

The study of the landscape: from a holistic approach to a social concept of knowledges

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ABSTRACT

Three examples of the study and enhancement of the landscape in Italy are presented. The interdisciplinary approach to this topic is carried out not simply by juxtaposing disciplines, but by the integration of different ambits. In this way, disjunctive thought is substituted by a holistic approach that produces communication more appropriate to research. This offers the scientists a tool that is of paramount importance for their studies, and for ordinary citizens, a new way of considering the landscape. Example 1: Sustainable tourism and man-landscape relationships: Ecomuseum, Castello di Serravalle (Bologna). By studying the landscape of a hilly wine-producing area, it has been possible to observe the signs of reciprocal man-environment interactions that have characterized the area for over two millennia. For this reason, an Ecomuseum was founded, to provide an efficient tool for the enhancement of sustainable tourism, and also to popularize knowledge of local cultural heritage among the citizens. Example 2: Lago Bracciano near Montese (Modena): re-assessment of an Apennine area combining archeology, landscape and history. The landscape of areas containing historical settlements of local populations was reconstructed. This started with archeological and documentary data that had not yet been correlated, which was integrated with geological and geochemical data. In this way, a marginal tourism area has been improved by appraisal of its intrinsic cultural and historical values. Example 3: Geological elements and poetic trails in Frignano Park. This geological-literary itinerary starts from the assumption that there is a specific poetic and cultural value to the Modena Apennines that is linked to the morphological and geological features of this territory. Geology and literature become an accompaniment to a new pilgrimage of knowledge.

1. Introduction

In an ever-changing and complex society like today's, distances have shrunk, journeys are faster, and links with the specific places to which each of us belongs appear to be disappearing. On the other hand, the more a familiar, nearby place is surpassed by many other places, perhaps just because they are more exotic or further away, the

more the link with one's place of origin becomes stronger, in a sort of search for our topological identity. It is this identity that we should try to appraise: throughout history, man's life, social structures, religion and culture have always found their roots and most immediate basic expressions in geological forms, in buildings of stone and their functional and esthetic features. In short, deep meanings and values have been assigned to the landscape.

The landscape is therefore considered a powerful means to build knowledge and create awareness of the cultural values of our own territory. In this, a strong link with the main topics of geoethics can be found, by involving society in the construction and conservation of a common, shared heritage.

2. From knowledge to enhancement

The concept of a well-balanced relationship between man and the environment is based on two fundamental elements: 'research' and 'information'. The former is developed by means of integrated and coordinated studies in diverse fields of the natural and social sciences and the humanities, and it is indispensable for the attaining of knowledge; the latter should find the methods and means suited to the education and training of the human conscience. Indeed, the knowledge of environmental dynamics is an indispensable foundation for understanding equilibria and disequilibria, and for the development and formulation of forecast scenarios, at least at a cognitive level. In addition, every kind of knowledge is loaded with values, and as such, it cannot be considered neutral with respect to human needs, aspirations and expectations.

The demand for knowledge that leads to the correct safeguarding of the environment and the patterns of its spread has recently become a clear social need. By now everyone knows that this might constitute the essential basis not only for a better quality of life, but also for the

survival of the human species. In particular, scientific knowledge is considered an indispensable part of the experience that each individual should have in order to strengthen his/her own participation in public life. Science has within itself a specific image of the world that shows how it should be perceived and investigated. Science should be able to spread its own values and, in particular, convey what the role of man should be in Nature. It must be remembered that science provides both conceptual and behavioral models that often direct and condition many sectors of social life [Piacente 1999a, 1999b].

Another element of paramount importance that must not be neglected is the interactions with society. Knowledge is not an abstract concept, but a product of the human mind: man carries out research to gain knowledge. Man is indeed part of his own time, which implies the possession of the means and apparatus for reaching a more diversified, higher, level of knowledge compared with the past. However, time also encompasses the social and ethical sphere, and therefore other needs and other values [Panizza and Piacente 2003].

In the field of landscape heritage enhancement in general, and in geological–geomorphological enhancement in particular, up to a few years ago, everything that had been carried out in Italy reflected the legacy of a mainly cataloging approach [Bini and Poli 2003]. The constraints and critical state typical of the Italian conservation system can be summarized as follows: (i) conservation inspired mainly by a restriction model; (ii) lack of a systemic and integrated view of territorial resources; (iii) modest financial support for upgrading and enhancement activities; and (iv) planning, intervention and conservation proposals that

were often imposed from above with little involvement of the local population. Indeed, the local population has often had to tolerate the implementation of measures the importance or meaning of which were not understood.

On the contrary, first and foremost, ‘enhancement’ means communicating. Indeed, positive communication (which reaches its target) is the first step for lasting and shared enhancement. ‘Enhancement’ also means experimenting with new strategies linked to continuous and transversal learning routes that also involve the sphere of emotional relationships. As a consequence, ‘enhancement’ must be considered as an integrated network between all of the physical, biological and cultural components of the environment.

3. Three examples of the achievement of communication and enhancement

3.1. Sustainable tourism and man–landscape relationships in the Ecomuseum of the hills and wine in Castello di Serravalle

By studying the landscape of Castello di Serravalle (Bologna Apennines, Italy), which is a hilly area famous for the production of typical wines, it is still possible to see traces of continuous and reciprocal interactions between man and the environment that have lasted over two millennia [Badiali 2009a]. Archeological and archeobotanical data show that the strong farming and wine producing vocation of this territory, which is a direct consequence of its geological and geomorphological setting, has been exploited by man from Etruscan times to date. Cultivation of crops and grapevines has never been interrupted, not even during periods of hard social and



Figure 1. The landscape of Castello di Serravalle: a reciprocal interaction between man and the environment that has lasted over two millennia.

environmental crisis, when elsewhere many farming practices were abandoned and the territory depopulated.

On the basis of these typical relationships between man and the landscape, an Ecomuseum was founded [Grasseni 2010]. The purpose was to develop a cultural process that was aimed at the enhancement of the common heritage of an entire territory, especially for the benefit of the local population [De Varine 2005]. The Ecomuseum of Castello di Serravalle has thus become first of all an ideal means for spreading knowledge and awareness among the local residents.

The outcomes are a website, a map and guide, and an audio guide of the Ecomuseum: three didactical and educational tools that allow visitors to create their own itinerary, based on personal needs and interests. It also provides an important resource for development, by means of sustainable enhancement (Figure 1).

3.2. Lago Bracciano, near Montese: re-assessment of a marginal Apennine area through archeology, landscape and history

In a poorly known area of the Apennines, between the provinces of Modena and Bologna, no trace remains on the ground to bear witness to the complex vicissitudes of Lago Bracciano. This small body of water of geomorphological origin no longer exists. Significant archeological and documentary data (Etruscan-Italic finds, local legends, and information dating from the 19th century) clearly demonstrate that in the past this site had a major role at a regional level, as it was considered a sacred area linked to the cult of curative waters where many people used to gather, through following various trans-Apennine trails (Figure 2). Unfortunately, the lack of precise archeological and morphological evidence has so far hindered any further investigations [Macellari 1990, Macellari 2000, Cardarelli and Malnati 2006].

To give new momentum to the study of this site, a fully interdisciplinary methodology was designed and planned by the identification of further goals for research, and by the recovery and in-depth study of already known data, which had nevertheless never been correlated before [Badiali 2009b]. The results of these recent investigations carried out in the fields of landscape–geomorphic, geochemical and geological engineering studies are now a key element for giving this site the cultural and historical relevance that it deserves. The various investigation stages also included popularization and awareness activities for the local residents, thus creating preliminary conditions for tourism enhancement of the area, including the implementation of a correctly equipped educational footpath (Figure 3).



Figure 2. Transformation of the Lago Bracciano area. The Lago Bracciano area today (top) and in the Etruscan Age (bottom). Reconstruction by Riccardo Merlo, exhibition *Mans and Gods of the Mountains*, Modena, 2006 (courtesy of Museo Civico Archeologico, Modena). **Figure 3** (below). A guided tour of the Lago Bracciano area, together with a witness of the events of the Second World War.



For this purpose, several activities are carried out: didactic visits, 'hedonistic–convivial' visits, equipped footpaths, and theater performances [Badiali and Piacente 2011].

3.3. Geological elements and poetic trails in the Frignano territory

This project of a geological–literary itinerary started from the assumption that there is a specific poetry and cul-



L'ora di notte

[...] E della terra
 Su cui riposa il piè, quasi sdegnoso,
 Mira il Cimone che maestosa estolle
 La fronte al ciel tutt'ora incoronata
 Di nevi, nel cui limpido cristallo
 Ecco specchiarsi la nascente luna.
 Aggruppati al suo piè come difesi
 Dal potente Signor, dormon tranquilli
 I sottoposti monti.

(Francesco Vignocchi, 1844-1910)

Figure 4. The poetry and landscape of Monte Cimone (2.165 m), the highest peak in the northern Apennines (Photo G. Bertolini).

ture of the Modena Apennines (Upper Frignano district, northern Apennines) that has resulted from the typical geomorphic and geological features of the territory [Piacente and Poli 2003].

The itinerary in the Frignano territory is proposed as a spiritual and human journey that runs through literary scenarios and images, where physical and fictional places materialize in a sort of permanent exhibition, and where natural and mental dimensions intertwine in an identity of land and feeling. In this way, it is possible to go beyond that ideal border – more sensed than actually crossed knowingly – that requires a different mental approach and sensitivity as a ‘passport’. The geological–literary itinerary was organized as a sort of mini-guide for sightseers yearning to meet Nature, also in its poetical forms, by traveling in space and time (Figure 4).

No place is too far away or unreachable, no land is ‘foreign’ if you can find a common thread that can lead and involve even the most absent-minded visitor towards the vast and widespread heritage of this country that is its own landscape.

4. Conclusions

To tackle adequately the problem of the relationships between scientific research, communication, and political choices with the hope of attaining positive results, it is of paramount importance not only to establish a dialog between the various parties, but also to constantly involve public opinion. This must be carried out by means of continuous information and educational activities. Furthermore, the scientific and administrative parties should assume a more ‘humble’ attitude, aiming not only to obtain a ‘result’, but also to make plain the route followed

for its achievement. In this way, knowledge becomes the suitable rational basis for the implementation of a policy of correct use of landscape assets. This implies conservation and improvement by means of efficient integration of cultural, social, economical and tourism interventions and competences.

In particular, ‘communication’ should enrich knowledge by making it more comprehensible without cultural impoverishment. Therefore, specific skills and cultural and social responsibilities are required. Too great a popularization would produce negative effects if it is based only on ‘show’, or arid legislative norms. Indeed, Nature must not be deprived of its poetic form, of its own soul. The danger of trivialization of Nature can lead to that form of spreading called “pornoecology” [La Cecla 1992], by replacing the reality with an image, of the Golem.

We believe that this sort of approach would offer a very important opportunity for relaunching the role of Earth sciences, which should find fresh cultural and social vocations in these topics. Naturally, these perspectives can become reality only if the philosophy of *geoconservation* is surpassed and integrated by the constant practice of *spreading geological culture*.

The correct viewpoint should be not so much planning in order to protect and protecting in order to manage, but rather *planning to spread knowledge*, and *knowing to develop awareness and self-protection*. All this should be carried out with the conviction that each generation is responsible for what happens to our Planet, as a consequence of our behavior towards future generations. Each of us is a mere “tenant of the Earth with precise instructions”; it depends on us all to read and interpret these instructions correctly.

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