

## CULTURAL HERITAGE AND THE CNR SPECIAL PROJECT

Analysis and research, investigation and resolution of the problems would be mere academic question if they were not guided by a competent management centred on a strong scientific base. Responsible science must thoroughly evaluate an object and conserve that object by registering every variation in its state. This data will assume an objective value only if it is combined with an evaluation of the threshold of risk that will always have to be defined before a responsible intervention can be considered.

This report establishes a relationship between the various sciences and competencies that, for all that emerges as problematic today can be resolved with the most serious and punctual of intentions. For the first time in ever, we are able to truly cure our artistic patrimony with a width and depth that has no equal in the history of Italy or other countries which will hopefully be stimulated to increase international collaboration on an ever-widening scale.

This is the first decisive step towards a program that does not intend to remain closed within the aseptic walls of laboratories but rather intends to open itself to the production and application of tools and methods capable, I hope, of ending the imprecise and stuttering language of the all too frequent chartlans that have been able to continue selling their easy and ineffective remedies despite the hard realities that face our artistic patrimony. Their actions have caused a lack of professionalism in the extremely delicate field of conservation and therefore, their elimination would represent an important development in the establishment of a professionally competent core of experts.

This is the reason why the commitment of scientists is crucial: for the protection, the restoration and the exploitation of Cultural Heritage; either by transferring to this field technologies developed in different areas, or by developing new scientific tools suitable for specific domains in Cultural Heritage.

Up to now, any scientific approach to this problem has been in Italy - and I dare to say all over Europe - rather random, ephemeral, often consequent to natural catastrophes like earthquakes which are so frequent throughout the Mediterranean Basin, or consequent to accidents and disasters provoked by men.

As a matter of fact, no well organised, scientifically conceived project has been prepared and put in action under strict scientific and public Authorities control.

This is the reason why the National Research Council of Italy prepared a Special Project on the Safeguard of Cultural Heritage which just started

January 1996 and will last five years for an overall budget of about 180 billion Italian lire.

Its philosophy is target oriented:

- 1) No single research group will be financed.
- 2) 40 Targets involving 5 ÷ 8 Research Groups for each Target.
- 3) Any Target must have a Public Authority (State, Region, City) which takes the responsibility to employ the “products” of the Target.

The Project is divided into five Subprojects.

The first Subproject is mainly devoted to archaeology and to Geographical Information Systems (GIS) which are necessary to safeguard ancient resources constantly in danger for environmental and human aggression. Every year, acres of archaeological ruins disappear in Italy under illegal buildings.

The second Subproject concerns the following topics:

- 1) Development of new scientific and technological methodologies for researches on the state of conservation of art objects, from paintings to bronze statues, from vases to historical buildings.
- 2) Development of new materials and procedures to restore and save these “art objects”.
- 3) Development of new technical and legal procedures to prevent the impoverishment of Cultural Heritage of the Nation.

The third Subproject deals with:

- 1) Studies on paper decay under the action of biological and physico-chemical agents.
- 2) Studies on new materials and procedures to restore damaged books and archive documents.
- 3) Studies on restoration of photographic plates, films and computer magnetic tapes.

The fourth Subproject deals with:

- 1) Biological diversity: studies on ancient and modern DNA, biological origin, genetic and pathological characteristics of human populations in Italy.
- 2) Preparation of archives and storing of genoma of ancient and modern populations.
- 3) Preparation of archives and storing of germoplasms of vegetal and animal origin belonging to species which are disappearing.

The fifth Subproject deals with:

- 1) Innovative methodologies devoted to a better organisation and management of different typologies of museums.

- 2) Restoration and exhibition of scientific and musical instruments.
- 3) Exploitation of multimedial technologies with reference to different typologies of museums.
- 4) Interaction between museum exploitation and tourism.

But, why should this Project be restricted only to Italy?

Actually, the problems of conservation, restoration and exploitation of Cultural Heritage are rather similar for all the European Countries, as well as for Countries of the Northern African Coast of the Mediterranean Basin.

However, as I said before, no significant common effort has been carried out: policy of the European Union has been to finance researches as *single projects* under no common and general framework.

Let us consider the Special Project we just started in Italy as the “preliminary draft” of a European Project which will take into account every national contribution, according to the following philosophy:

- 1) Preparation of a European Project starting from National Projects wherever they exist, taking into account the Cultural Identities of the European Partners.
- 2) The European Project should follow the same philosophy of the CNR Special Project; i.e. no single Research Group, but common Targets which must have National Public Authorities (State, Region, City) approval. These Authorities will take the responsibility of the use of the “products” of the Targets.

Financial support to any single Target should come from Countries of the European Union *and* from the European Union whenever the Target is of common European interest.

I think that the scientific papers on the Caere Project reported in this issue represent a significant and quite important example of exploitation of a Geographical Information System to an archeological problem.

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