it will be necessary to harmonise the legislation that concerns the two sectors. This also will not be easy, but it can be assisted by outside pressure from international bodies^[14]. However, such a harmonisation is not a key priority, as it will become inevitable and follow smoothly once co-operation on the ground is achieved. It is clear that attempting to build synergy between the nature and culture sectors can only be encouraged from above, but must be gained and strengthened at the field level through a 'bottom-up' approach and the strengthening of mutual trust.

4. Implementation perspectives

Implementing the integrated approach described in the previous chapter entails various far from simple steps, which have to overcome traditional attitudes and inertia among the disciplines involved. They can be summarised as follows:

- Obtaining consensus on common objectives and priorities. This will require both intellectual flexibility and a degree of generosity in understanding the point of view of the other side. All in all, it must be based on equity, with visible benefits for both sides.
- Achieving agreement on a common language and terminology. This will not be simple in a first phase, but it will develop naturally through common field work and the progress of collaboration. In an initial phase, the glossary of a discipline linking both nature and culture, such as sociology, might provide a useful bridge.
- Developing appropriate methods and tools. As already mentioned, it will not be perhaps necessary to invent new tools, but to merge existing ones so that they can be adapted to the new requirements.
- Testing these methods and tools in specific sites, so as to both check their validity and to refine them on the basis of practical experience to be gained.
- Disseminating this experience and the tools associated with it, and adapting it to a variety of geographic, cultural, social and physical situations. The flexibility of the methods and tools proposed and their adaptability to a wide range of cases will be a principal criterion in validating them.
- Evaluating the results and correcting the approach. This should be a permanent process, where the expanding application of integrated methods and tools will provide a greater and continuing input, which will be incorporated in them and lead to their increased effectiveness.

We believe that facing these steps in a linear and sequential manner would be too lengthy and cumbersome. That is why we propose to start with a small number of concrete pilot cases, which would allow simultaneous development of both the theoretical / methodological and the practical field work.

A first pilot study selected is the area of the Prespa Park, a trans-boundary collaboration initiative among Albania, Greece and the FYR of Macedonia. The area includes two major lakes, with important breeding colonies of Dalmatian and Great White Pelicans, Pygmy Cormorants and other rare bird species, and magnificent forested mountains, which still contain rare mammal species, such as *wolves* and *brown bears*. For this reason, parts of it have been

declared Ramsar Sites of International Importance, National Parks, or EC Natura 2000 sites. On the cultural side, the area is very rich in monuments of the Byzantine and Post-Byzantine eras, and retains still significant traditional customs and practices. The existence of the Prespa Park initiative provides an appropriate background for the development of an integrated approach. This is reinforced by the presence in the area of a very competent non-governmental organisation, the Society for the Protection of Prespa^[15], which is focused on the relationship between human beings and nature.

The terms of reference for such an application of the integrated approach to the Prespa Park area is now being established, and are expected to be completed by early 2004.

In parallel, and in close collaboration with partner organisations, a similar approach could be applied to a small number of additional pilot sites, all in the Mediterranean region, such as:

- Aammiq Marshes (Lebanon).
- Albufera de Valencia (Spain).
- Butrint Wetland (Albania).
- Evros / Maritsa / Meriç River (Bulgaria, Greece and Turkey).
- Neretva River wetlands (Croatia, Bosnia and Herzegovina).
- Zaranik Lake (Egypt).

It is hoped that systematic work on these sites may start during the second semester of 2004.

In addition, a number of other support activities could be launched through the MedWet Initiative network, such as:

- Ensuring that a MedWet publication on wetland management in preparation^[16] will include a chapter on cultural values and heritage. This could be expanded rapidly to a corresponding addendum in the manual on wetland management. A publication on best practice examples from various Mediterranean sites might prove a useful tool in familiarising wetland managers with various aspects of cultural heritage.
- Preparation of training modules for the joint management of cultural and natural heritage, based on the experience gained by MedWet in training wetland managers through the organisation of training modules and corresponding seminars. These can be drafted by the Station biologique de la Tour du Valat and ATEN (which have done most of the corresponding work for MedWet), in collaboration with the CNRS unit in Montpellier.
- On a more systematic level, adapting the work done in 1996 by MedWet in developing a methodology for information and public awareness^[17], as well as similar initiatives of the Convention on Wetlands, to the new approach.

Bibliography

An effort has been made to group –wherever possible– the selected references under their main focus, and specifically under (a) general references, (b) natural heritage, (c) cultural heritage and (d) integrated approach.

general references

Bragader, A.A. *et al* (1994), *Environmental Protection in Islam*, IUCN Publications Services Unit: Gland, Switzerland and Cambridge, UK.

Donahue, J.M. and B.R. Johnston (eds.) (1998), *Water, Culture and Power: Local Struggles in a Global Context*, Island Press: Washington, D.C., USA.

Fagan, B. (1999), *Floods, Famine and Emperors – El Niño and the fate of Civilizations*, Basic Books: New York, USA.

Honderich, T. (1995), *The Oxford Companion to Philosophy*, Oxford University Press: Oxford and New York.

Kempf, E. (ed.) (1993), *The Law of the Mother*, Sierra Club Books: USA.

natural heritage

Benessaiah, N. (1998), *Mediterranean wetlands: Socio-economic aspects*, Ramsar Convention Bureau – MedWet, Tunis.

Papayannis, T. and Salathé, T. (1999), *Mediterranean wetlands at the dawn of the 21st century*, MedWet – Tour du Valat Publications: Arles, France.

- Papayannis, T. (2002), *Regional action for wetlands: The Mediterranean experience*, MedWet – Tour du Valat Publication: Arles, France.
- Pearce, F. and Crivelli, A.J. (1994), *Characteristics of Mediterranean wetlands*, MedWet – Tour du Valat Publications: Arles, France.
- Skinner, J. and Zalewski, S. (1995), *Functions and Values of Mediterranean wetlands*, MedWet – Tour du Valat Publications: Arles, France.
- Zalidis, G.C., Crisman, T.L. and Gerakis, P.A. (eds.) (2002), *Restoration of Mediterranean wetlands*, Hellenic Ministry of Environment, Physical Planning and Public Works, Athens and Greek Biotope/Wetland Centre: Thermi, Greece.

cultural heritage

- Barker, P. (1993), *Techniques of Archaeological Excavation*. Batsford, London.
- Binford, L.R. (1978a), Dimensional Analysis of Behaviour and Site Structure: Learning from an Eskimo Hunting Stand, *American Antiquity* 43:330-361.
- Cleere, H. (ed.) (1984), *Approaches to the Archaeological Heritage: A Comparative Study of World Cultural Resource Management Systems*, Cambridge University Press: Cambridge UK.
- Current Archaeology: *Wetlands Special Issue*, No. 172, Vol. XV No. 4, February 2001, The Friary Press, Dorchester, UK, p. 40.
- European Archaeological Council (2000), *A strategy for the heritage management of wetlands*, p.10.
- European Archaeological Council (2000), *The Heritage Management of Wetlands in Europe*, EAC Occasional Paper No. 1, Belgium, Brussels, p. 207.
- Grant, J., Gorin, S. and Fleming, N. (2002), *The Archaeological Sourcebook, An Introduction to Study Skills: Topics and methods*, Routledge: London and New York.
- Hester, T., Shafer, H.J. and Feder, K.L. (1997), *Field Methods in Archaeology*, Mayfield: California.
- Hodder, I. (ed.) (1978), *The Spatial Organisation of Culture*, University of Pittsburgh Press: Pittsburgh USA.
- Price, N. S., M. K. Talley Jr. and A. M. Vaccaro (eds.) (1996), *Historical and Philosophical Issues in the Conservation of Cultural Heritage*, The Getty Conservation Institute: Los Angeles, USA, p. 500.
- Renfrew, C. & Bahn, P. (1996), *Archaeology; Theories, Methods and Practice*, Thames and Hudson: London UK.
- Shanks, M (2002) Culture/Archaeology: The Dispersion of a Discipline and its objects, In I. Hodder (ed.) *Archaeological Theory Today*, Polity Press: Cambridge, UK
- Zangger, E. (2001), *The future of the past: Archaeology in the 21st century*, Weidenfeld & Nicholson, London: UK, p. 270.

integrated approach

- McNeely, J. and D. Pitt (eds.) (1985), *Culture and Conservation: the Human Dimension in Environmental Planning*, Croom Helm, p. 308.
- MedWet (2000), Conclusions of the Technical Session on: Cultural aspects of Mediterranean wetlands and their potential contribution to the sustainable use of wetland resources, MedWet/Com3, Djerba, Tunisia, 1-5 April 2000, p. 5.
- MedWet (2001), Conclusions of the Technical Session on: Salinas, tradition and sustainable management, MedWet/Com4, Sesimbra, Portugal, 20-23 May 2000, 6 pp.
- Papayannis, Th. (1992), Greek wetlands: cultural values and tertiary sector activities, in P. A. Gerakis (ed.), *Conservation and Management of Greek Wetlands*, IUCN, pp. 157-174.
- Petanidou, Th. (1997), *Salt in European History and Civilisation*, Hellenic Saltworks S.A., Athens, Greece, p. 384.
- Phillips, A. (2002), *Management Guidelines for IUCN Category V Protected Areas: Protected Landscapes/Seascapes*, IUCN Publication Services Unit, UK.
- Posey, D.A. (ed.) (1999), *Cultural & Spiritual Values of Biodiversity*, Intermediate Technology Publications: London, for and on behalf of UNEP, Nairobi, (and re-launched at CBD COP5, Nairobi, May 2000), p. 732.
- Viñals, M.J. (co-ord.) (2002), *El patrimonio cultural de los humedales / Wetland cultural heritage*, Ministerio de Medio Ambiente: Madrid, Spain, p. 272.

1. With an emphasis on wetlands, mainly of the Mediterranean Basin.
2. This resolution, entitled 'Guidelines for taking into account the cultural values of wetlands for the management of sites', was approved by the Eighth Conference of the Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971), held in Valencia (Spain) in May 2002.
3. '*Sede para el estudio de los humedales mediterráneos*' of the University of Valencia.
4. Shared by Albania, Greece and the FYR of Macedonia.
5. Already major international conventions, such as the Convention on Biological Diversity, the Convention on World Natural and Cultural Heritage, the Convention on Wetlands have recognised this linkage in their work. The third one has just adopted Resolution VIII.19 on "Guiding principles for taking into account the cultural values of wetlands for the effective management of sites" (Valencia, Spain in November 2002).
6. Such as the Porto Alegre anti-Davos gatherings, the Florence movement, the global demonstration on 15 February 2003 against the war in Iraq.
7. National or regional parks and reserves for the former, Ramsar Sites of International Importance, Special Protection Areas, World Sites of Cultural and Natural Heritage, etc, for the latter.
8. As in the case of Syria and Turkey for well-understood reasons.
9. MedWet has developed an Information and Public Awareness Methodology that includes such an evaluation system.
10. Cited in Hester, T. *et al* (1997), *Field Methods in Archaeology*, Mayfield, California.
11. Ecofacts are the floral and faunal remains resulting from human activity.
12. Developed in 2002 by the MedWet Technical Database Unit at the Greek Biotope / Wetland Centre (EKBY) in Thessaloniki.
13. Such data sheets have already been prepared by SEHUMED (*Sede para el estudio de los humedales mediterráneos*) of the University of Valencia.
14. Such as through the implementation of Ramsar Resolution VIII.19.
15. The SPP is an umbrella organisation consisting of seven Greek NGOs, including WWF Greece, of the Danish Ornithological Society, of the Royal Society for the Protection of Birds in the UK, and of the *Station biologique de la Tour du Valat* in the Camargue, France.
16. By Tour du Valat, to be published in late 2003.
17. Carried out by WWF Italia in the context of the MedWet1 project, funded by the European Community *et al.*