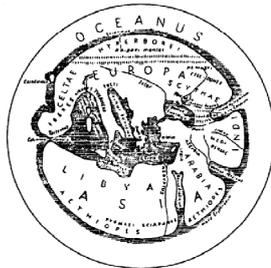


LECTURES AND PROCEEDINGS OF THE 6TH
INTERNATIONAL SYMPOSIUM ON THE
CONSERVATION OF MONUMENTS IN THE
MEDITERRANEAN BASIN, LISBON, PORTUGAL



**Influence of the Environment
and Defense of the Territory on
Recovery of Cultural Heritage**

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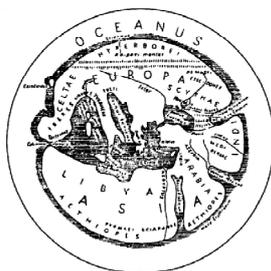
ORGANISATION

The 6th International Symposium on the Conservation of Monuments in the Mediterranean Basin was organised by:

- Centro de Petrologia e Geoquímica do Instituto Superior Técnico
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under auspices of:

The International Group for the Protection and Conservation of the Cultural Heritage of the Mediterranean Cities



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PRESENTATION

This volume contains summaries of the lectures and full papers to be presented at the 6th International Symposium on the Conservation of Monuments in the Mediterranean Basin (IGCMM), to be held in Lisbon, Portugal, from 7th to 10th of April, 2004, organised by the International Group for the Conservation of Monuments in the Mediterranean Basin, the Centro Petrologia e Geoquímica do Instituto Superior Técnico (Technical University of Lisbon) and Sociedade Geografia de Lisboa.

This International Symposium will be, I hope, a forum for scientists, technicians, and experts in the area of conservation and restoration of monuments, to present their works and exchange ideas. During Lisbon 2004 Symposium, new opportunities shall be presented to deepen the existing knowledge base regarding the problems of cultural heritage. A large array of topics will enable scientists to discuss and share among themselves the main problems they encounter in their respective monument projects in the Mediterranean Basin. Thus, the Symposium is appropriate not just for restorers and conservators of stone artefacts, architects, restoration engineers, and other specialists in the decay and restoration of monuments but also for art historians and other scientists in the fields of physics, chemistry, biology, and mineralogy. In addition, manufacturers of building treatment products may also be interested, as well as cultural institutions involved in heritage management.

The Authors of the papers and Delegates come from eighteen countries (Austria, Belgium, Brazil, Egypt, France, Germany, Greece, Hungary, Israel, Italy, Jordan, Morocco, Nigeria, Portugal, Spain, Thailand, The Netherlands and U.S.A.). All papers have been critically reviewed by members of the Scientific Committee. I would like to express my deepest gratitude to the members of the Scientific Committee for all their effort and co-operation in the most important aspect of the Symposium. Nevertheless, the content of the papers are only responsibility of the authors and do not necessarily reflect the opinion of the Scientific Committee.

Papers have been arranged in the book according to the topics programmed in the Symposium and alphabetically ordered. In the preparation and edition of this volume it was important the collaboration of Prof. Amélia Dionísio and Dr. Madalena Rodrigues. To them I would like to express my great thanks and that from the IGCMM. The last but not the least I would like to express my gratitude to the sponsors.

Lisbon, April 2004

Prof. Luís Aires-Barros



BIU-Internacional



LUÍS AIRES-BARROS

President of the Organising Committee

Ladies and Gentlemen:

My dear colleagues and friends

It is a great pleasure for me, not only as chairman of the Organizing Committee of this Symposium, but also as President of the Geographical Society of Lisbon, to receive you, to-day, among us.

Here we have cultural heritage everywhere and a lot of big and difficult problems to solve. This is an alive Historical and Ethnographic Museum, a very rich Library, Chartotec and Phototec. This is one of the most active cultural and scientific private society plenty of Past and tradition but fighting for a good Present and working hard for a better Future. You are all wellcome.

Cultural heritage around the Mediterranean Basin is unequalled in its richness and variety. Its protection and conservation is quite well recognised to be of great importance in all the countries of this so many outstanding area of the world, from South Europe, to Northern Africa and Middle East Asia.

At the same time, the threats to this heritage are growing due to various causes such as atmospheric pollution, urbanisation, tourism or inappropriate conservation treatment.

Faced with this tremendous problem the International Group for the Protection and Conservation of the Cultural Heritage of the Mediterranean Cities have combined its effort to cope this challenge. So, since Bari, in 1989, Geneva, in 1991, Venice in 1994, Rhodes in 1997 and Seville in 2000 international symposia have been dedicated to several question on the conservation of monuments in the Mediterranean basin. This year, in Lisbon we are again together trying to give our contribution to better knowledge of the influence of the environment and the defence of the territory on recovery of cultural heritage.

The two main thematic areas of the Symposium are: the Environment and cultural heritage and, on the other hand, the Territory and cultural heritage.

In the first broad thematic area subjects from historical, technological and structural features of monuments and their decay, considering the analysis of environmental parameters, the forms and mechanisms of weathering until analytical techniques and materials characterisation as well as the treatments and their technologies should be considered. It is a broad and ambitious thematic area, traditionally considered in previous symposia of our Group. The second thematic area deals with Territory, considering natural hazard, methodologies for damage evaluation and remediation, planing and heritage management taking into account their cultural, economic and social aspects. Now-a-days is increasing the interest for these topics.

The importance of monuments stone weathering is increasing rapidly in recent years and, in many cases, the damage produced is irreversible. It is clearly evident, from photographic documentation, that monument stones have suffered much more damage from weathering during 50 last years than during the previous five to six centuries. The main cause of this acceleration in the decay of urban stone monuments in the last decades has been attributed to the sharp increase of air pollutants, as well as vandalism and touristic invasion.

The search to obtain means to combat and to cope the consequences of that main causes of accelerated weathering of monument stones is an urgent matter.

Besides the well known problems arisen by air pollutants acting on stones of historical buildings, palaces and churches we must consider also these monuments today are visited and admired by an enormous number of tourists. This means a considerable increase of pollutant concentrations and an imbalance microclimate activity. Cultural heritage conservation aims to maintain the integrity and authenticity of the monuments materials. In fact the original substance (v.g. stone, glass, wood, etc.) is "carrier of the message" and thus must be preserved without being falsified. It is intended to preserved them to "eternity" and not only for tens of years, but for hundred and even thousands.

But historical building conservation is a matter also for industry, in special the constructing industry. Compared to constructing in general, conservation gives some additional demands on materials and methods. There is a major difference regarding the “time dimension”. It is immense in conservation. In fact buildings, in general, are supposed to have a service life of tens of years. On the contrary, architectural heritage is supposed to live for “eternity” which means hundred or thousands of years.

This fact affects tremendously the technical solutions.

To complicate conservation problems we are aware that the demand on authenticity and integrity leads to minimum intervention, if possible no intervention at all. As every intervention means a change, a falsification of the original, to cope the solution of our monument conservation problems is an hard work.

Another problem cultural heritage conservation faces is called reversibility (or more recently re-workability). This means the ability of complete removal of a product applied, without affecting the original substrate.

As industry is not used to think in the immense time - dimensions of conservation it can hardly think in terms of “durable” meaning durable for tens of years.

The result of an inappropriate treatment is the same: the damage or destruction. Most of these problems could be avoided by using products or/and methods which are reversible or at least fully repeatable without affecting the original substance. Like medicines, conservation products should be proved by the manufacturer to fulfil certain demands with a minimum of side-effects, which in turn should be declared.

As Lemaire has stressed out “A monument is not only a unit of correctly adjusted materials. It is also, and above all, the unique expression of a creative idea and of a sensitivity belonging to the past. Its true value resides not in its materials but in the stroke of human genius the materials hold and express”.

Considering the different intervention possible to carry out in a monument, the chosen option should be based on an evaluation of the risks and benefits it involves. This evaluation means to estimate whether a conservation option will introduce an appreciable risk and, if so, how serious the risk is likely to be, how often it is likely to occur, and what are its possible long-term effects.

Now-a-days, risk assessment in conservation has been increasingly recognized as an essential aspect of decision - making, and has become an important tool.

Conservation is an applied science and its procedure should be based in good scientific practice. It is true that the conservation scientist can work no more effectively without the advice of conservators than conservators can work without this advice of scientists.

We must say the main areas in which conservation research are needed are the development of theory and philosophy for historical buildings and artifacts conservation, in general, the development of environmental management which implies research-work within the architecture and engineering fields, and the development of materials and methods for preventive and remedial conservation.

The fact that some conservation and restoration activities are controversial is healthy because it indicates that there are strong feelings about the cultural heritage. Frequently for many people the survival of the cultural heritage is bound up with their quality of life. All those responsible for the cultural heritage need to consider different ways of drawing attention to the benefits of stewardship as well as the costs of loss.

It is well known that resources are never enough for every worthy cause, but if we succeed people be fired by the cultural heritage problematics and genuinely involved in its case, then historical, artistic and cultural patrimony conservation will be supported and promoted as fundamental basis of sustainable development.

Deterioration of culture heritage as well as their conservation are complex, requiring an interdisciplinary approach to understand the previous history of their materials and the way in which physical, chemical and biological processes including human activity, affect their degradation. Synergetic effects between air pollution and climatic conditions are also very much relevant.

In what concerns monuments stone deterioration and conservation this is an exceptionally multidisciplinary field involving in one hand geology, petrography, mineralogy, silicate chemistry regarding also several branches of materials science, of technical physics, of structural mechanics, do not forgetting microbiology and algology. On the other hand, atmospheric physics, climatology, aerosol science as well as physical and mathematical modeling must be also involved.

Stone conservation requires also the study of some inorganic materials, and a vast range of solvents, resins, plastics, adhesives, pigments or cleaning agents.

Add to all these disciplines we must consider the architecture, and the history of the monument.

Evaluation of present conditions of monuments requires observations by many different specialists such as art historians, conservators, scientists, building researchers, and architects. This evaluation should be performed in a non-intrusive and, non-destructive manner.

There is an urgent need to establish a set of guidelines for balancing conflicting aims against one another and to draw several different professionals (director, art historian, conservator, financial officer) into the decision - making process.

The responsibility given to professionals working in the field of cultural heritage is enormous. But the authority the society gives to them is also considerable. So we, all of us, overlap these two forms of responsibility and authority. But we must show our legitimacy to care for cultural heritage, being accountable experts.

The resolution of questions relating to damage and protection of cultural heritage need a common language for debate among the range of experts working on the problems arisen.

Culture does not just happen. It develops slowly, richly. Generation after generation has to digest the heritage of the past to fully live its present. Only by integrating the marvellous influences of the past with today's activities can a culture persist and endure.

Culture consists of language, ideas, beliefs, customs, codes, institutions, tools, works of art and so on.

Culture is an activity particular to mankind, along with the creation of material objects which are an expression of it. Cultural Heritage conservation makes sense only when all materials, techniques, skills, surroundings and beneficiaries are considered together. When all these conditions are fulfilled simultaneously, can one speak about a holistic approach to Cultural Heritage conservation.

In fact the problem of conserving stone objects is interdisciplinary: it may be settled only through considerable knowledge of chemistry, physics, mineralogy, petrography, geochemistry, botany, zoology, metallography and microbiology as well as the history of cultures, history of arts and archaeology.

Only a broad naturalistic preparation, integrated by ample critical knowledge of the history of the monuments, will enable scientists to adequately respond in three main questions we face when we intend to study a monument:

What happened to the monument in the past?

What is happening to it now?

How can we prevent further damage in the future?

The cope this triple challenge we must be aware of the Leonardo da Vinci statement.

I will quote him:

“Quelli che si innamorano di pratica senza scienza sono come il nocchiero che entra al navio senza timone o bussola che mai ha certezza dove si vada”.

That means:

“Those who fall in love with practice without science are like the helmsman who enters the waters without rudder or compass, who never knows with any certainty where he is going”.

Cultural Heritage cannot be preserved for future generations without proper care and protective measures. Scientific research is an important basis of a long term conservation strategy, which aims to improve knowledge on processes of natural and anthropogenic decay and ageing of a variety of materials. It is directed towards development of methodologies and materials and for conservation and for preventive measures. Also important is the transfer of these technologies to users.

Because society has to have a real interest in the preservation of its own cultural heritage, it has to take care of it and spends a small fraction of its resources for preservation. Societies need cultural heritage for their own survival but they also have to know, which profit is drawn out of this investment. The publication of scientific results therefore is not simply a proud presentation of achievements and scientific talents but it is also a justification to those, who have enable the work. We are here showing how this is true and of real interest.

In these three days of work we will have the opportunity to hear and to discuss about 120 communication, either in oral presentations, or in posters. More than 150 colleagues from eighteen countries are among us and they will participate in rich and fruitful discussions.

I must thank some entities and persons.

First of all I wish to thank all the members of the Scientific Committee for their support and hard and fruitful work carried out. They are the guarantee of the high level of all papers and posters presented to our Symposium. The Organising Committee has also worked hard. I thank all its components, my colleagues at I.S.T..

A lot of institutions have supported this Symposium. Their names are refered in the Proceedings. I thank them deeply. Their support have been fundamental to dress up this meeting.

We have organised 4 study tours involving visits to 4 important Portuguese monuments. I want to thank IPPAR and the Catholic Church to enable these visits as well as our colleagues who directly will guide us, in situ, in these study tours.

Finally I want to thank Dr. Paulo Marques to kindly agreed to give us the invited lecture on “Public monuments, private initiative”, that will open our works.

To meet, to know, to understand and to trust are the four steps for any collaborative process and the mainstay of any scientific project to be implemented with success.

I hope you will meet here good partners in order to know how to dress up good future projects to better understand not only the causes but also the remediation of problems cultural heritage is facing and deeply to trust in solutions encountered.

Looking for new routes and new topics and enhancing actions are the best ways to cope new challenges and missions culture heritage study rises. I hope you feel at home, among friends, making efforts to stay abreast of the new challenge and missions of culture heritage and fighting for the maintenance of the memory of the Past, hoping it may be known and appreciated in the Future.

Thank you.

FULVIO ZEZZA

*Coordinator of the International Group
for the Conservation of Monuments
in the Mediterranean Basin*

The 6th International Symposium starts today in the magnificent setting of the Sociedade de Geografia. Since 1897 the Sociedade has organized in this palace scientific expeditions, national commemorations, exhibitions and meetings; the palace is place of the colonial and ethnographic museum distributed between the vestibule, the three-storied stairs, the halls and the two orders of galleries which turn round the big hall Portugal. As Fernando Pessoa remembers in his posthumous book on Lisbon, the Sociedade has covered an important patriotic role in Portugal. We are honored to meet in this place and we are grateful for the hospitality.

It is a point of pride to recognize the continuity with which we return to meet across fifteen years. The cohesion of several representatives of scientific and socio-economic sectors in the Symposium of Lisbon encourages the International Group for the Conservation of the Monuments in the Mediterranean Basin (I.G.C.M.M.) to follow this initiative; our continuity to meet is also a positive and actual sign of the impact that the international scientific community has on the territory. The I.G.C.M.M. Group, that is not a single moment of connection among research centers, can boast the opportunity to open the scientific sector toward the territorial and environmental problems; during these years we have effectively realized the exchange of multidisciplinary and multicultural experiences. The Mediterranean Basin concentrates four fifth's of historic, artistic and architectural heritage of the world; this cultural heritage represent the primary activity of intervention for the countries that cannot afford the loss of their historic memory and that above all avoid any neglect or waste their most important asset which is a particular resource of wealth.

Tourism could not be in any Mediterranean area if more than five thousand years of history of the world was not so excellently documented and usable thank to what has been secured by local and international authorities through careful choices of environmental and socio-economic policy. How many monuments have we lost to the present? How much superficiality and ignorance has guided some conservative or rehabilitation interventions which later have revealed more destruction than the damage that these set to repair ?

One of our fundamental objectives is to bring together the scientific experiences acquired in this field to suggest acceptable and reversible procedures concerning the conservation interventions. It is well known that all of the aspects linked to the conservation of the monuments derive from a great variety of causes and damages. These derive both from meteo-climatic events, which vary along the coastal belt of the Mediterranean region, and from the natural characteristics of the sites, the structural conditions of the buildings, the properties of the employed materials and the anthropogenic and natural pollution. In such a case, to be employed in conservation and to plan the restoration it means to penetrate a complex system of knowledge in an area of different disciplines. In particular, in the field of the conservation of the building materials and the stability of architectural structures it is fundamental to gain new knowledge to be able to interpret the systems linked to the weathering forms, the masonry morphology and textures, the history of the buildings, the static analysis, the environmental context and other such as analysis of the natural hazards to which many monuments are exposed.

Substantially cultural heritage which encompasses both historic buildings and archeological remains demands from the research precise diagnosis and the best choices in conservative techniques. For this we return again in meeting to exchange our experiences and suggest advanced methodologies. We favor in this way the spreading of technological innovation in the system of production and that of information systems which are necessary for efficiency of cultural and scientific exchange.

The objective of the 6th Symposium, which examines the influence of the environment and the defense of the territory on recovery of cultural heritage, becomes part of this context. The thematic areas are indeed focused on the environment and on the territory. We will deepen, on the one hand, historical and structural aspects of the monuments, environmental parameters, forms and mechanisms of weathering, analytical techniques, methods and technologies of treatments; on the other, we will discuss aspect linked to natural hazards, methodologies for the assessment of the damage and remediation, planning and aspects of heritage management.

As in the 1st Symposium there are today representatives of research centres, universities, museums, private enterprises and professionals to discuss and to find the solutions of the problems derived from environmental stresses on the heritage of the Mediterranean Basin.

The activity developed through the previous five gatherings of the Symposium was extremely useful. From scientific point of view we can evaluate positively the informations on the appropriate measures to be adopted and the control of environmental conditions provided through the published proceedings to the restores and managers of the cultural heritage. On this side the necessary contribution to achieve the results is derived from scientific programs of our countries and from those emergent policies of the European Community regarding the environment, the climate, the technological development and the city of tomorrow.

We can believe that for the Mediterranean area this scientific activity has facilitated not only the exchange of experiences among the operators but also encouraged new openings: countries which have yet to confront the most novel developments there find in their represents of research the ambassadors who will generate the will to collaborate, in other ways could not previously realized. Therefore our obligation is that to open the research toward those who need to build a new development scenario.

Now it seems timely to underline the choice of Lisbon as the setting of the Symposium. Lisbon, ancient city of history and art, represents with its surroundings an example above all of the safeguard of the historic buildings inherited from the civilizations of the past, restored today and well exhibited, as a sign of a cultural demand before economics. Lisbon is today a bridge of culture of the Western Europe across which passes the scientific knowledge toward the countries that have discovered the importance of their monuments and that need of technology so that a great part of their asset does not remain abandoned to neglect and to weathering. Lisbon, with its Universities and the Research Centres of international level, is the opportune setting where will be develop the topics of the Symposium.

Lisbon welcomes us with great hospitality. I whole heartily thank Prof. Luis Aires Barros and his excellent collaborators for the perfect organization that is the best prelude for a useful work that will be shared with all presents.

PUBLIC MONUMENTS PRIVATE INITIATIVE

PAULO LOWNDES MARQUES

President of World Monument Fund Portugal

Ladies and Gentlemen,

May I thank those responsible for this initiative in inviting me to attend and participate in this opening meeting with some thoughts regarding restoration and the mobilizing of private initiatives.

I note that certainly regarding my country - Portugal - few private entities appear in this field of conservation except, of course, as paid executors.

I represent in this country the World Monuments Fund. This is an American organization in its origins, which strives to bring together public and private funds to bring about the conservation of monuments and other works of art. It is now a worldwide organization and has sponsored various famous projects such as in Easter Island, Ankor Wat, St. Petesburg and many other places. In some European countries it has affiliates and a World Monuments Fund exists here. It has its own Board of Directors, a Board of Scientific Advisors and Sponsor Members.

The word “monument” comes from the Latin “monumentum” which itself derives from the verb “monere” which means, and this is important, to remember, to record. Something which exists in an emotional manner in the memory of man or woman.

The scope of the word has changed semantically over the centuries but it is not a neutral concept. The idea has always been to exite emotionally a living memory.

The word was first associated and continued to be for many centuries associated with the expression “historical monument”. It was, and is in many ways, considered to have a function of awakening in the present the grandeur or beauty of former times. The expression, however, of “historical monument” only acquires a legal status in the XIX century. Guizot, Minister of Interior to Louis Phillipe creates in 1830 the position of “Inspecteur de Monuments Historiques”.

Today we talk about many other types of monuments such as industrial monuments. We often refer to parts of cities or indeed areas of outstanding natural beauty as monuments. Whole cities or towns are today classified by Unesco and other bodies.

Also a battlefield like Waterloo or Verdun is a monument and even a place of horror and past suffering like Auschwitz is carefully conserved as a monument. We recall the original Latin verb “monere”, to remember.

Indeed we have come to the age of the instant monument such as the Gugenheim Museum in Bilbao, which attracts thousand of tourists to an otherwise rather unattractive city. The point was that its construction was deliberately done to create a monument, which would attract tourists and their money. In this it was eminently successful.

The modern world has today many types of classification of monuments considered to be, as such, recognized within a legal framework with the supervisory intervention of different heritage bodies and limiting what and how an owner can carry out any interventions. For example, in Portugal laws limiting what could be constructed within an area of protection of a monument date from 1930. The creation of a special department within the Ministry of Public Works, the “Direcção Geral dos Monumentos Nacionais” dates from 1924. Before, therefore, the Salazar government.

But also public opinion has changed dramatically on what can be done with heritage. Monuments were in the past often recognized as such and appreciated not only by the elites. But there was seldom any initiative to protect monuments from damage, even less to restore.

In the XVI century, the King of France, François I, knelt before the Roman Colosseum of Nimes whose interior was entirely filled with little houses and swore he would clean out all these extra constructions. Nothing happened. It was only in the XIX that the area was cleaned. One may well ask if such a radical restoration would take place today. Curiously the Portuguese King John III forbade all construction in front of Jerónimos Monastery. This in the XVI century.

This is, I feel, an interesting line of thought. Many cities have suffered dramatic rebuilding interventions. Some, of course, caused by catastrophes. Lisbon had its great earthquake in 1755, London its great fire in the XVII century, Dresden or Warsaw as a result of the last War. But it is curious to meditate on what action was taken in these cases. Lisbon was mostly rebuilt in an contemporary manner, indeed with Turin and the Covent Garden area of London, it is one of the first European overall urban plans. London after the great fire was the same although with greater limitations than Lisbon. For example, the ecclesiastical authorities were flexible in Lisbon regarding Church property. This did not occur in London. The Church insisted that the new churches (done mostly, as we know, by Sir Christopher Wren) be built in the same places as those which had been burn't down which, naturally, did not help modern urban planning. The English baroque and glorious St. Paul rose, replacing the old gothic cathedral. But it is legitimate to ask what would have been the decision had St. Paul been destroyed by the great Blitz in the Second War. Would the authorities and public opinion have allowed a modern church to have been built? Or would a copy of St. Paul's been erected. After all, this is what happened to the center of Warsaw and is at this moment occurring to the historical and monumental area of Dresden destroyed in 1945. Some of you will remind me that the Cathedral of Coventry was rebuilt by Sir Basil Spence as a modern church after the war. This is, of course, true but I submit such an initiative was more the exception than the rule.

Public opinion and indeed informed opinion today we would like to think would never allow certain terrible man-made destructions (that is, not resulting from War or catastrophes) which occurred. The arrogance of destroying the thousand year Constantine basilica of St. Peter at the end of XV century. The destruction in the XIX century of the old walls of Viena, building along the Ring a series of pastiche monumental buildings of different periods some of which have become monuments in their own right. After all, we appreciate the Church of "la Madelaine" today in its own terms, not as a perfect copy, as it was intended to be, of the Parthenon.

Would Hausman be allowed today to do what he did in Paris? He defended himself saying that not a single monument or palace of significance had suffered. Yet Victor Hugo while not denying this or indeed denying the authorities' right to alter the city so profoundly, wept for the Paris of his youth.

The intervention of architects in conservation work has always been difficult. Architects consider themselves creators, artists and are instinctively drawn to leaving their mark on their own work. They argue, not unreasonably, that most great monuments have had in the past constant intervention of architects whose recognizable contribution is easily detected. The great cathedral of Toledo has many interventions over the centuries.

But nevertheless we in the World Monuments Fund espouse the theory that modern conservation architects are self-facing and their contribution should not be noticeable. They must not appear, we think.

Revolution and social upheavals have claimed their price. The Reformation and what is now described as the stripping of the altars destroyed much art. The Russian Revolution the destruction of innumerable churches. But note the recent construction of a brand new great church next to the Kremlin to replace exactly the one destroyed by Stalin. The same in Mexico and during the Spanish Civil War. Indeed in Romania, Ceausescu was destroying ancient churches in the 1980's. In Portugal as late as 1976 a Romanesque Church in the north, in Rates was wantonly destroyed with the consent of the local municipality and the local parish priest. Nobody was ever held responsible. But the worst case of heritage destruction ever done throughout the centuries was man-made and in contemporary times. I am referring to the Chinese Cultural Revolution.

The point I am trying to make is that we cannot ever be sure that something is safe. From natural causes or war, that is obvious. But I am referring to man-made destruction out of negligence, stupidity or fanaticism as we witnessed recently the destruction of the huge Budist statues in Afghanistan.

Yet world organizations and conferences, such as this one, on conservation and restoration multiply. The first world wide conference on Conservation took place in Athens in 1931. Only European countries attended. The Second Conference took place in Venice in 1964. Other than European countries Tunisia, Mexico and Peru were present. Curiously this was the time the World Monuments Fund was created as the first private organization dedicated to saving and conserving heritage. Fifteen years later eighty countries took part in a Conference. This surely is a good sign.

The World Monuments Fund has, successfully, promoted, with the sponsorship of American Express, a watch list every two years of the one hundred World monuments more at risk. It is a credit to the publicity and importance this list represents that, two years afterwards, usually about half of those included have been object of some conservation intervention.

The World Monuments Fund Portugal wishes to launch a Portuguese Watch List containing the 25 monuments considered to be at greater risk with the object of attracting attention and, shall we say, shaming those who can in doing something about them.

What has the World Monuments Fund done in Portugal? Our major projects have been the conservation of the outside stonework of the Tower of Belém and above all the complete restoration of the great Manueline cloisters of the Monastery of Jerónimos, which I trust visitors here will have the opportunity to see. On a smaller plane we have restored an important organ in the University Church of Évora, restored two large paintings in the Lisbon Church of Menino de Deus and currently are restoring the painted ceiling of the Church of Encarnação, the conservation of several aspects of the Irish Dominican Convent of Bom Sucesso and, in Oporto, on the mouth of the Douro river, the oldest surviving lighthouse in the Peninsula and one of the first Renaissance buildings in Portugal, certainly in granite, - the tower of S. Miguel-o-Anjo.

And what has been our experience in Portugal? My country is still, I might say, mesmerized by the State. Louis XIV said "L'État c'est moi". Here it would be better to paraphrase the expression by saying "L'État c'est lui", pointing at the Government. Monuments and heritage tend not to be considered the responsibility of all, that is, of ourselves but such responsibility is always the Government's. This lamentable attitude, which comes from a long way back, tends to absolve our collective conscience. More seriously Governments also tend to like it because it gives them self-importance and excuses for not doing things because, of course, they can't do everything.

Regarding heritage and conservation they are also not well organized. In Portugal, we have IPPAR belonging to the Ministry of Culture which looks after, usually, the main monuments and a Direcção Geral dos Monumentos Nacionais which belongs to the Ministry of Public Works and which is responsible for many other monuments and also all building interventions in public buildings old and new. It is not a satisfactory system.

Having said this we, the WMFP, have mostly worked with IPPAR but also with the DGMN and, on the whole, it has worked very well. On the main projects quoted, the Government has contributed with one third of the costs and WMFP has mobilized the other two thirds usually one third by Portuguese private sponsors and the other one third by international sponsors.

May I say that Portugal is one of the countries with the most generous heritage sponsoring laws. Private contributions to certain projects can be expensed up to 130% of their cost. It is our experience that money is not usually the problem. The problem rather lies with good projects being carried out in a serious and credible manner. No sponsor wants or likes to contribute funds and then discover that they go in salaries to Directors, executive class flights or good hotels. Sponsors want and reasonably so, that their money is spent directly in the cost of the conservation project. Also they don't want to be approached half way along the project and be told that, after all, the monies asked for were not enough. It shows lack of professionalism.

WMFP is responsible for the actual execution of its projects. If I may be immodest the two largest and most important conservation works carried out - the Tower of Belém and the Cloisters of Jerónimos - were executed within budget and time periods. This and, of course, the quality of the work done is what gives credibility to an organization and it enables it to seek funds with success for further conservation projects.

In every initiative we have first spent monies on a complete study both historical and scientific of the work ahead. At Jerónimos we spent 11% of the budget on this initial study. We were much criticised in certain civil service circles for doing this. But it enabled us to have an exact idea of what had to be done, its cost, how to do it and the time it would take.

In all of this we were supported by our Board of Scientific Advisors, some of whose members are among us today, and to which I wish to convey public thanks.

Once a monument or a work of art is restored what happens next? This is very important and often those involved in conservation work don't think of this. Will it again become vandalised or again the painted ceiling suffer because the roof was not maintained? Will it be seen and be useful? And above all appreciated and loved by the public? Will the local community consider it and be proud of its heritage?

We cannot ignore to our peril the day after.

General public appreciation of their monuments, although growing, is not always so. Vandalism is a reality all heritage authorities have to contend with. This is not helped by foolish Art Ministers who wishing to appear anti-elitist and modern consider graffiti a form of art and encourage it. I recall that modish French Minister Jacques Lang. What a difference from the great André Malraux.

And then, of course, we have the growing problems of success. I refer to the ever increasing numbers seeking cultural tourism. Often, of course, well behaved. They are not vandals and would be horrified to be associated with them. But the sheer number of those visiting monuments create ever increasing problems. Countries have different approaches. For example, no church in Portugal however monumental will charge entry. The same does not apply to cloisters, etc. But paying to visit a cathedral is becoming usual in the U.K. and no doubt, if I may rather inappropriately quote, the money-lenders will return to the Temple. Venice is considering, as we know, to charge an entry fee to the city to all those not residing or staying in the city.

Ladies and Gentlemen,

Conservation work is the responsibility of all of us. Something destroyed is gone and never returns. Our heritage are our roots, our ability to identify with a cultural background, especially important now with increasing globalization and Starbucks coffee-houses round each corner. Government's react to public opinion, not always, as they should, but increasingly so. So, if I may, paraphrase John Kennedy who was assassinated 40 years ago last year, "Ask not what your Government can do for your heritage but what can you do for your own heritage" which, Ladies and Gentlemen, belongs, after all, to us all.

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