



Protection of Cultural Heritage



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Maiden's Tower

Introduction



Academic Assessment

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❖ The destructive effects of natural disasters have a bigger impact upon residential areas and they are more likely to result in economic losses and moral hazards. Among all those damages caused by disasters, the second most important and hardest to replace after human life is Cultural Heritage.

It is a huge possibility that, during the very same moments in which these lines are being written, people in different parts of the world may be experiencing various kinds of extraordinary natural events. Whereas life takes its normal course as a result of some of these events; in other areas which are mostly human settlements, they appear to be harder to overcome and turn into natural disasters.

The destructive effects of natural disasters have a bigger impact upon residential areas and they are more likely to result in economic losses and moral hazards. Among all those damages caused by disasters, the second most important and hardest to replace after human life is Cultural Heritage.

Forming the indispensable components of cultural heritage that form both the intangible and tangible values included within the memory of humanity; the sites, the structures as examples of civil architecture, the rituals conducted in these structures and areas along with the special traditional productions which give a spirit to the residences, all add a value and depth into our lives while acting

as partners in constituting the common activity points of societies in shaping the future. Along with the function modifications that harm the structure of the buildings, the maintenance and repair activities which are failed to be carried out periodically and properly also increase the possibility of historical structures to be damaged or destroyed in cases of disasters affecting human settlements. Thus, works carried out for disaster management especially in disaster-hit regions play a vital role in terms of controlling the destructive effects that threaten the existence of cultural heritage.

The unexpected losses the humanity experienced as a result of the single-focused risk mitigation studies held during the recent natural disasters such as earthquake, fire, tsunami and flood have unfortunately shown us that the secondary effects of a disaster can be as destructive as the major disaster itself. Taking a lesson from these examples, the authorities have started to adopt a new approach both in their disaster management studies and the risk mitigation works which are also a part of disaster management.



Today, “**Integrated Disaster Risk Management**” works concerning the management of disaster related dangers and risks in relation thereof are therefore being carried out by measuring not only one single risk but also each risk which can be triggered by the effects of the disaster according to the grading values.

In this book, you will find information on the promising works of IPCU which are the steps towards an integrated disaster management approach within Protection of Cultural Heritage. This book introduces the effects of earthquake on cultural heritage as a major disaster risk of our geography as well as the works oriented at risk mitigation in order to eliminate these effects and practices in which each structure is taken as a case model with the views of experts from various different values.

These projects conducted was shared with the experts of the area, with a view to evaluate the positive and negative results of this practices, in an international scientific platform within the symposium titled “Heritage&Risk: Cultural Heritage Protection in Times of Risk, Challenges and Opportunities” held in November 2012 with the cooperation of Yildiz Technical University, International Council on Monuments and Sites - International Committee on Risk Preparedness and IPCU.

During the course of these studies, the unanswered questions regarding the content, limit and depth of the response have paved the way through a new study within the coordination of IPCU.

The studies which have been carried out by International Council on Monuments and Sites (ICOMOS) Turkey National Committee for about a year enabled our national policy on cultural heritage protection to be presented under a charter and this charter will be published in near future as Turkish Charter on Protection of Architectural Heritage.

We hope that these studies will go beyond the borders of being an intellectual product and encourage and generalize “Integrated Disaster Risk Management Concept” while clearing the way for new ideas in terms of disaster risk mitigation which threaten the rich cultural heritage of our country and lives of their users.

Protection of Cultural Heritage

With the studies initiated by Istanbul Seismic Risk Mitigation and Emergency Preparedness Project (ISMEP) within the subject of risk mitigation in terms of protection of important historical buildings and cultural heritage property of Istanbul, our aim is to safeguard Cultural Heritage property within the framework of Risk Mitigation Planning.

ISMEP studies included in this book can be summarized as follows:

- Determining the methods to integrate the works on cultural heritage and its important component historical structures into risk mitigation plans, and beginning the implementation thereof in the “Inventory on Cultural Heritage and Structures of Istanbul and Research on Multi-Disaster and Earthquake Performance” project;
- Grading the vulnerability of historical artifacts as a result of disasters and specifying response priorities for risk mitigation;
- Assessment of the present condition of cultural heritage property, degree of possible disaster risks and the vulnerability grades;
- In this respect; developing and implementing risk mitigation plans in order to safeguard cultural heritage by setting the required risk mitigation actions;
- Projects conducted within the framework of “A Charter for Turkey on Architectural Protection and Restoration” which is used to help determining rules and standards in education and training required for protecting and providing sustainable protection of protected areas, structure groups, monuments, civil architecture examples and intangible heritage components according to 1972 World Heritage Convention.

Each process and activity included in the book is based on modern disaster management references. Cultural entities, local authorities, public administrations and non-governmental organizations are included in the risk mitigation planning studies.



Historical Peninsula, Istanbul

What is Cultural Heritage?

Cultural heritage is an important treasure which shows members of a society their common history and strengthens the solidarity and unity emotions among them. It provides sustainability of the experiences and traditions which are the fruit of a long history behind and enables them to form a stronger future for themselves.

There are lots of answers to be given for the question that seeks the reasons why cultural heritage needs to be safeguarded. Cultural heritage should be safeguarded because it provides new learning and development opportunities to young people; gives them a chance to feel beautiful emotions and warm memories; feeds our urge to create and explore; deepens our point of view both to the world and life and lastly it reminds us that history is the biggest teacher of all.

Cultural heritage is the complete state of two separate things which are intangible and tangible values relating to our identity, culture and history. The intangible values such as language, traditions, dance, music and rituals are also

as important as the historical cities and patterns, cultural landscapes, monumental structures and archaeological sites in creation of cultural heritage.

Acting as a bridge between the present day and history, the cultural heritage constitutes the base for the culture and the world in which we live and gives a strong reference to future while enriching human life spiritually.

The definition of cultural heritage has expanded and has gained new meanings in time.

This has led to a new meaning which not only bears a definition and protection understanding focusing on monumental buildings but also to a more inclusive cultural heritage concept that contains all kinds of cultural values in human life.

Again, the emphasis on human rights, cultural diversity and equality should be the base of all definitions and documents about cultural heritage.

Today, the cultural heritage categories used in agreements prepared by UNESCO, ICOMOS and other similar international institutions; in international law documents; in domestic codes and directives are as follows:

1 Tangible Cultural Heritage

- Movable Cultural Heritage (paintings, sculptures, coins, manuscripts, archaeological pieces etc.)
- Immovable Cultural Heritage (monuments, archaeological sites, historical city patterns etc.)

2 Underwater Cultural Heritage (submerged ruins, underwater ruins and cities)

3 Intangible Cultural Heritage (oral traditions, performance arts, rituals etc.)

4 Natural Heritage (physical, biological and geological formations like culturally important natural sites and cultural landscapes etc.)

❖ Cultural Heritage is each and every tangible and intangible property that carries a local and global value about the history of a society which has survived until today within the continuity of life.

Some of the main definitions in the subject of cultural heritage and protection in the study called “A Charter for Turkey on Architectural Protection and Restoration” are as follows:

Cultural Heritage

Cultural Heritage is each and every tangible and intangible property that carries a local and global value about the history of a society which has survived until today within the continuity of life. From this point of view, “Cultural Heritage is a resource group which is described as a reflection of human kind’s values, beliefs and traditions that have achieved to come to the present day by following a continuous change pattern without being possessed by anyone.

It contains all features of the environment arising out of the interaction between people and places in time.”

Architectural Heritage

Architectural heritage means all kinds of buildings and building types that contains the common humanity property such as historical value, sustainability value, memorial value, mythological value, aesthetics and artistic value, technical and technological value, authenticity value, exceptionality (rarity) value, uniqueness value, group value, economical value, usage value, traditional value, educational value, social value and multi-layer value within itself; each of them in a different level and quality, in a view of protecting and transferring them into future in terms of integrated protection principles.

Protected Area

This title refers to areas which are mandatory to be protected in that they play an important role in the conservation of immovable cultural and natural property or protecting them in their historical environment.



Ephesus Ancient City

Site

Site refers to the productions of various civilizations that have achieved to survive until today as cities or city ruins which reflect the social, economical, architectural or similar features of their age in a sustainable and integrated manner. These places which were once the home of ancient social life or important historical events have to be protected without harming their identified natural characteristics.

Buffer Zone

Buffer zone refers to the areas which directly affect the cultural property and sites that have to be protected; were taken out of site borders even when they were previously within them; streets, squares, structure groups or suchlike to be protected out of the site areas; or areas that directly affect the site area or should be specially considered during preparation of reconstruction plan for protection.

The buffer zone surrounding the protected area is a secondary protected area. This is the area

that both affects the protected area and is being affected by it. Out of the protected area, buffer zone is a well described place that is being affected by this area physically, socially and visually.

Urban Site Area

Urban site areas are places where there are various cultural and natural environment elements (structures, gardens, flora, settlements and walls) with different architectural, local, aesthetic and artistic features; in these areas these elements reside together and this common existence creates a bigger and more important cultural and natural value in the site area.

Archaeological Site

Archaeological site refers to the areas which are home to ancient civilizations' ground sources, underground sources and underwater products as well as the cultural property that reflect the social, economic and cultural features of their time.

Rural Sites

These rural areas contain important protection values which were created by the integration of single structures like streets, squares and cultivated areas of the rural places with their own settlement pattern, construction practice and design.

Traditional Architectural Heritage

In a world that globalizes rapidly with the equally rapid development of technology and communication, this kind of heritage refers to the traditional structures, structure groups and settlements that reflect local or region-specific construction materials, techniques and traditions in addition to highlighting the local identity anonymously.

Industrial Heritage

All kinds of intangible or tangible proofs and documents of industrial culture; all structures, production equipment and construction components created by industrial processes; and settlements, nature and city landscapes constitute the industrial heritage.

❖ These areas are places in which both society and human settlements experience an evolution process within history by being in connection with their natural environment under the effect of economic, social and cultural factors.

Modern Architectural Heritage (20th Century Architectural Heritage)

These are the structures, structure groups and settlements which are the representatives of design products constructed by the new technology and production system of “Modern Movement” era being effective after 1920s following the architectural style of the early 20th century (Art Nouveau, Art Deco, 1st National Architecture).

Underwater Cultural Heritage

Underwater cultural heritage refers to values which are created by human such as settlements and structures; submerge areas and submerged ruins; sea vehicles; air vehicles; pre-historical items; pipelines; and cables that managed to stay underwater (coastal waters, shallow seas, deep oceans) continuously or discontinuously for at least 100 years and can be regarded valuable in terms of cultural, historical and archaeological studies.

Cultural Landscape Areas

These areas are places in which both society and human settlements experience an evolution process within history by being in connection with their natural environment under the effect of economic, social and cultural factors.

The Cultural Landscape Areas consist of geographical areas which contain cultural and natural resources created by human and nature in addition to wild and domestic animals while displaying different cultural and aesthetical values arising out of historical events or activities.



Historical City Walls of Istanbul

Why is It Important to Protect Cultural Heritage

When looked at the first international regulations on Protection of Cultural Property, it is seen that most of them were related to the damages caused by war or armed conflict.

According to the regulations of No. 4 Hague Convention of 1907 on law of war and customary rules, all kinds of attacks to buildings used with the purpose of religious activities, education, art, science or charity; to historical buildings and to hospitals have been prohibited. With regard to this regulation, the purpose in protecting the cultural property is the same with that of the civil buildings like schools and hospitals.

However, when the developments in cultural heritage area after 1950s is considered, it has also been stated that cultural heritage should be safeguarded because of being “common heritage of mankind” in addition to the artistic and scientific values it contains within.

In the preface of Hague Convention (UNESCO, 1954) which organizes the regulations on Protection of cultural property in armed conflict environments the following statement is highlighted: “Being convinced that damage to cultural property belonging to any people whatsoever means damage to cultural heritage of all mankind, since each people makes its contributions to the culture of the world”.

Similarly, in the preface of “World Heritage Convention” it is accepted and acknowledged “that deterioration or disappearance of any item of the cultural or natural heritage constitutes a harmful impoverishment of the heritage of all the nations of the world”; “that the existing international conventions, recommendations and resolutions concerning cultural and natural property demonstrate the importance, for all the peoples of the world, of protecting this unique and irreplaceable property, to whatever people it may belong” and “that parts of the cultural or natural heritage are of outstanding interest and therefore preserving them is the duty of all mankind as a whole”.

With respect to the statements presented by these conventions, European Council also adopts the common heritage understanding in all of the documents it agrees on in the area of culture and cultural heritage.

Following these progresses, cultural heritage started to come into the forefront as “a resource to increase cultural diversity and to improve inter-cultural dialogue” in the early 2000s.

In the UNESCO Universal Declaration on Cultural Diversity of 2001, cultural heritage was shown as the resource of creativity and specifically states the following, “cultural diversity is the common heritage of humanity and should be recognized and affirmed for the benefit of present and future generations in order to create an effective dialogue among cultures”.

❖ Protection of cultural heritage is as important as other important common values such as environment protection or human rights.

Within the scope of UNESCO 2003 Convention for the Safeguarding of Intangible Cultural Heritage, the intangible cultural heritage, transmitted from generation to generation is described as follows, “it is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity”.

On the other hand, European Council Framework Convention on the Value of Cultural Heritage for Society (FARO Convention) added to the legislation in 2005 describes cultural heritage as “a part of the economic development model which is based both on fostering intercultural dialogue, cultural diversity and human development and also on its use as an economic resource”.

Additionally, Faro Convention discusses cultural heritage within human rights and interprets it as an individual right.

According to the Convention, each and every individual has a right to benefit from cultural heritage and contribute to the improvement thereof (Article 4); and this right is also inherited within the “right to participate in cultural life” of Universal Declaration of Human Rights.

Consequently, the function of cultural heritage has changed in time and evolved into an element that creates the cultural identities of both societies and individuals apart from being only a historical and artistic property that is the subject of scientific research. Shortly, protection of cultural heritage as a common property is as important as other important common values such as environment protection or human rights.



Apollon Temple, Didyma

Protecting Cultural Heritage against Disaster Risks

As the extreme natural events have started to turn into disasters and the frequency of such events has increased in recent years, these events became one of the most important actors that affect valuable architectural and natural heritage areas around the world. In addition to natural or human-based disasters; wars, local conflicts, big projects that ignore cultural heritage, the effects of mass tourism, legal regulations ignoring protection of cultural heritage and the results of such regulations directly or indirectly threatens the cultural heritage in short or long term.

Earthquake, fire, armed conflict, vandalism, terrorist attacks and global climate changes not only damage the ecological balance of the natural areas but also damage the archaeological areas and historical structures at the same time.

With reference to researches conducted in the area, major losses have occurred in World Heritage Property because of natural and human-based disasters in recent years.

For example, in 2003 Bam city (Iran) and in 2006 Prambanan Temple (Indonesia) were subjected to earthquake disaster whereas in 2002 Edinburgh Old Town (England) was subjected to fire disaster in 2002.

In 2001, Bamiyan Buddhas in Afghanistan was destroyed by armed conflict and vandalism; in 1998 Tooth Relic Temple Kandy (Sri Lanka) was ruined by terrorist attacks; in 2007 Sundarbans forest (Bangladesh) was destroyed by a hurricane and wild life with all fishermen there was also destroyed and the region was covered with salty water.

In addition to causing damage in the ecological balance of natural areas, global climate changes are one of the biggest problems that cause archaeological sites and historical buildings to be destroyed by natural events such as earthquake and flood.



Kariye Museum

Protection of Cultural Heritage Around the World and in Turkey



Protection of Cultural Heritage Around the World

❖ Each State signing World Heritage Convention enters into obligation of defining, determining, safeguarding, reconstructing and presenting its cultural and natural heritage along with transmitting them into next generations.

The roots of institutionalization of cultural heritage protection go back to World War I. However, until the end of World War II no common and concrete steps were taken.

The struggle to prevent armed conflicts was first introduced by the conventions developed by UNESCO.

Hague Convention which was first accepted in 1954 and then revised in 1999 due to the armed conflicts of that time highlights the risks confronting cultural properties and identifies the approach to be adopted/ steps to be taken by State Parties.

1964 Venice Convention, on the other hand, is recognized as a document that identifies the “movement relating to protection of historical centers and rehabilitation, plays an active role in generalizing the approach for preventing heritage from damage. This document still preserves its importance today.

Before 2000s, cultural heritage concept was described as a single-structure approach. It is possible to observe this approach in some of the conventions even today. For instance in 1931 Charter of Athens and 1954 Hague Convention, cultural heritage is discussed only as immovable cultural properties like monumental architectural pieces, archaeological sites and historical and artistic structures or movable cultural properties that are important in terms of art, history and archaeology like artworks such as sculptures and paintings; books, archives and manuscripts.

European cities which have historically rich civil structures were highly damaged during World War II. Following the war, the reconstruction works in the cities created a fast transformation and suspended the historical continuity.



From the World Cultural Heritage of UNESCO, Old Bridge of Mostar, Bosnia Herzegovina

This fast works of reconstruction in the cities met with serious reaction and led to the occurring of a new dimension in terms of protection. As a result of this huge reaction, civil structures were also accepted as valuable cultural properties to be safeguarded.

The Venice Charter of 1964 was the first document to mention civil structures as valuable properties worth protecting like monumental structures. Additionally, this Charter extended the scope of immovable cultural properties. The Venice Charter is milestone in changing the definition of cultural heritage and extension of the scope of protection.

According to the Venice Charter; along with major art pieces, the historical monument definition also includes simple art pieces which gain importance in terms of culture as time goes by. Therefore, for the first time in history, settlement patterns which do not have the characteristics of an art piece was also included in the Charter as worth protecting.

Another important alteration in the definition of cultural heritage was the fact that human-made areas along with nature itself and the pieces produced by both human and nature was included in the scope of the definition with “Convention Concerning the Protection of the World” which was opened for signature by UNESCO in 1972.

Shortly, according to World Heritage Convention, each State Party enters into obligation of defining, determining, safeguarding, reconstructing and presenting its cultural and natural heritage along with transmitting them into next generations.

It is possible to recognize the World Heritage Convention of UNESCO as the first international document to discuss cultural heritage in terms of risk.

Within this Convention of 1972, it is highlighted that “cultural and natural heritage is under danger of destruction as social and economic conditions of the world continues

to change in an increasing speed and this situation constitutes a danger of impoverishment for all states around the world”.

After the Committee of Ministers of Council of Europe declared 1975 as the “European Architectural Heritage Year”, European Charter of Architectural Heritage” became an important document that deals with the new problems encountered in of cultural heritage.

Same as it is stated in the Venice Charter, architectural heritage is described as a concept beyond monumental structures which includes also the ordinary buildings in historical cities and rural settlement areas in this convention too. While highlighting the fact that these settlements present appropriate environments supporting composite patterns both functionally and socially in terms of societal integration, this convention also discusses the damaging threat upon their features.

An integrated approach is offered in order to eliminate these dangerous risks. In this respect, the most important concept proposed by Convention for the Protection of the Architectural Heritage of Europe is “integrated protection”.

Within the Principle of Integrated Protection, the importance of protection the physical environment with its habitants is especially emphasized.

Additionally, it is stated that integrated protection can only be achieved by a broadly participated cooperation of all sides.

At the same year, Declaration of Amsterdam published by Committee of Ministers of Council of Europe explained and emphasized these principles in detail and struggled to popularize the motto “A Future for Our Past”. Following the recognition of concepts of danger and risk in the development process of cultural heritage protection across the World and in the course of time World Heritage Committee has turned its eyes on “risk preparedness” and “monitoring” processes.

World Heritage Convention developed “List of World Heritage in Danger” process as a control mechanism in order to safeguard Cultural Heritage property without damaging their authenticity.

This initiative has opened the way to taking extraordinary precautions and carrying out international cooperation to preserve the properties as they are originally.

Within the scope of report published in 1992 which assesses the 20-year practices of World Heritage Committee between years 1972-1992, two important subjects about risk preparedness is defined:

- Developing appropriate action plans against subjects that threaten or have a high possibility to threaten the safety of heritage areas in order to improve the management and protection of World Heritage Areas properly;
- Describing the processes in order to monitor World Heritage Areas more systematically and establishing cooperation with the related authorities, experts and referees for providing regular monitoring.

Expert reports on “risk preparedness” for cultural property within the scope of UNESCO List of World Heritage was published in 1992.



From the World Cultural Heritage of UNESCO, Machu Picchu, Peru

In line with these studies, a reconstruction work has been developed.

According to this reconstruction, United Nations member states accept and undertake to develop and implement scientific and technical works and researches against the risks and dangers that threaten the cultural and natural heritage.

In 1992, ICOMOS held the “Inter-Agency Task Force (IATF) for Cultural Heritage at Risk” meeting.

Since then, the works of IATF have been carried out by ICOMOS Canada National Committee.

These activities have been finalized with a national declaration. The symposium on “Risk

Preparedness for Cultural Properties” which was held after the big earthquake that stroke Kobe in 1995 played a triggering role in the creation of public opinion about this issue.

UNESCO World Heritage Committee meeting which was held in Japan in 1999 and the title of World Bank’s presentation being “Heritage under Risk” can be counted as the other important steps taken to establish a public sensitivity about the issue.

At the same year, ICORP - International Committee on Risk Preparedness which brings experts working on natural or human-based risk mitigation for cultural heritage and risk preparedness together under one roof was founded under ICOMOS - International Council on Monuments and Sites.

The “Risk” concept appeared firstly in the Practice Manual which was accepted in the 18th meeting of World Heritage Committee (1994) in Phuket, Thailand. However, it was not earlier than 2005 that World Heritage Committee could accepted the risk issue as a direct decision in its committee meeting in 2005. In the meeting, the committee once again highlighted the importance of risk preparedness within the decision by referring to Kobe Symposium.

Today, it is a highly known fact that World Heritage is under threat by natural and human-based disasters.

According to the decision accepted in its 30th meeting held in 2006 in Vilnius, UNESCO World Heritage Committee established a thematic working group for “Reducing Disaster Risks for World Heritage Properties”.

❖ Damaging or loss of value of world heritage properties will adversely affect the cultural significance and socio-economic values of societies.

Strategy for Disaster Risk Reduction at World Heritage Properties

In 2004, World Heritage Committee called for cooperation among World Heritage Center, States Parties, Advisory Bodies and other international institutions and non-governmental organizations working in the emergency response area in order to establish a risk reduction strategy.

The strategy in question was presented to World Heritage Committee in its 30th session in 2006; its objectives were considered to be appropriate and the strategy was approved by the Committee. Later on, it was revised and Strategy for Disaster Risk Reduction at World Heritage Properties was presented in the 31st session in 2007 and approved by the Committee.

Objective of the Strategy

The objective of the strategy is to strengthen the understanding about protecting World Heritage and to contribute to sustainable development by providing assistance to States Parties in relation to the following issues:

1. Integration of worries and concerns about heritage (cultural and historical) into the national disaster risk mitigation policies,
2. Combination of worries and concerns about disaster risk mitigation under the national management plans and systems for the benefit of World Heritage properties within the national borders.

Scope of Strategy

In line with the objective of the strategy, risks will be considered and accepted as risks arising out of disasters with a possibility of affecting the cultural and natural heritage values or the authenticity and entirety thereof adversely.



From the World Heritage List of UNESCO, Mount Nemrut, Adiyaman

Therefore, the strategy does not include cumulative processes and factors like pollution, tourism and urban invasion.

Considering the previous policies on disasters and heritage, this strategy has a revolutionary position.

For the first time in history, heritage has the opportunity to play a positive role in reducing the effects of disasters thanks to the properties and services it provides for societies. According to the report prepared by this work group, damaging or loss of value of world heritage properties will adversely affect the cultural significance and socio-economic values of societies.

Accordingly, the objectives and principal actions to be taken are as follows:

- Improving the related global, regional, national and local institutions in order to reduce risk;
- Using the information, innovation and education areas in order to establish a disaster prevention culture;

- Defining, assessing and monitoring disaster risks;
- Reducing the real reason behind risk factor;
- Reinforcing disaster prevention activities.

The following are the main principles described for Disaster Risk Management in the manual:

- In addition to priority of risk reduction in terms of protecting the authenticity, entirety and sustainability of World Heritage Property, the importance of human life, physical assets and life maintenance should also be highlighted.
- Disaster risk management includes not only protection of property against big threats but also the factors concerning maintenance, continuous deterioration and ecosystem of the property.
- Another important factor in protection of World Heritage Property is the buffer zone practice.

Disaster Risk Management plays a supporting role in development of proper risk management rules for buffer zones which are the possible sufferers of fire or landslide risk.

- Protection against floods in coastal areas stemming from erosion, tsunami and storms may be achieved by regional planting.
- Special Disaster Risk Management definitions should be introduced separately for cultural heritages such as historical buildings, historical villages and urban areas, archaeological sites, historical gardens and cultural landscapes.

❖ In a disaster situation, previously developed emergency response programs are required for cultural heritage too just as it is for human life.

“A Management Manual for World Cultural Heritage against Disaster Risks” accepts and bases its foundation on the four phases of disaster: risk and damage mitigation, preparedness, response and recovery.

Preparedness activities which take place before the emergency situation occurs are defined as formulation of and implementation of risk assessment and precautions to prevent and minimize its effects (maintenance and monitoring, various disaster management policies and programs). Additionally, at this phase emergency preparations should also be accomplished.

These preparations include forming an emergency response team; evacuation plan; defining the procedures and preparation of warning systems, required equipment and temporary depots. In a disaster situation, previously developed emergency response programs are required for cultural heritage too just as it is for human life.

On the other hand, after disaster activities include repair of damaged cultural properties and preparation of rescue and rehabilitation activities. Disaster Management concept encompasses all aspects of preparation for all kinds of activities required before, during, and after disaster.

Learning from the experiences and failures after each disaster or rescue activity, reviewing the plans, and accordingly providing an uninterrupted and periodical communication and monitoring cycle in risk management plans are among the strict orders specified in the manual.

The other two important aspects of the issue are the usage of a language easy to understand for the preparation of plans and placement of the prepared plans in digital environment in order to provide access for everyone.



From the World Heritage List of UNESCO, Itsukushima Temple, Japan

General Framework of “Disaster Risk Management Plan” for World Heritage Properties

The manual has developed the following suggestions to be remarked as important in terms of preparation of Disaster Risk Management plan:

- The plan should be clear, flexible and practical without any strict rules.
- Plan should be more than just a list of actions. It should describe proper actions for different situations and allow the monitoring of the practices by the responsible.
- In addition to main objectives and the process of the plan; the area borders to be implemented, target group and the officers in charge should clearly be explained.
- In the plan to be prepared, the features of cultural property which are specified in Outstanding Universal Value Declaration and basic disaster risks that might endanger these features should be determined.

These features form the equipment and techniques to be used for disaster prevention and risk mitigation; practice strategies; preparation and response to emergency situations; recovery; lastly maintenance and monitoring processes.

- Disaster Risk Management plan to be prepared according to the quality of the cultural property should be as comprehensive as possible in order to enable coordination among institutions like municipality, fire station, police and healthcare services.

For example, if there are so many different kinds of cultural properties in one region, a single more comprehensive plan is suggested for all heritage properties of the region rather than various separate plans for each.

- Disaster Risk Management Plan should be adopted according to its users like a brochure or poster to raise public awareness; a proper report for state institutions; and a control list or a manual for area managers.

Independently of its form, the basic decisions and system of management plan should never be changed.

- These plans should be kept safe in different places in order to be easily found in case of a disaster.
- Disaster Risk Management Plan should contain these steps in order to work in a cycle system that is open to feed back: defining and reviewing; prevention and mitigation; emergency preparedness and effects; rescue; practice and monitoring.

Another issue the manual specifies as highly important is to relate the following three systems with each other for an effective Disaster Risk Management Plan: “disaster management systems valid for country / city / rural area”, “Disaster Risk Management plan for World Heritage”, “World Heritage area management plan”. Where there is a comprehensive area management plan, risk management plan is prepared in accordance with this area plan.

In case of non-existence of area management plans, there may only be risk management plans; this is why they have to be prepared in relation to area management plans. In this case, risk management plans may act as activators in preparation of area management plans.

If there are a number of independently prepared plans for a cultural property, establishing cross references to these plans gains importance.

For example, fire management and visitor usage plans should be prepared in connection with management plan and regional disaster risk mitigation plan. There are a number of different national and international institutions working to monitor risks on World Heritage properties. The most important one among them is ICOMOS – Heritage&Risk program.

The studies of the program were started in 1999 in Mexico general assembly and it was based on a report systems. The objective of the program is to define endangered heritage areas and monuments, tendencies and typical case studies in addition to monitor suggestions developed to offer a solution to dangers confronting cultural heritage.

Today, under the title of “Heritage&Risk” within the body of ICOMOS, there are international committees and institutions like ICOMOS Global Heritage Monitoring Network and “International Committee on Risk Preparedness” (ICORP) which was brought to life again in 2009 and “Blue Shield” partnership.

ICORP working as a scientific committee of ICOMOS has two objectives: to develop preparations for natural or human based disasters with heritage organizations and professionals; to encourage integration between disaster issues and heritage protection, preparation planning, risk mitigation and help operations.

“Cultural Heritage Protection in Times of Risk” international symposium under the cooperation of Yildiz Technical University, ICOMOS and ICORP was held at Yildiz Technical University on 15-17 November 2012, as a part of ISMEP project.

On the other hand, artifact-based point of view concerning cultural heritage properties has evolved and broadened in time, to additionally include intangible heritage (traditions, beliefs, music, cuisine and life practices of societies and nations); cultural heritage of living communities; the physical pattern, atmosphere, landscape areas and industrial architecture of places.



Determined by UNESCO, One of the World Cultural Heritage Properties, Venedik, Italy

As a matter of fact, The World Heritage Committee has opened a new category as the “properties having heritage value” which can be nominated for the consideration of the World Heritage Committee in Operational Guidelines for the Implementation of the World Heritage Convention which was adopted by the Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage in January of 2008.

Accordingly, within the scope of “Cultural Landscapes”, “Historical Cities and City Centres”, “Canals” and “Heritage Routes”, the heritages of Outstanding Universal Value can also be nominated for the consideration of the World Heritage Committee.

Exemplary Studies Around the World

The Mayor of fabulous city of Venedik, Giorgio Orsoni, has been elected the European’s first Champion of Urban Resilience by the United Nations International Strategy for Disaster Reduction Secretariat (UNISDR) in recognition of his efforts to build resilience to disasters and protect cultural heritage.

In 2010, the United Nations International Strategy for Disaster Reduction launched the world disaster reduction campaign of “Making Cities Resilient: My City is Getting Ready”. In the Guidebook on Planning and Building Disaster Resilient Cities there is more detailed information about the campaign.

United Nations International Strategy for Disaster Reduction announced Venice to be the most resilient city of the world as part of “Making Cities Resilient” campaign of UNISDR which has nearly 1000 members all over the world.

The award ceremony took place at a two day conference on “Building Cities Resilience to Disasters in Europe: Protecting Cultural Heritage and Adapting to Climate Change.”

Venice was praised award for its active role in protecting cultural heritage with the direct involvement of citizens.

Citizens participate directly in disaster risk reduction efforts through an effective municipal civil protection system. For example, consisting of citizen-volunteers a special group, expressly devoted to the protection of cultural assets in case of an emergency, was formed.

Mayor Orsoni said: “Venice can be a world icon, not of fragility, but of resilience with respect to the challenges of global change,” referring to the heightened risk of flooding from sea level rise, which results from climate change.

❖ Cultural heritage represent a source of cultural identity and a non-renewable human asset. The cities are living evidence, and a physical store, of this cultural heritage.

Italy, a store of cultural and artistic heritage for the world, is at tremendous risk due to massive urbanization and high exposure to a full array of natural disasters ranging from earthquakes, volcanoes, floods, landslides to forest fires according to Franco Gabrielli, the head of the Italian Civil Protection agency.

The floating city, the “Queen of the Adriatic”, has resisted during its long history without losing its captivating beauty and fascination over time thanks to the constant development of specific risk prevention and monitoring skills.

Improving resilience requires continuous work built on cooperation, information exchange and common action by all the actors involved, whose work is devoted to civil protection purposes. This is why disaster risk reduction is constantly ranked at the top of the political agenda.

The conference, held in Venice from 19 to 20 March, was attended by European mayors, representatives of local and national governments working on disaster risk mitigation in Europe, as well as regional organizations, such as Council of Europe, European Commission and private sector, three United Nations agencies - the UN Education, Scientific and Cultural Organization (UNESCO), the UN Human Settlements Program (UNHABITAT) and UNISDR United Nations International Strategy for Disaster Reduction.

Participants adopted the “Venice Declaration on Building Resilience at the Local Level towards Protected Cultural Heritage and Climate Change Adaptation Strategies.” The stated provisions are as follows:

- “Cultural heritage represents a source of cultural identity and a non-renewable human asset.



The Ancient City of Olympia, Greece, World's Cultural Heritage, UNESCO

The cities are living evidence, and a physical store, of this cultural heritage.

The urban disaster risks are one of the most significant threats to the protection of such assets.”

- “Sustainable development must integrate disaster risk mitigation and resilience building at all levels through planning across sectors to increase urban resilience to disaster.”
- “It is aimed to further the engagement of European local level city networks in embracing resilience to disasters with a particular focus on cultural heritage protection and climate change adaptation.”
- “The sustainable development strategies should reflect disaster risk mitigation measures at the local level for urban sustainability and resilient growth. The communities, cities and local governments should be encouraged to take advantage of existing sources of

information such as the Making Cities Resilient campaign website, national databases and other available information related to the activities of participating cities.”

- “The participants resolved to integrate the Ten Essential actions of the “Making Cities Resilient” campaign into local risk reduction plans as a way to foster partnerships for disaster risk mitigation with the private sector in order to accelerate efforts to make cities safer and to prevent the loss of lives and assets.”

Moreover, a decision was taken to encourage the use of the Local Government Self Assessment Tool, newly developed by UNISDR for collecting baseline information on risk mitigation activities undertaken by cities.

UNISDR’s Making Cities Resilient campaign, launched in 2010, not only demonstrates local leadership, but also raises awareness of what kind of efforts to reduce disaster risk are making cities safer and more resilient.

As part of their involvement in the campaign, member cities are developing and implementing local risk mitigation and adaptation strategies in line with the Hyogo Framework for Action 2005-2015 - Building the Resilience of Nations and Communities to Disasters, the world’s only blueprint for reducing disaster risk.

Preventive Conversation in the Cultural Heritage Project, Georgia

The conservation and maintenance of historic buildings and artifacts with an understanding of prevention is a crucial step in mitigating the damage which may originate from natural disasters like earthquakes, floods, fire and etc. In 1998, to promote economic growth through development of the tourism industry, a World Bank cultural heritage project was launched in Georgia to rehabilitate historic sites and revitalize cultural traditions.

Because Georgia is prone to seismic activity, preventive conservation was included in the project through an Emergency Rehabilitation Program. In fact, toward the end of project implementation, two earthquakes shook Georgia's capital, Tbilisi.

The project provided US\$ 1 million to beneficiary groups, NGOs and institutions to prevent the loss and permanent damage to cultural heritage throughout Georgia. It was implemented as a grant facility using a competitive process of selection.

The project more focused on the proposals for stabilizing buildings, archiving old manuscripts, and recording traditional songs and dances.

More specifically, thanks to the 58 projects over 100 cultural and historic treasures such as churches, monuments, frescoes, and archeological sites as well as folk music, photos, films, and dances were protected from further deterioration or irreparable loss.

The proposals to be provided fund were decided through a fully transparent process run by the Georgian Cultural Revival Board. The selection committee and beneficiary groups received assistance from the Fund for the Preservation of Cultural Heritage of Georgia in order to ensure compliance with required criteria, and to monitor and evaluate the implementation process.

The project also sponsored conservation and maintenance of historic buildings in Tbilisi's Old Town with financial support and assistance in order to prevent further deterioration. As is known, the appropriate maintenance

and rehabilitation of historic places increases resilience against disasters and reduces damage.

Tbilisi has enjoyed a period of revitalization and economic development as private investors joined in renovating important historic monuments and also invested in various businesses that have been successful in attracting residents back to the historic core.

Moreover, thanks to the media coverage of certain projects within the scope of Emergency Rehabilitation Program the program enables to raise the public awareness and attention about the conservation of various prosperous cultural heritage of Georgia.



Mtskheta, Georgia, World's Cultural Heritage, UNESCO

Key Lessons Taken from International Experience according to the World Bank;

- The key to effective protection of cultural heritage at risk is advanced planning and preparation.
- Advanced planning for cultural heritage properties should be designated by considering the whole property. The buildings, structures, and associated contents and landscape consisting of the concerned property should be approached with an integrated consideration.
- Advanced planning for the protection of cultural heritage against disasters should integrate relevant heritage considerations within the overall disaster prevention strategy for the property. (For example, a sprinkler system may be unwelcomed by the conservation experts, yet may be essential to save the entire collections.)
- Requirements for preparedness should be met in heritage buildings by means that have the least impact on heritage values. (For example, to decrease humidity levels applying waterproof coatings to the foundation of a building may be preferred instead of using a dehumidifier.)
- Heritage properties, their significant attributions, and the disaster response history of the property should be clearly documented as a basis for the + appropriate disaster planning, response, and recovery. (For example, risk mapping was employed successfully in Italy.)
- Maintenance programs for historic properties should be integrated with a perspective of “cultural heritage-at-risk”.
- Property occupants and beneficiaries should be directly involved in the development of emergency response plans.
- Security of heritage should be of the highest priority during emergencies.
- Following a disaster, every effort should be made to ensure the retention and repair of structures of features that have suffered damage or loss. (In other words, protection experts should be integrated into all phases of risk management including recovery.)
- Conservation principles should also be integrated to all the phases of disaster planning, response, and recovery. (If collections become waterlogged, air drying is preferable to adding heat since the latter may cause brittleness and exacerbate damage.)

Protection of Cultural Heritage in Turkey

❖ “Cultural Heritage” is one of the important issues for Istanbul in Disaster Management studies that are planned to be prepared with an integrated approach.

The massive destruction that the Marmara Earthquake caused in 1999, has necessitated the acceleration of preparations to take proactive precautions against the major earthquake expected to strike Istanbul during the next 30 years.

The biggest lesson taught by the disaster was that the only way to reduce the destructive outcomes created by disasters is to be thoroughly prepared.

From this standpoint, with the changes in disaster laws after the earthquakes in 1999, the emphasis placed on pre-disaster planning and preparations has increased.

In today's world it is absolutely essential, both in order to minimize the effects of disasters and as a precondition to public aid, to have local planning that allows actions to be taken at a local level, as well as making efforts to coordinate and implement risk mitigation preparation studies.

The new discourse of disaster management tells us that all types of authorities of every level and expertise have to work on risk mitigation planning and practice in close coordination with each other. In order to be completely successful, it is very important that every individual and establishment agency has to take precautions for risk mitigation.

“Cultural Heritage” is one of the important issues for Istanbul in Disaster Management studies that are planned to be prepared with an integrated approach.

All the assets Istanbul has in terms of its cultural heritage are located in the most active parts of the city. These assets play an important role in defining the identity, forming the recollection, and shaping the economy of the city. The fact that all the studies to protect the cultural heritage require experts on different subjects to work in collaboration with each other is what makes this topic mandatory.



Studies in Turkey for Protection of Cultural Heritage

On that note, concerning the risk mitigation studies for cultural heritage properties, priority is given to public buildings. Also, for cultural heritage structures, most of which are used as museums, libraries or buildings for educational purposes, it has been attempted to determine the earthquake disaster countermeasures.

When we scrutinize our past regarding the protection of cultural heritage, we observe state and societal traditions.

In Ottoman times, the first considerable step was taken in 1869 when the seven-point Antiquities Act was set up in order to institutionalize archaeological operations. This act is the first regulation concerning ancient arts.

This act secures archaeological excavations through state permission and puts a ban on the taking of artifacts found outside of the country and also guarantees the fact that immovable structures situated on the ground, such as tombs, will not be damaged.

With this act, the management of all the aforementioned issues is commissioned to the Ministry of National Education.

Thus, up until 1971, the foundation year of the Ministry of Culture, the public administration for archaeology, museums or cultural heritage in general, was conducted by several units under the Ministry of National Education.

The foundations, laws and general understanding regarding antiquities in the Ottoman Empire have devolved into the Turkish Republic. Even though some changes and additions have been made in accordance with the new understanding and the necessities of the current time, legal texts and the civil order have remained the same.

For instance, with law number 1710 that passed in 1973, natural entities such as fossils and skeletons have been included and qualified alongside cultural properties and monuments, Islamic social complexes (külliye), conservation sites, historical and archaeological sites, ruins and natural conservation sites.

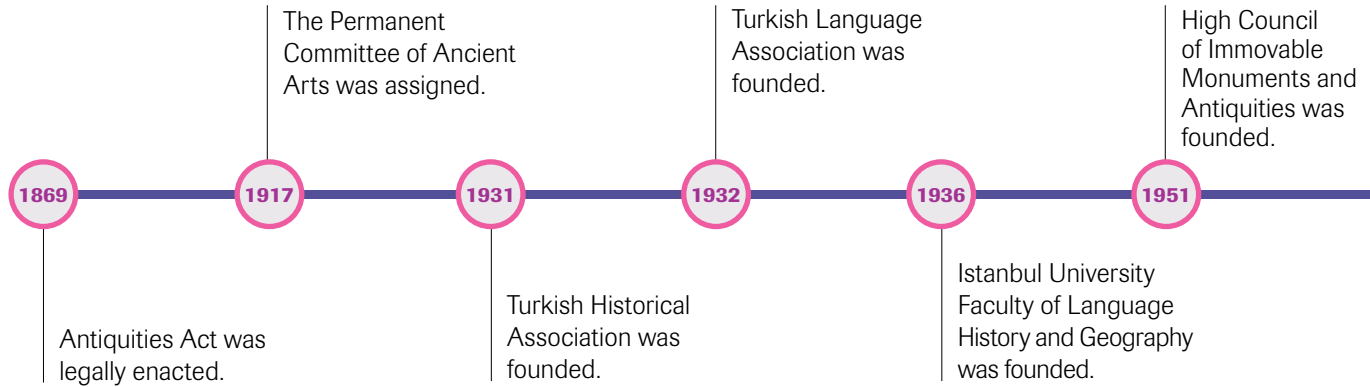
These developments have a lot to do with the 1972 Convention concerning the Protection of the World Cultural and Natural Heritage (The World Heritage Convention) ratified by UNESCO and are internal reflections of a general understanding of cultural heritage as well as the international regulations that Turkey is liable to.

In Turkey today, Law 2863 on the Protection of Cultural and Natural Property enacted in 1983 is the regulation defining the rules of all kinds of research, protection and administration regarding cultural properties and natural assets.

In 2004, this law was amended by the law 5226, with the changes reflecting developments in terms of cultural heritage management and finance around the world.

Article three gives a definition of concepts like “cultural property”, “natural property”, “conservation site” and “ruin”.

Important Dates Regarding the Studies for Protection of Cultural Heritage



❖ Turkey is a country with a rich range and amount of cultural heritage on an international level, which makes Turkey liable in the international arena.

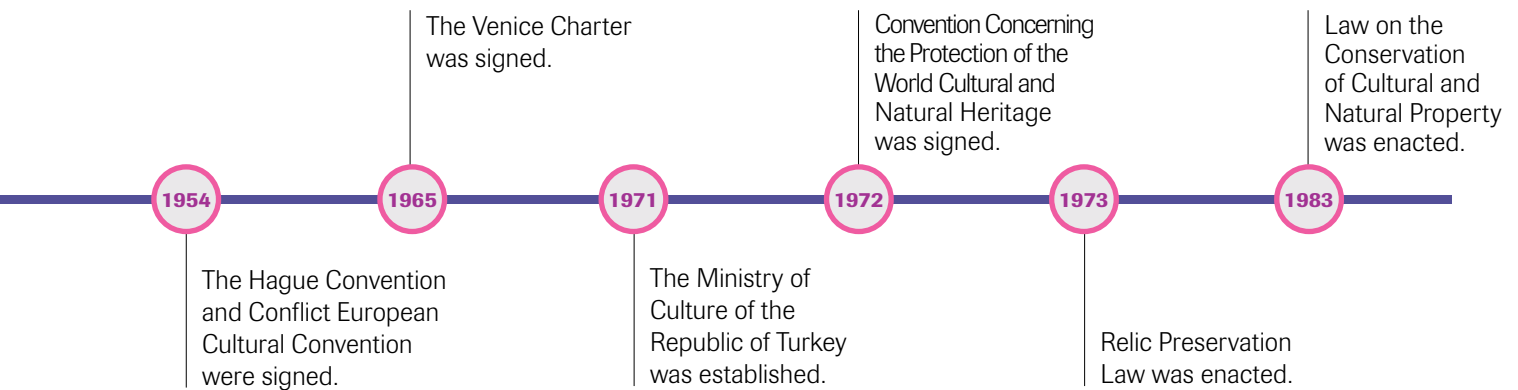
According to the new approach that accepts cultural property not as a creation but as a unity expressing scientific and cultural values, “cultural property is regarded as property on the ground, under the ground or underwater that pertains to science, culture, religion and fine arts of, before and after recorded history or that is of unique scientific and cultural value for social life before and after recorded history”.

Natural property is described as “all assets on the ground, under the ground or underwater pertaining to geological periods, prehistoric periods until the present time, that is of a unique kind or require protection due to their characteristics and beauty”.

The concept of site, one of the basic units of both protection and management, is defined as “cities and remains of cities that are a product of various prehistoric to present civilizations that reflect the social, economic and architectural characteristics of the respective period, areas that have been stages of social life or the sites of important historical events with a concentration of cultural property and areas the natural characteristics of which have been documented to require protection”.

Turkey is a country with a rich range and amount of cultural heritage on an international level, which makes Turkey liable in the international arena.

For this reason, all the establishments taking part in the process of protection should be aware of all the international developments and decisions as well as the national framework regarding protection and should communicate on the same level.



Turkey ratified many decisions of the Council of Europe and UNESCO; Turkey turned the Venice Charter (1964), Convention Concerning the Protection of the World Cultural and Natural Heritage (1972), Convention for the Protection of the Architectural Heritage of Europe (1985), European Convention on the Protection of the Archaeological Heritage (1992) into part of its domestic law by becoming a signatory country.

Turkey is one of the most unique countries around the world in terms of its cultural heritage. The habitable conditions enabled different civilizations to settle down in this area and produce numerous works which express themselves.

Urban and rural traditional settlements, archaeological sites, single buildings, tangible-intangible cultural heritage values which also involve using the traditions of these areas to build up the reliable starting points for planning the future by forming memories of past cultures.

These activities were created at unique times throughout history, therefore it is impossible to replace them in the case of their destruction.

Their formation and the values added on them within the process require the continuity of their existence from past to future being independent from time.

A historic environment, group of buildings, a single building, and the imposed procedures on these buildings should contain some values in order to be defined within tangible-intangible cultural heritage.

These values are defined in A Charter for Turkey on Architectural Protection and Restoration whose studies are still ongoing at a national level:

Historic Value

Historic value is understood according to two different criteria: The first criterion is explained by the relation of the building or the group of buildings to an “event” having left a mark in history of the settlements; while the second is explained by “antiquity”, depending on the age of the heritage unit.

Continuity Value

This is the case where the building is safeguarded by being used and carried into the future through having a place in modern life as part of the continuity of the use of the cultural property in the direction of “a future for our past” and finding a place for itself in modern society.

Memory Value

People and memories of the society related to events in the past may be identified with a building in some cases. Some buildings or groups of buildings are the witnesses of an event in history; they gain value owing to being associated with those events by the people of that area or of the whole country.

❖ A historic environment, group of buildings, a single building, and the imposed procedures on these buildings should contain some values in order to be defined within tangible-intangible cultural heritage.

Mythological Value

This regards the building or the area being linked to a legend or a myth.

Aesthetic and Artistic Value

This involves understanding of the design of the cultural property, its ornamental features, the appreciation level the property has attained for the community and the quality.

Technical and Technological Value

This is related to the quality and the level of technical, technological, structural, material and craftsmanship standards of its period.

Authenticity Value

The buildings carry authenticity value in the event that they have conserved all the characteristics of their construction period and the marks of the historical layers having been preserved untouched until today.

Authenticity is required in the location, design, material, and craftsmanship.

Rarity Value

The buildings and their structural elements whose aspects have been destroyed in the course of time carry rarity value.

Uniqueness Value

The buildings or their structural elements which are unique in the context in terms of types of building, its architectural style and its designer or the ones extant on its own carry uniqueness value.

Group Value

This value arises from the examples of architectural heritage taking place together within the frame of the structural and semantic context.

Economic Value

The building and its location have economic value. Economic value should not be considered as a monetary and measurable value. This value stems from the building being cultural property, or it has been subjected to a protection act that takes place in this context.



Hagia Sophia Museum Featuring Various Values Related to Cultural Heritage

Use Value

It is the value added by the continuity of the authentic use of the building or the new way of usage provided by the community.

Traditional Value

This is the value reflecting the settled traditions, lifestyles, beliefs, and habits of the community that constructed the building.

Educational Value

It is the source value which gives tangible and intangible information on the buildings regarded as a reflection of life in relation to the space, the communities having lived in different periods and their social, cultural, economic, and political lives.

Social Value

The architectural buildings (buildings, group of buildings and building units) which reflect the living of the community having produced them carry social values since they promote social identity and a sense of belonging.

Multi-Layer Value

It is the value defining the relations of the cultural properties in the multi-layered and multi-cultural settlements with the other properties belonging other periods. It involves the purposes of global protection within the framework of these relations.

These values define the quality of the cultural heritage and economic value is not defined in this context.

The elected ones, the owners of the buildings, the local decision makers, and the citizens should know that the protection of the cultural properties that they own is a necessity for global protection; they should realize that the leading motive for protection is not the fact that they know these cultural properties affect their local economy in various ways.



Süleymaniye Mosque

ISMEP's Studies



Cultural Heritage Protection

Activities of ISMEP

❖ In 2012, a study named “A Charter for Turkey on Architectural Protection and Restoration” that was started within the cooperation of ICOMOS Turkey, Yildiz Technical University, IPCU and Istanbul Technical University has a defining role for main road map of these studies.

One of the main components of ISMEP Istanbul Seismic Risk Mitigation and Emergency Preparedness Project which was founded in February 2006 in order to prepare Istanbul against disasters -especially for earthquake- is to protect cultural heritage.

Within the scope of ISMEP there are studies for evaluating buildings considered as cultural heritages in terms of seismic risks and for establishing reserving projects that will ensure reducing earthquake risks for exemplary structures.

A protocol was signed in 2006 between Istanbul Project Coordination Unit and the Ministry of Culture and Tourism for developing proactive measures that can be taken in case of an earthquake for cultural heritage structures that is used by or belonging to the Ministry in Istanbul.

Before this initiative, within the scope of restoration works of architectural heritage structures, it is determined that there is a need for evaluating damages in the existing buildings and also for a detailed study of historical structures within the context of below topics in case of an earthquake;

- Behavior pattern,
- Damage scenarios,
- Measures that can be taken,

Activities for reducing the destructive effects of disaster require coordination between organizations as well as it is an important factor to ensure community to participate in the risk mitigation planning process. Cooperation between each effect level in mitigating disaster risks for cultural heritage assets is critically important.



Topkapı Palace and Sultanahmet Square, Historical Places of Istanbul in World Heritage List

It is obvious that cultural heritage buildings can survive and accomplish an integrity only with the existence of their users and being used with appropriate functions.

Therefore improvement works should be carried out in order to reserve and sustain the authenticity of the structures. Cultural Heritage reserving related studies must be handled in an integrated approach.

This means, an approach taking both abstract and concrete points of structures into account together must be adopted; ensuring improvement of physical status of structures, providing new functions when necessary and allowing sustainability of reservation.

In 2012, a study named “A Charter for Turkey on Architectural Protection and Restoration” that was started within the cooperation of ICOMOS Turkey, Yildiz Technical University, IPCU and Istanbul Technical University plays a defining role for a main road map in terms of these studies.

Following the completion of draft report of charter study, the works of Symposium named “Preserving of Cultural Heritage In Case Of International Risks: Opportunities and Threats” held by Yildiz Technical University, ICOMOS ICORP, Committee of Preparation for Risks of International Consul of Monuments and Sites and IPCU in October 2012, still continue.

One of the main targets of ISMEP is to integrate historical assets and cultural heritages in Istanbul with an extensive risk mitigation plan, and with this work it is aimed to include cultural resources into planning within the current policies and programs.

This work conducted within the scope of ISMEP will increase the ability of understanding the values of cultural heritages which belong to local authorities in any place of Turkey and also the risks they face, and will provide a chance to reveal exposure to natural disasters and human based threats with reports and projects.

Findings and Suggestion Development Work

Before starting ISMEP Cultural Heritage activities, international and national studies were reviewed, and substructure and suggestion development works were performed for the studies to be performed most up-to-date technologically.

According to this, before starting the activities in scope of ISMEP, the methods of restoration works currently performed by Ministry of Culture and Tourism were examined and the affect of this method in terms of reduction the disaster risks on these cultural heritage assets was studied.

On the other hand while determining the road map to be followed for Cultural Heritage buildings; technical staff of Istanbul General Directorate of Relief and Monuments and IPCU researched the literary, reviewed current examples and revealed firstly the necessity of Inventorying Istanbul's Cultural Heritage Buildings and Reviewing Their Multi Disaster and Earthquake Performances.

With "Inventorying Istanbul's Cultural Heritage Buildings and Reviewing Their Multi Disaster and Earthquake Performances" project, literary research and field work the below tasks will be performed quickly;

- Determining the buildings to be examined,
- Creating earthquake oriented inventory of specified buildings,
- Evaluating their multi disaster risks,
- Determining risky buildings,
- Prioritizing the structures.

After analyze of current status, it is evaluated how IPCU may support preserving historical and cultural heritages within the scope of ISMEP locally.

In order to activate within the scope of ISMEP, for the first suggestions were accepted for historical and cultural heritage buildings, then these suggestions were evaluated and lastly the schedule of specified actions were planned.

Although the buildings are collected under 26 headings, due to their different architectural designs, courts were divided into subsections, and these subsections were divided into building units for ease of review. Within the scope of project, there are 176 building unit which are being such an historical and cultural heritage.



Zeyrek Mosque, Historical Places of Istanbul in World Heritage List

Resource Organization

Stage 1: Evaluating the Support of Related Units of Community

Before all of these extensive studies started, it was necessary to make a large and joint promotion for planning team of historical assets and cultural resources.

At this point; while data from community's different fractions related to matter were included into planning activities, various definitions, perceptions, evaluations related to historical/cultural heritage were considered. It is ensured that planning team to refine and use this highly extended data by data mining.

When a common definition was specified, basis of second stage, in which assets and resources being evaluated and determined, was established.

There are many resources offering an insight to researches that can be used in reserving historical/cultural heritage.

At the beginning of risk mitigation planning;

- Compiling building information in Ottoman archives,
- Reviewing university dissertations prepared about these buildings,
- Revealing resources on hand (and negotiating with archive keepers and planners in addition,
- Collecting information of each building in-situ and familiarizing cultural heritage buildings

Stage 2: Establishing the Planning Team

In stage of establishing planning team, each team member was selected considering him/her being expert to work on cultural heritage and in a way there will no gap within the big project.

Principal provisions for determining members of ISMEP Cultural Heritage Planning Team

are as follows;

- The organizations working on historical/cultural heritage buildings, including archive keepers,
- Communities related to central, regional and local cultural heritage buildings,
- Cultural Heritage Protection experts having knowledge about Reserving regulations, specific regulations and possible sources of funds,
- Related departments of universities in Istanbul,
- Museums and archives in Istanbul
- Non-profit protection organizations,
- Cultural Heritage Protection experts having knowledge about Reserving regulations, specific regulations and possible sources of funds,

These provisions were reviewed carefully and the required planning team was established accordingly.

Risk Assessment Steps



❖ Vulnerability assessment used in creating risk profile was considered in three different dimensions.

Stage 3: Joining the Related Components

There are a few methods to collect data from community related to protection of cultural heritage in planning disaster risk mitigation. Common methods are community meetings, surveys and visual diagnosis researches. Community meetings are useful in building public awareness in disaster fighting plans, in learning alternative risk mitigations usable in preserving cultural heritage buildings and informing the public about implementations. It is, therefore, implemented in at least some key stages of risk mitigation planning process by planning team.

These key stages are specified as follows:

- Documenting risk assessment results relating to our findings,
- Discussing alternative risk mitigation actions relating to risk mitigation strategy while defining our purposes.

Assessment of Cultural Heritage Risks

Within the scope of ISMEP Cultural Heritage Preserving activities, the usage of specified resources and their risks on historical buildings were evaluated. This risk evaluation was performed in 4 steps; Specifying the Risks, Creating Risk Profile, Inventory Study Related to Cultural Heritage Assets and Damage/Loss Estimation Works.

Step 1-2: Specifying the Risks and Creating Risk Profile

For the risk mitigation plan, it is necessary to specify firstly cultural heritage components under risk and to specify the risks might occur accordingly. So, planning team firstly specified the threats and high vulnerability values causing the risk and based on this data, created the risk profile made for cultural heritage buildings in its authority region.



Historical City Walls of Istanbul, World Heritage List

Vulnerability assessment used in creating risk profile was considered in three different dimensions; Geological Layer Scan Geological and geotechnical data were compiled and used for estimating the soil profile around the historical building on list.

Earthquake Risk Evaluation

Specific to Field In reference ground conditions, field specific earthquake risk evaluation was performed.

Earthquake Risk Evaluation

Earthquake Risk Evaluation was performed within the frame of probability calculus or causation. The final aim is to be reliable while classifying vulnerability.

The activities conducted within this scope;

- Updating and changing data collection methods for different procedures,

- Evaluation unit classification relating to individual buildings and groups to which different evaluation procedures may be implemented.

This information is used as a start point of 3rd and 4th steps of risk evaluation related to historical assets and cultural resources. And during the integration of historical buildings with current risk mitigation plans, it was not necessary to repeat 1st and 2nd steps.

Within the preparation of 3rd step, current threats specified in planning field and their risk profiles were reviewed.

And Field Investigation, a separate study that for determining buildings' current status, and reviewing material degradations and deformations in situ and recording in plans, were performed under a different heading.

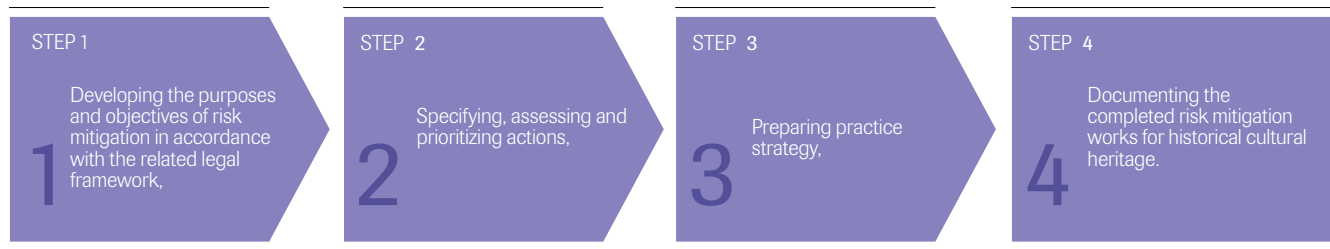
Step 3: Inventory Study Related to Cultural Heritage Assets **In this step, Cultural Heritage**

Assets likely to be affected in case of a dangerous situation were determined.

In this scope, below activities were performed;

- Inventorying cultural heritage assets in planning field and transferring them into digital maps,
- Preparing a two layered map as one with the determined risk map of planning filed in 2nd step of risk evaluation process and as the other with "cultural heritage assets", therefore seeing which asset and resource is being exposed to risk resulting from the threat,
- Reviewing "cultural heritage" map settled in risky areas due to threats and determining the number of these assets,

Risk Mitigation Actions and Practice Strategies for Protection of Cultural Resources



- Compiling the data of historical assets likely be affected from a potential disaster and data of each resources and transferring them into GIS database (This information is necessary in the 4th step of risk evaluation process),
- Reviewing the date of cultural heritage and features of each asset, and revealing their protection requirement priorities. Therefore the information to be used in 3rd step of risk mitigation planning process was obtained.

Geographic Databases and Data Sharing

It is important to create and use Geographical Data System based information for specifying density of cultural heritage resources and for defining better the risks they face.

CBS allows us to see historical assets in active earthquake zone and gully at a glance.

As it is very important that collected data to be classified and interrogable for offering a sight to future works, it was necessary to establish a GIS database including buildings' plots.

And sharing buildings' plots with disaster Management via this database, allows knowing how and where to intervene in a possible disaster.

Step 4: Performing Damage/Loss Estimation Works

In this stage the answer to "which cultural heritage asset's damage or destruction causes an irrecoverable loss in terms of both economical and resource" was investigated.

Data collected in 1st, 2nd and 3rd steps were used to estimate the potential loss of cultural heritage that might be affected from dangerous events.

In this step, works, totally protection oriented, focused on determining structural vulnerability in percent and what-to-do later for these buildings.

Before estimating the losses, it was checked if had been used as a part of risk mitigation planning works, the calculations for this purpose were used, and adaptations that are necessary for historical values were implemented.



One of the Historical Places incorporated in World Heritage List, Süleymaniye

Preparing Disaster Risk Mitigation Plan for Cultural Heritage Assets

Risk mitigation actions and implementation strategies were determined for preserving historical assets and cultural resources specified. This process consists of four main steps:

Step 1:

Developing risk mitigation purposes and targets within the line of definitions of legitimating related to preserving historical environment-building,

Step 2:

Specifying, evaluating and prioritizing the actions,

Step 3:

Preparing an implementation strategy,

Step 4:

Documenting risk mitigation works completed for historical assets and historical/cultural heritage.

Implementing the Plan and Monitoring the Process

In the implementation stage of risk mitigation plan, the new collected data about cultural heritage buildings were inserted into the plan by planning team.

Protection priorities were clearly identified; new information was obtained about the opinions of public management on preserving these resources; other risk mitigation ideas taking a shape in other parts of risk mitigation plan were revealed; and certain asset/resource specific risk mitigation was investigated if it is efficient or not.

During the implementation of risk reduction plan for cultural heritage buildings, planning team needed to review and update evaluation results using inventory information.

Although this kind of updates be performed each ten years, it is necessary to update more frequently in some situations such as increased population or a serious disaster.

It is believed in that inventory information is better to be updated along with local risk reduction plans performed each five years in terms of historical and cultural heritage.

❖ Project consists of 3 stages. Within the scope of project, scanning the literary, evaluating buildings' earthquake and multi disaster performances and transferring obtained data and evaluations into a database were performed.

Disaster Preparedness Studies with ISMEP in the Cultural Heritage Buildings of Istanbul

“Inventory and Multi Disaster Performance Evaluation Project for Buildings in Scope of cultural Heritage under the responsibility of Ministry of Culture and Tourism in Istanbul”

In the context of this project, for reviewing 26 building complexes, all building related data was collected, building information was collected in-situ, expert evaluations were performed by both in-situ and mathematical methods and each building's risk level was prioritized.

Within the scope of this project, ISMEP, cooperated with ARS Progetti s.r.l. (Italia), SPC Studio Progettazione e Controlli s.r.l. (Italia) and Consultancy for Conservation and Development companies performing internationally.

Project consists of 3 stages. Within the scope of project, scanning the literary, evaluating buildings' earthquake and multi disaster performances and transferring obtained data and evaluations into a database were performed.

Literature Review

A wide range of resources were reviewed during the stage of scanning literary.

Some of resources reviewed;

- The Ottoman Archives of the Prime Ministry
- Istanbul General Directorate of Relief and Monuments Archive,
- University and Research Institutes' Archives,
- Published dissertations and papers

FACTOR 1	SENSITIVITY OF INFORMATION,
FACTOR 2	REVIEWING THE REQUIRED REGULATION
FACTOR 3	COORDINATION/AGREEMENTS BETWEEN ORGANIZATIONS,
FACTOR 4	EVALUATING AND UPDATING THE PLAN,
FACTOR 5	UPDATING THE INVENTORY INFORMATION

- Building related data, drawing and photos by scanning archives of General Directorate Of Land Registers,
- Board Decisions, documents related to repairs performed so far and documents related to damages occurred during the earthquakes in past.

Obtained documents were compiled and classified in an inventory system.

Evaluating Earthquake And Multi Disaster Performances of Structures

Within the light of data from field and literary scanning of “Inventory and Multi Disaster Performance Evaluation Project for Buildings in Scope of cultural Heritage under the responsibility of Ministry of Culture and Tourism in Istanbul”, the issue in question was examined by academic specialists.

As a result of these evaluations, risk levels of buildings were determined.

For the purpose of developing a plan for determining priorities in structural improvement and strengthening according to the performance levels of buildings;

- Preparing structural and non-structural degradations and drawings of each historical building by specialist teams,
- Taking the information related damages of earthquakes in past and occurred geometrical changes into account, earthquake performance evaluations according to field observations of specialists,
- Using Famive and Vulvault procedures, the possible crashing mechanisms were investigated.

In quantitative evaluation; experts having years of experience created possible damageability scenarios considering the factors such as distance to fault, earthquake damages and repairs in past compiled from Ottoman Archives and additional function-related modifications.

In qualitative evaluation, buildings were examined with software developed by Prof. Dina D'Ayala, and determining the possible crashing mechanism of masonry constructions.

Within the line of works performed above reports including expert opinions and suggestions for each building.

These reports provide information about the quality and quantity of tests and reviews that must be performed in terms of earthquake safety on buildings in question.

❖ It is desired to develop this database having the characteristics of inventory with feedbacks from groups those can access it.

By creating the website, promoting project/ database and providing passwords to Institutes and Universities, it is planned to reach a large audience.

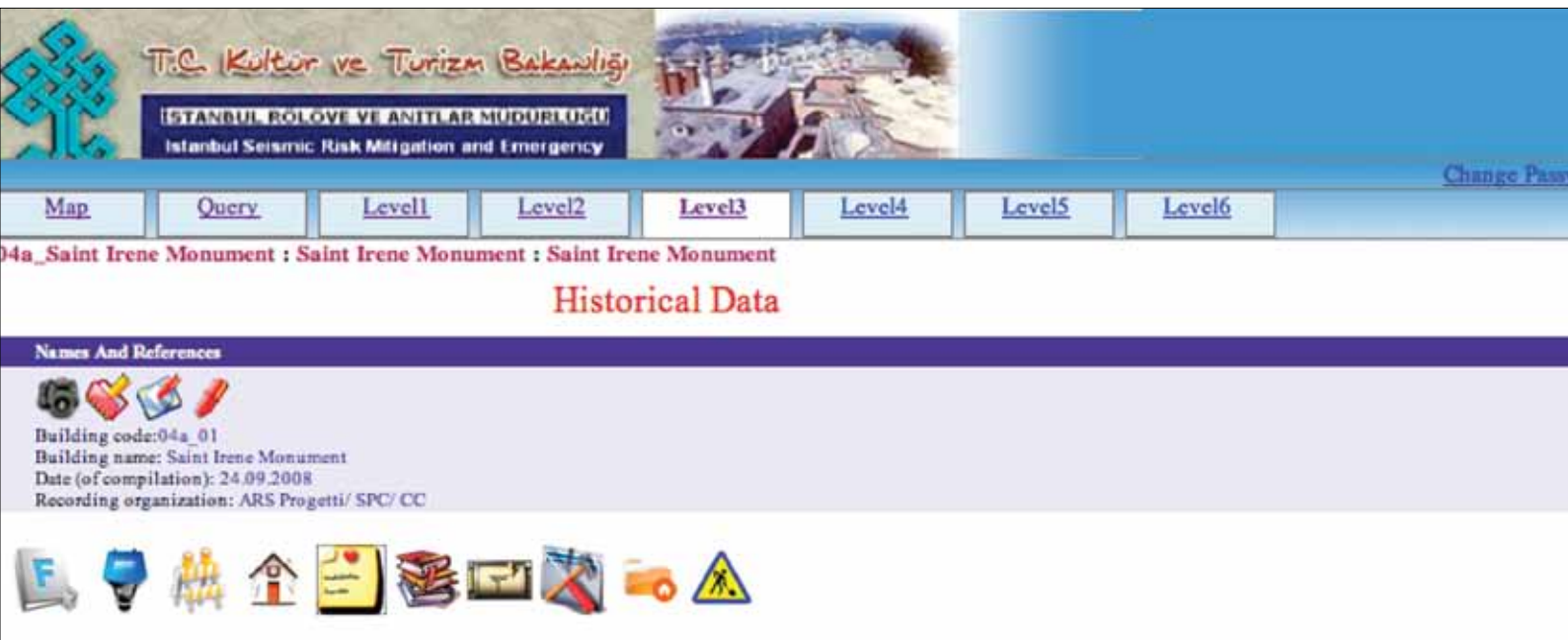
Transferring of Data and Evaluations into Database CBS (Geographical Information System) based information system that ensures investigating spatial and oral data and evaluations compiled from “Inventory and Multi Disaster Performance Evaluation Project for Buildings in Scope of cultural Heritage under the responsibility of Ministry of Culture and Tourism in Istanbul”, is available firstly by Ministry of Culture and Tourism and all units, and Universities and Institutes and community via Internet.

- Public user can access summary information related to buildings on Internet,
- Educational organizations such as Universities and Institutes can access to restricted information with password provided,
- And the units of Ministry of culture and Tourism can access all database.

The server and storage units and required software for sharing database in question were supplied by Istanbul Special Provincial Administration, Istanbul Project Coordination Unit.

Compiled and collected data within the scope of project was imported to server that is placed in Istanbul General Directorate of Relief and Monuments.

The staff of Istanbul General Directorate of Relief and Monuments were trained on 2nd December 2008 on using database.



GBS (Geographic Information System) based Information System

Database updating works are performed by officers assigned by Istanbul General Directorate of Relief and Monuments. It is desired to develop this database having the characteristics of inventory with feedbacks from groups those can access it.

By creating the website, promoting project/database and providing passwords to Institutes and Universities, it is planned to reach a large audience.

Database was commissioned in 2008 in order to Istanbul General Directorate of Relief and Monuments' tech staff to perform the repairs according to reviews and findings found by experts in database and enter new findings in restoration on buildings during the works coordinated by Ministry Culture and Tourism.

This project is a first with in the context of creating an earthquake oriented inventory system, considered as a pilot project, and in future it can be implemented all cultural heritage buildings in Istanbul and can be developed by feedbacks.

On the other hand in can be an opportunity for sharing and promoting the project and database, preserving cultural heritage buildings and establishing earthquake awareness.

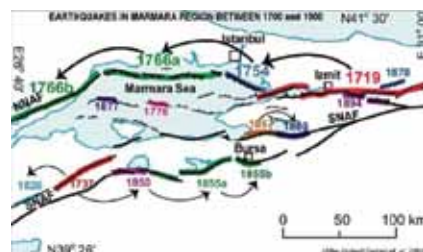
It is necessary to create and commission a separate unit by updating inventory, promoting in a large scale and share with the experts in short time.

Inventory Preparation and Multi-Disaster Performance Assessment for Cultural Heritage Structures (Hagia Irene Monument)

LITERATURE REVIEW



Anonymous Gravure picturing the major Istanbul earthquake in 1509



Earthquakes between the years 1700 and 1900 in Marmara Region

FIELD WORKS

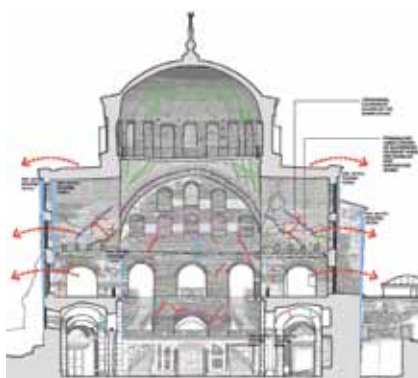


Drafts of current material damages and weak places in Hagia Irene Monument

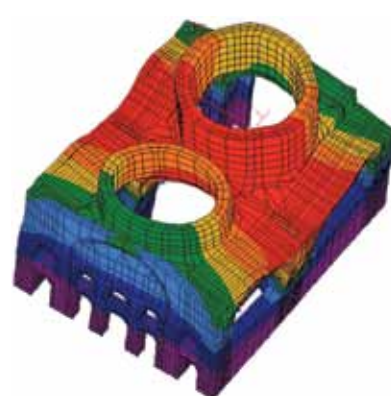


Drafts of current material damages and weak places in Hagia Irene Monument

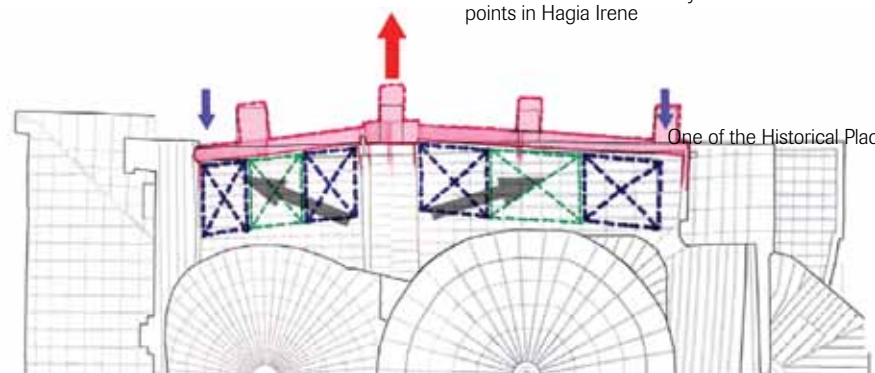
DISASTER VULNERABILITY ASSESSMENT



Drafts of deterioration analyses and transition points in Hagia Irene



Experimental scanning



Shaking Table Test



Computer aided building evacuation modeling

Hagia Irene Monument





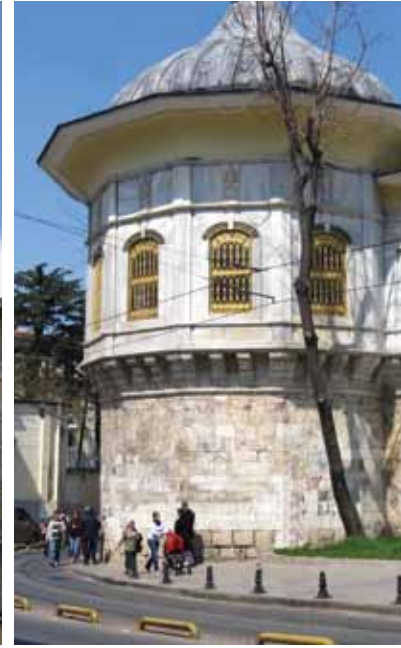
Yedikule Dungeons



Bank Note Printing House



Yıldız Palace Complex



Alay Kiosk

Historical and cultural Buildings Evaluated within the Scope of Study

MONUMENTAL BUILDINGS

ANATOLIAN FORTRESS
RUMELIAN FORTRESS
SEVEN TOWER DUNGEONS

PALACES, ADMINISTRATIVE BUILDINGS AND HOSPITALS

MATBAA-İ AMİRE – MINT BUILDING
İBRAHİM PAŞA COURT
TOPKAPI PALACE COMPLEX
YILDIZ PALACE COMPLEX

CIVIL ARCHITECTURE

ATLAS BUILDING
SEYRAN BUILDING
SÜMERBANK BUILDING
SEKJUKIAN HOUSE
RECEP PEKER HOUSE

MUSEUMS

ARCHAEOLOGY MUSEUM COMPLEX
HAGIA SOPHIA MUSEUM

LIBRARY AND EDUCATIONAL BUILDINGS

ATIF EFENDİ LIBRARY
BEYAZIT ORHAN KEMAL CITY PUBLIC LIBRARY
ÇİNİLİ ÇOCUK LIBRARY
FATİH MİLLET LIBRARY
HEYBELİADA H. RAHMİ GÜRPINAR LIBRARY
RAGIP PAŞA SOCIAL COMPLEX
SELİM AĞA HANDWRITTEN WORKS LIBRARY
SELİMİYE PUBLIC LIBRARY
SÜLEYMANİYE HANDWRITTEN WORKS LIBRARY
ŞEMSİ PAŞA LIBRARY
BÜYÜKADA PUBLIC LIBRARY
BEYAZIT STATE LIBRARY AND WORKHOUSE BUILDING
GALATA MEVLEVİ HOUSE
MİHRİMAH SULTAN CHILDREN LIBRARY



Mecidiye Kiosk

“Preparation of Earthquake Performance Evaluation and Reinforcement Suggestions for Buildings in Istanbul under the responsibility of Ministry of Culture and Tourism” Project

With implementation of “Inventory and Multi Disaster Performance Evaluation Project for Buildings in Scope of cultural Heritage under the responsibility of Ministry of Culture and Tourism in Istanbul”, a second project’s preparations were started. In this second project, 3 building having different structural systems and built in different periods of time as exemplary for later projects. Specified three building;

1. Hagia Irene Monument
2. Archaeology Museum
Additional and Classic Building
3. Topkapı Palace, Backyard -
Mecidiye Lodge

As Hagia Irene Monument is a byzantine structure having dome and arch, as Archaeology Museum and additional ferroconcrete building includes assets in it, and as Mecidiye Lodge is a stack structure example from last period of Ottoman Empire, they are selected as prototypes; performing prescribed tests and analyses in the reports of previous projects, evaluating earthquake performances and structural improvements are main topics of this project.

In the first stage archive documents, expert opinions and evaluations from previous project were reviewed, research of three buildings were deepen and tests and analyses requested to increase information level about structural status of buildings by courtesy of Conservation Board.

Mathematical modeling was prepared for each 3 building, and they were exposed to possible earthquake scenarios expected in Istanbul, and vulnerability was examined.

Weakness points and problems of buildings were determined and projects including measures against to these weaknesses were prepared.

Project does not only include structural improvements but also architectural interventions.

Also a 1/10 scaled model was built for Hagia Irene Monument; expected earthquake was simulated on vibratory table, and a study was performed for comparing with damages in mathematical modeling.

On the same model, improvement measures suggested by experts were implemented and expected earthquake were re-simulated. So suggested method was cross checked.



Istanbul Archeological Museum, Retrofitting Project within ISMEP

❖ During the works, measures were taken for life safety of working staff within the scope of Occupational Health and Safety Law.

After earthquake simulation, factors such as the period in which cultural heritage buildings built, its region, their exposed changes, additions, interventions such as modification of inner plan schema/current usage status were taken into account and preliminary investigation processes were developed which assesses earthquake load the buildings would be exposed in a possible earthquake.

According to material analyses and earthquake behavior analyses, prepared relief and restitution projects, approximate costs of restoration-reinforcing projects were determined. Also summary of works performed (including main stages, encountered challenges, their solutions and acceptations) was compiled as a handbook. For evaluating the buildings statically, test plan relating to tests required was approved by Conservation Board.

The test plan prepared for assessing the buildings in terms of their static strength was approved by Protection Board.

Relief projects were delivered in December, project was completed in July 2009. Istanbul Archaeology Museum works started in July 2012, with carrying assets, emptying areas, demounting and assessing data after demounting. After site delivery on 17.08.2013, it was requested the museum to be closed completely and works on approximately 25% of building is started for Istanbul Archaeology Museums Classic Building Restoration and Reinforcing implementations.



Istanbul Arkeological Museum

Restoration and reinforcement will be implemented part by part and the works will be performed so museum will be mostly open for visiting. Within the scope, works go on Classic Building of Istanbul Archaeology Museums built as 3 parts in 1891, 1903 and 1907 respectively.

Many methods were investigated for reinforcing Archaeology Museum, at last it is decided to intervene the building by using recoverable methods and contemporary additions. Care was taken to preserve cultural and architectural values while reinforcing.

An appropriate balance was established between reinforcing and protection, and principles such recoverable reinforcement, conserving volume and function were taken into account.

In case of an earthquake, to avoid the assets n Archaeology Museum getting damages earthquake performances of all tiles and walls are increased.

Besides, within the scope of work negotiations continue to avoid buildings get damaged during earthquake (seismic isolator etc.).

As a result of performed reinforcing and restoration works, it is ensured that building to provide desired performance levels (Service limit for earthquake having probability of exceedance of 10% for 50 years, Life Safety for earthquake having probability of exceedance of 2% for 50 years).

During the implementations, all movable assets were moved to warehouse and other exhibition areas; unmovable parts were protected from damages might occur during works with suitable measurements.

During the works, measures were taken for life safety of working staff within the scope of Occupational Health and Safety Law.

❖ Within the scope of our activities, four different workshops were held with the participation of experts in interdisciplinary fields; Turkish Declaration on Protection of Architectural Heritage was prepared and signed by the parties in March, 2013.

Workshops and Symposiums on Protection of Cultural Heritage

Within the scope of our activities, four different workshops were held with the participation of experts in interdisciplinary fields; Turkish Declaration on Protection of Architectural Heritage was prepared and signed by the parties in March, 2013.

“A Charter for Turkey on Protection of Historical and Cultural Heritage” Workshops September 2012 – March 2013
The studies which were started under the name of “A Charter for Turkey on Protection of Historical and Cultural Heritage” were concluded with the publication of “Turkish Declaration on Protection of Architectural Heritage.

This document adopts the provisions of “Convention Concerning the Protection of the World Cultural and Natural Heritage”, “European Convention on Protection of Architectural Heritage” and “Convention for the

Protection of the Architectural Heritage of Europe” as they are recognized as documents of national law having been accepted by the parliament with the Law No. 2658 of 14.04.1982, Law No. 3534 of 13.04.1989 and Law No. 4434 of 5.8.1999 respectively.

This declaration defines the main principles of protection of architectural heritage for each discipline that participate in the protection process and for the different components of the society. Within the declaration, the definitions concerning the architectural heritage, process and equipment of protection and elements to socialize protection are also included.

In 30 May, 2013, Special Provincial Administration Istanbul Project Coordination Unit, Yildiz Technical University, Istanbul Technical University and ICOMOS Turkey National Committee initiated their works with a common initiative all together with the purpose of protecting the rich Architectural



International Symposium on Cultural Heritage Protection

Cultural heritage of our country; contributing to the process of transmitting them into the future generations untouched; determining the principles which will guide authorities both in the solution process and in the legal practice area within the framework of Turkey and presenting those results in a single document called “Turkish Charter on Architectural Protection”.

Within the scope of our works, four different workshops were held with the participation of experts in interdisciplinary fields; Turkish Declaration on Protection of Architectural Heritage was prepared and signed by the parties in March, 2013.

The objective of the document prepared by experts of protection field is to create a resource in Turkey scale for a cultural policy to be shared with public and be internalized by the people.

This document defines the main principles of protection of architectural heritage for each discipline that participate in the protection process and for the different components of the

society. Within the document one can also find the definitions concerning the architectural heritage, education oriented at protection and elements to make protection internalized by people. The issues discussed under these studies are as follows:

Main Issues (Stylistic issues)

1. What are the basic arguments of supporting the idea of having an ethical document to direct the protection area in Turkey?
2. Should “Turkey Protection Charter” be general or thematic? Does it have to accept the main international document and set the basis of its local identity on the provisions of the international document?
3. What kind of a method should be chosen for the preparation of “Turkey Protection Charter”?
4. Is the general format of ICOMOS Local-Regional charters appropriate for Turkey?
5. Which method should be chosen: setting the basis of the “Turkey Protection Charter” on the general international format or to creating a new and different format and content?
6. To what extent the international concepts and protection values or other conventions signed by Turkey should be included in “Turkey Protection Charter”?
7. Is it necessary to have a part in “Turkey Protection Charter” which solely focuses on the problems specific to Turkey?
8. How should we include the new concepts and situations that introduce a change in modern architecture within “Turkey Protection Charter”?
9. How should we include the task, authority and responsibility of all actors working in the protection area (architect, civil engineer, archaeologist, art historian, chemical engineer, etc.) within the charter?

❖ Urban heritage is an indispensable part of the urbanized people and their identity. Therefore, this heritage needs to be transmitted to the next generations through cultural reference constituting the conscious and content of history and future.

Main Issues (Operational issues)

1. Is a commission study needed for conducting the process and preparing the drafts (if so, who and how)?
2. Within the charter, how can we formulate the social participation into protection area?
3. How can we enable this ethical document to get widespread and be more practicable?

Thematic Issues

Definitions, concepts

The relation between this document and other related policy documents

- Building a proper relation between this document and current major policy documents
- Overcoming the deficiencies of major policy documents concerning protection area
 - Culture policy,
 - Space usage policy in country scale,
 - Housing policy, etc.

Institutional Infrastructure

- Considering the well-being of whole environment in protection policy (integrated protection)
- Urban architecture means valuable and important historical structure heritage of a city that managed to survive for centuries, so it is safeguarded in order to protect the memories (experiences) and identity of a city. As well as human-made immovable properties that have a cultural and artistic value, the natural properties that were created as a result of location topography and climate are also considered and accepted as heritage.

This urban heritage is an indispensable part of the urbanized people and their identity.

Therefore, this heritage needs to be transmitted to the next generations through cultural reference constituting the conscious and content of history and future.

- Cultural Heritage Values
 - Values added to environment
 - Values obtained from environment.



Turkish Declaration on Protection of Architectural Heritage (Istanbul Riva Declaration)

- Sustainability of the Values
- Importance of Cultural Heritage
- Accepting Possible Changes in Protection Process and Determining the Precautions Required
- Reason of change
- Change in nature
- Change in already built areas
- Change in social environment

Protection Process

- Documentation of Cultural Heritage
 - Importance of inventory
 - Archiving
- Protection Principles
 - Authenticity
 - Integrity
 - Revocability of interventions conducted
 - Protection / use balance
 - Giving importance to maintenance and simple repairs, and scheduling this intervention periods

- Main Titles of Protection Projects
 - Gathering information (historical, structural and architectural researches)
 - Defining structural behavior
 - Defining structural problems
 - Defining problems relating to equipment
- Intervention Criteria
 - In the context of cultural property
 - In the context of consistency that try to use same solutions to solve similar problems
 - In the context of providing a balance between protection and use
- Types of Intervention
 - Maintenance, simple repair
 - Restoration
 - Reconstruction
 - Interpretation
- Protection Process Specific to Archaeological Properties

Participation of Public to the Decision-making Process in Protection

- Accepting people as the first group to carry out the protection process
- Sharing the results with public

Different Dimensions of Protection

Executive issues

- Organizing and managing the protection process both centrally and locally
- Area Management
 - Specifying cultural properties
 - Determining the partners in the process
 - Defining possible conflicts
 - Determining legal, administrative, monetary and technical means and methods
 - Carrying out SWOT analysis
 - Determining proper strategies and making a work calendar

- Personnel
- Giving importance to researches
- The need for keeping old handicrafts and structure techniques alive and reviving them
- Education for protection

Legal Issues

- A sufficient legislation
- Placing the protection legislation in a high position among others
- Financing of Protection Activities

- Current resources
 - Resources of central administration
 - Resources of local administration
 - Personal and/or institutional initiatives
 - The need for adequate and new financing mechanisms and partnerships
 - Reviving economic development by way of protecting urban heritage

Ethics of Protection

- Optimum qualifications to be looked for people which will work in protection process
- Relationships between different profession groups
- Re-organization of tasks of public organizations and institutions which will be responsible from protection directly or indirectly

- Determining main principles to comply on before and after implementation

Creation and Development of Protection Culture

- Developing a culture of protection should be an indispensable part of a country's culture policy.
- All nations have the right and liability to defend their cultural properties.
- The concept of protection should be dynamically handled and promoted.
- The social dimension within the process should not be overlooked.



Cultural Heritage Protection Symposium

Cultural Heritage Protection In Times of Risk:

Challenges and Opportunities Symposium 15-17 November 2012

Under the cooperation of Yildiz Technical University, ICORP -ICOMOS and Istanbul Governorship Special Provincial Administration Istanbul Project Coordination Unit, “Cultural Heritage Protection in Times of Risk: Challenges and Opportunities” international symposium was organized with the purpose of defining long term/short term and sudden or more extended risks; mitigating their effects; sharing the planned projects with the experts of the field and contributing to developing solution offers.

At the symposium, so many participants consisting of Public Institutions, Universities, Non-Governmental Organizations,

Turkish Armed Forces and Media representatives¹⁰⁷ of which were international participants from 36 different countries.

In total, there were 81 presentations at the symposium; 48 of them were speech presentations and 33 were poster presentations. Following are the issues discussed at the symposium:

- Risk mitigation at natural disasters
- Risk mitigation at human-based disasters
- Mitigation of risks stemming from urbanization
- Law and regulations on risk mitigation
- Risks arising out of tourism pressure

- Response and recovery activities at disasters
- Media’s role in disaster management
- Awareness and education concerning risk mitigation

On 16 November 2013 which was the 40th anniversary of adoption of UNESCO World Heritage Convention on 16 November 1972, Cultural Heritage Protection in Times of Risk: 2012 Istanbul Declaration was presented and accepted in the closing session of the symposium.

The final declaration was also read in the United Nations Global Platform for Disaster Risk Reduction held in May 2013, in the Geneva city of Switzerland.



TRT Istanbul Radio Building

Conclusions And Gains



Conclusion and Gains

The activities of ISMEP which have been carried out with the purpose of protecting important cultural properties of Istanbul that are listed in the world heritage list provided benefit in improving our respect for history, future, humanity and for cultural heritage assets thanks to its services in terms of historical and cultural properties in the city and with the help of knowledge, experience and new perspectives it gave us as a result.

While setting a target for protecting the broad cultural heritage assets created by ancient civilizations along with the responsibilities we personally have; the responsibilities of Istanbul, and of our country as a whole by considering the fact that these values are the common properties of the world; we also took into consideration the importance of transmitting these assets to future generations within the protection/use balance.

Solid steps have also been taken in order to continue these activities with new plans and concepts as a whole, by using the benefits of technology.

Above all, initiating the activities for protecting cultural properties in Turkey, an issue which has been neglected for years, is an important beginning.

When architectural structures which can be described as one of the most effective elements of culture are lost, the remaining properties become more vulnerable to dangers and societies experience major value losses.

Fortunately, these concepts are mostly considered in terms of architectural structures in international law documents too.

Transmitting these values to future generations is the responsibility of current generations in that this is the most important factor of creating national integrity.

Carrying out activities within the context of the project, we have created a database and inventory with an integrated protection approach for future by way of analyzing historical and cultural properties in the scale of architectural structures and the city that is shaped with those structures.

Forming a good example for future studies, this initiative works are important steps towards increasing such studies in our country. In this process, each and every stakeholder has made great contributions to the work with their valuable ideas and views.

Dissemination and Continuity of Cultural Heritage Protection Studies

The complementary activities to be carried out in the future by Istanbul Seismic Risk Mitigation and Risk Preparedness Project (ISMEP) are as follows:

- Increasing public awareness by carrying out activities on the social importance of cultural heritage and disaster risk = management in terms of heritage.
- Educating the architects, engineers and the technical personnel working on the project about the main approaches in preparation of protection projects for integrated disaster risk mitigation.
- Implementing international environment protection standards for reinforcement studies.
- Building a sustainable infrastructure in works of protecting cultural heritage properties by developing participatory methods and promotive mechanisms.
- Involving the employers and other related groups in disaster and emergency situation planning activities.
- Preparing manuals for the sustainability of protection following the structural enhancement and reinforcement activities on cultural heritage structures.
- Improving the legislation concerning construction in such a manner that will cover historical areas and buildings and supporting the studies to set national standards.
- Continuing activities oriented at developing financial incentive programs for local preparedness and seismic reinforcement for the benefit of historical and cultural areas.

❖ Istanbul Project Coordination Unit (IPCU) aims to continue its activities oriented at developing financial incentive programs for local preparedness and seismic reinforcement for the benefit of historical and cultural areas.

References

Ahunbay, Z. (2005), Doğal ve Kültürel Mirası Koruma Alanında Geçerli Uluslararası Belgelerin Türkiye'deki Uygulamalara Yansımaları" Korumada 50 Yıl (ed. P.İlgi, Yüce Aşkun), MSGSU Yayınları, İstanbul.

Ahunbay, Z. (1996), "Tarihi Çevre Koruma ve Restorasyon", Yapı Endüstri Merkezi Yayınları, İstanbul.

Binan, C. (1999), "Mimari Koruma Alanında Venedik Tüzüğü'nden Günümüze Düşünsel Gelişiminin Uluslararası Evrim Süreci", Yıldız Teknik Üniversitesi Yayınları, İstanbul.

Dağıstan Özdemir, M. (2005), "Türkiye'de Kültürel Mirasın Korunmasına Kısa Bir Bakış" http://www.spo.org.tr/resimler/ekler/f468c873a32bb06_ek.pdf

Delafons, J. (2005), "Politics and Preservation", E & FN Spon Publishing, London.

Dinçer, İ., Z. Enlil, Y. Evren, Kozaman Som, S. (2011), "İstanbul'un Tarihi ve Doğal Miras Değerleri: Potansiyeller, Riskler ve Koruma Sorunları" İstanbul Kültürel Mirası ve Kültür Ekonomisi Envanteri-2010, Bilgi Üniversitesi Yayınları, İstanbul.

Dinçer, İ. (2010), "Türkiye'de Kent Ölçeğinde Koruma ve Kent Planlamanın Yollarının Kesişmesi ve Yeniden Ayrılması: Protokol Alanından Yenileme Alanına", Dilek Özdemir (Der.), Kentsel Dönüşümde Politika, Mevzuat, Uygulama: Avrupa Deneyimi, İstanbul Uygulamaları (ed. Dilek Özdemir), Nobel Yayınevi, İstanbul.

Dinçer, İ. (2013), "Kültür Mirasının Korunmasında "Risklere Hazırlık" Kavramının Gelişimi" <http://www.mimarlikdergisi.com/index.cfm?sayfa=mimarlik&DergiSayi=378&ReclD=2906>

Feilden, B M., Jokilehto, J. (1993), "Management Guidelines for World Heritage Sites", ICCROM, Rome.

ICCROM (2005), "Definition of Cultural Heritage References to Documents in History" Working Group 'Heritage and Society' Selected by J. Jokilehto originally for ICCROM, 1990 Revised for CIF: 15 January 2005

Jokilehto, J. (1999), "A History of Architectural Conservation", Butterworth-Heinemann, Oxford.

Kayın, E. (2008), "Türkiye Koruma Tarihindeki Kırılmalar" Mimarlık, S.338, <http://www.mo.org.tr/mimarlikdergisi/index.cfm?sayfa=mimarlik&DergiSayi=354&RecID=1970>

ISMEP Guide Books

