The Risks to Cultural Heritage in Western and Central Asia

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Abstract
Today the cultural heritage of humankind is endangered not only by natural catastrophes and the exploitation of resources but also by economic and social problems and institutional weaknesses. Western and Central Asian countries contain a major part of the cultural heritage on the earth, but due to different problems common in developing countries, cultural heritage in such countries suffers from natural and non-natural risks. A lack of public awareness of various types of risks itself worsens the conditions in such countries. It is necessary to clarify the situation within the region regarding different categories of risk, and then considering how to devise measures for heritage sites that are truly endangered at present, as well as how to prepare for risk anticipated in the future.

This paper discusses and categorises the risks to cultural heritage in Western and Central Asia.

Keywords: risk; cultural heritage; Western and Central Asia

1. Introduction
Cultural heritage is subject to the impact of natural factors as well as damages induced by human-induced processes. The international community, feeling responsibility for preserving cultural heritage, has been concerned about risks to cultural heritage and is eager to find a solution to this situation.

Lack of identification and awareness of the causes of risks and of the nature of various possible dangers to the cultural sector by people living in areas with high cultural value has always been a common problem in developing countries, part of which are Western and Central Asian countries. Such a lack of awareness may lead to some risks being ignored and thus to being unprepared for protection.

In order to have a more practical approach to prevent damage and risk to cultural heritage it is necessary to have a clear understanding of the different types of risks to cultural heritage. At present, there is a need to deepen this understanding in such countries, to consider the true nature of risk in the light of regional conditions, as well as the causes of that risk and the countermeasures appropriate to it.

This paper aims to clarify common problems in cultural sector in West and Central Asian countries and to categorise such risks and to present actual examples for each case. Case studies discussed in this document show the wide extent of danger to world cultural heritage.

2. The Risks to Cultural Heritage
Western and Central Asian countries belong to developing countries. Western Asian countries are Armenia, Bahrain, Cyprus, Sinai (Eastern Egypt), the Gaza Strip, Iraq, Jordan, Kuwait, Lebanon, Oman, Pakistan (Balochistan only), Qatar, Saudi Arabia, Syria, United Arab Emirates, West Bank, Yemen, the Asian portions of Azerbaijan (Asian part only), Georgia (Asian part only), Turkey (Asia Minor or Anatolia only). In addition, its limits are sometimes widened to include Afghanistan, Iran, Pakistan, the African portion of Egypt, the European portions of Azerbaijan, Georgia, Turkey (Eastern Thrace or Rumelia), adjacent parts of Central Asia (Turkmenistan, Uzbekistan, Tajikistan) (Fig.1.(a)). Central Asian countries consist of Kazakhstan, Turkmenistan, Uzbekistan, Kyrgyzstan, Tajikistan, and smaller states like Azerbaijan (Fig.1.(b)). In these countries distinct and common factors are responsible for risks to cultural heritage. Four types of causes endanger cultural heritage in developing countries, in particular in Western and Central Asian countries (Abouseif 1994, Dixon, Scua, Carpenter and Sherman 1994, Cernea and McDower 2000):
1. Natural causes
2. Economic causes
3. Social causes
4. Institutional weaknesses
2.1 Natural Causes

A major part of the risk to cultural heritage consists of natural disasters. Natural risks can be categorized into sudden risks such as earthquakes, floods, major storms, and landslides, and regular natural processes such as rainfall, wind and temperature changes, which increase the vulnerability of cultural heritage.

Some built heritage of Western and Central Asian countries is in coastal areas and is exposed to high humidity and coastal erosion. Some of these areas are located in high seismic zones, where tall structures and minarets are highly vulnerable to seismic events.

Georgia, for example, is under permanent risk of a variety of natural disasters, such as earthquakes and floods. However, the traditional risk management system has been able to safeguard the country against vast damage from these disasters, although in some situations there has been a lack of preparedness in the field.

Tbilisi, capital of Georgia, was hit by a level-6 earthquake on 25 April 2002. Tbilisi Historic District, nominated for inclusion on the World Heritage List, was damaged greatly from the earthquake. The buildings within the District were already vulnerable to the earthquake as they had not been maintained for many years (Fig.2. and Fig.3.). After the earthquake many buildings were damaged and unsafe to use.

The Bam Citadel, Iran, the oldest and greatest complex of adobe structures, was devastated during the earthquake of 26 December 2003. The site was registered as a World Heritage Site in Danger in 2004 and international community has made a great effort for its restoration (Fig.4.) (Hejazi and Mokhtari 2005).
2.2 Economic Causes

Economic growth itself provides heritage with a set of economic causes of deterioration.

Economic and technological changes make traditional production systems different and push them out from old medinas and souks. The World Heritage cities and souks of Zabid and Old Shibam in Yemen are examples.

Infrastructure construction can cause major losses due to the construction of new roads, railways, airports, dams and new towns. For example, the underground transportation in Isfahan, a world-reknowned historical city in Iran, was planned to pass under Chahar-Bagh street, a national historical street dating back four centuries, which is supposed to be inscribed in the World Heritage List. But it was in danger of deep excavation that would lead to demolition of archaeological items underneath the street and to the loss of its historical value (Fig.5.).

The construction of railway between Shiraz and Isfahan, in Iran, in front of Pasargad (550 B.C.), one of the most magnificent ancient sites of Iran that is to be added to the World Heritage List, will put the site at risk (Fig.6.). By the construction of Sivand dam in Shiraz the water level behind the dam will rise and Pasargad will be in risk of being submerged under the water (Fig.7.).

Erecting electricity transmission towers near the Ferdowsi tomb, in Tous, Iran, which is expected to be added to the World Heritage List, has greatly damaged the buffer zone of the site (Fig.8.).

Agricultural development and the expansion of irrigation systems can ruin lands of archaeological values.

Air pollution in recent years has caused damage to historical buildings. Fig.9. shows the deteriorated wooden ceiling of Ali Qapu building, 16th century, in Isfahan, Iran. During last four decades the number of industrial plants and private cars has greatly increased and has resulted in worsened environmental pollution. As a result the surfaces of many historical buildings have been affected.

2.3 Social Causes

Important social causes are as follows.

Population growth in historical parts of cities causes damage by decreasing maintenance, generating waste, the demolition of historical buildings, and illegal construction. The Old City in Damascus in Syria,
Fig. 6. New Railway in Front of Ancient Site of Pasargad, Shiraz, Iran

Fig. 7. Sivand Dam Will Endanger Pasargad, Shiraz, Iran

Fig. 8. Ferdowsi Tomb, Tous, Iran: (a) before, (b) after Erecting Electricity Transmission Towers

Fig. 9. Deterioration of Wooden Ceiling of Ali Qapu Building due to Air Pollution, Isfahan, Iran
with buildings from the 16th century and inscribed on the World Heritage List in 1979, is such an example which is in danger. The al-Bahsa quarter, a historical neighbourhood outside the city walls, was completely demolished in the beginning of the 1980s. Low quality concrete structures were built to replace them, which were never effectively used (Fig.10.).

The same problem can be found in the historical city of Isfahan, Iran. The historical sites of the city are suffering heavy destruction and buildings with odd architectural styles are constructed (Fig.11.). The Naqsh-i-Jahan Square, a World Heritage Site, in Isfahan is going to be entered in the World Heritage at Risk List due to the illegal construction of a high-rise building in the buffer zone of the Square (Fig.12.).

In the holy cities of Mecca and Medina, in Saudi Arabia, 1400-year-old buildings from the early Islamic period risk being demolished to make way for high-rise buildings for pilgrims. Old souks in Mecca (Fig.13.(a)) are destroyed (Fig.13.(b)) and high-rise towers in the vicinity of Al-Haram mosque are built. These towers have destroyed the authentic view of the mosque from inside (Fig.13.(c)). Covering a 230,000 square metre area adjacent to the Al-Haram mosque, the seven-year project consists of several towers containing hotels, apartments, shops and restaurants. In Medina the old continuous texture of the city has been transformed and fragmented by detached clusters of high-rise buildings. The Prophet's mosque is surrounded by tall hotels and commercial centres and its buffer zone has lost its
Tourism can cause damage to historical heritage in different ways such as vandalism, generating waste, and commercialisation beyond carrying capacities. Looting, illegal excavations, and theft from museums and archeological sites can damage heritage. In 1992, archaeological items of great value, two marble tombstones and the capital of a column were illicitly removed from a site in Anavarza in Turkey. In November 1992, seventeen ancient manuscripts in Arabic were taken from a public library in Amasya Beyazit in Turkey. In January 1993, seventeen bronze statuettes were stolen from the Karachi National Museum in Pakistan.

An example for vandalism is the blowing-up of the Buddhas of Bamiyan in Afghanistan in March 2001 (Fig.15.).

In October 2007 a precious 2400-year old inscription from Achaemid era in Old Persian was found in Khark.
Island in Persian Gulf, Iran, (Fig.16.(a)). Due to lack of appropriate protection by authorities, the inscription was defaced by vandals using a hammer on 30 May 2008 (Fig.16.(b)).

Neglect and ignorance. People living in some regions with high cultural value are sometimes unaware of the importance and vulnerability of the buildings. This may cause unwanted damage to the heritage.

2.4 Institutional Weaknesses
In some cases, institutional weaknesses accelerate the damaging action of natural, economic and social factors. Systems of governance are unable to safeguard cultural heritage. The destroyed ancient inscription on Khark Island in Iran (Fig.16.) is an example of such weakness.

3. Conclusion
The paper presents a brief description of the risks to cultural heritage in Western and Central Asia. The main categories of risk are natural, economic, social and governmental causes. In general, the four categories are common among the countries of the region, but according to regional conditions and the sources of risks, different and appropriate measures may be taken to safeguard cultural heritage.

References

Fig.16. Defacing of a 2400-Year Old Inscription by Vandals: (a) before, (b) after Destruction, Khark Island, Persian Gulf, Iran

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