

The 2001 Earthquake in Arequipa: Lessons Learned and International Rescue Network for Endangered Cultural Heritage

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Resumen

El terremoto de Arequipa (2001) - Experiencias y redes internacionales para salvar el patrimonio cultural en peligro

Pese a su corta duración (dos minutos), el terremoto que sacudió la ciudad de Arequipa tuvo consecuencias dramáticas para la población (cien muertos), la agricultura y los edificios urbanos (el 80% de los situados en el centro histórico quedaron destruidos). La primera ayuda fue aportada por el ejército peruano, que comenzó recogiendo meticulosamente los fragmentos de edificios diseminados en las calles, antes de despejarlas para permitir la circulación de vehículos. El interior de los edificios históricos deteriorados fue objeto de una atención especial debido a su fragilidad y al hecho de que contenían objetos valiosos como libros, esculturas, pinturas, muebles, etc.

La ayuda internacional ofrecida por el ICCROM y la cooperación con los profesionales locales permitieron iniciar los trabajos urgentes de restauración con una rapidez sin precedentes, lográndose así salvar 2.250 piezas en once días. El ejército, la policía y las comunidades religiosas locales desempeñaron un papel de primera importancia en las operaciones de rescate del patrimonio cultural en peligro. Por una parte, la presencia de profesionales de distintas especialidades permitió enseñar técnicas básicas para la manipulación y almacenamiento de objetos, y por otra parte la colaboración de la comunidad propició que la población cobrase conciencia del valor excepcional de los bienes culturales.

Résumé

Le tremblement de terre de 2001 à Arequipa : expériences et réseaux internationaux pour sauver le patrimoine culturel en danger

Le tremblement de terre d'Arequipa, aussi court que fût sa durée (deux minutes), a eu des conséquences dramatiques tant sur les habitants (cent morts) et l'agriculture que sur les bâtiments, détruisant 80 % des constructions du centre historique. La première aide apportée fut celle de l'armée péruvienne qui, méticuleusement, a commencé le rassemblement des fragments parsemés afin de permettre le passage des véhicules dans les rues. L'intérieur des bâtiments historiques endommagés ont fait l'objet d'une attention particulière du fait de leur fragilité puisqu'ils regroupaient livres, sculptures, peintures, meubles, etc.

L'aide internationale offerte par l'ICCROM et la collaboration avec des professionnels locaux ont permis de commencer les travaux de restauration

d'urgence dans un temps record (2 250 pièces sauvées en onze jours). La communauté locale (armée, police, religieux) a joué un rôle de première importance dans le sauvetage de ce patrimoine culturel en danger. D'une part, les différents métiers présents ont permis l'apprentissage des techniques de base par la manipulation et le stockage des objets et d'autre part, la présence de la communauté a favorisé la prise en considération des biens culturels comme "valeur unique".

The Larousse dictionary gives the following definition of the word "disaster": "Very bad and calamitous thing. Great sudden misfortune that generates serious damage, destruction and loss." Disasters often take place because there was no forward planning for potential risks, either natural or man-made. Similarly, any minor emergency which goes out of control can develop into a disaster.

Generally speaking, man is the only being in nature to appreciate and preserve his own works; there is no similar case among other species. Human beings preserve their works for religious, sentimental, aesthetic or scientific reasons.

The cultural heritage of mankind - man's work - is boundless in its variety and volume: paintings, drawings, customs, traditions, sculptures, textiles, writing, architecture and other forms of expression are all proof of human achievement throughout time. All material and non-material evidence of man's great mental ability deserves our admiration and respect.

Cultural heritage, however, is extremely vulnerable and many risk factors threaten its fragile stability. Nature can turn into an agent of destruction through earthquakes, seaquakes, floods or sudden changes in the weather and, paradoxically, it is man who is one of the greatest destroyers of his own works through sloth, war, vandalism and so on. There is a long list of potential disasters threatening our cultural heritage and we, the preservers, have had many opportunities to stand by helplessly as valuable works have been lost beneath the rubble of an earthquake, submerged by flood waters or razed by crowds out of control in wartime.

The Experience of the 2001 Earthquake in Arequipa

An earthquake is a huge disaster: sudden, calamitous and highly destructive. It kills people and devastates buildings; it leaves survivors initially in a state of shock and depression and this means their response to the disaster is slow.

In June 2001, Arequipa was struck by an earthquake that lasted almost two minutes, killing around one hundred, destroying many buildings, blocking highways and ruining crops in the fields as a result of a tsunami that hit the coast.

A few months before the earthquake, UNESCO had proclaimed the historic centre of Arequipa as part of the World Heritage, and this historic

centre was one of the worst hit areas. 80% of the historic buildings (most from the 18th century) were hit by the earthquake; for example, one of the steeples of the cathedral collapsed, making a hole in the vaulted ceiling and falling inside. The walls of the church of the Third Order moved and the arched roof was pushed out of shape. The Franciscan Recoleta convent-museum had several walls collapse and cracks in the gallery and library, and many old books were buried in the rubble. In Santa Rosa monastery, the cloisters and stairway leading to the second level had serious cracks. The monastery of Santa Teresa saw the chapel, cloister and other areas unsafe for use, and part of the outer wall collapsed. In the technical reserves of the archaeological museum at San Agustín University, several storage shelves collapsed, breaking pre-Hispanic ceramics. Part of an external wall of Santa Catalina monastery fell onto the street, and several walls in rooms inside cracked and shifted. In the church of Santa Marta, the steeple broke away from the nave, and in the church of Santo Domingo the steeple split in two but did not fall down. Many historic buildings used for housing could no longer be occupied as vaulted ceilings and walls had collapsed.

For cultural heritage, the first response to the devastation of the earthquake came from the Peruvian Army. One day later, in coordinated action with officials in charge, soldiers were trained within minutes to manually pick up and carefully classify fragments of carved stone from the façades and cornices. This left streets free for vehicular traffic and preserved architectural pieces which were later put back in place.

A problem requiring a more careful solution came with the pieces housed inside the historic buildings damaged by the earthquake. Paintings, sculptures, books, furniture and other cultural objects were under serious threat while still inside rooms which had collapsed or were about to collapse. Packing and inventory materials were needed, as well as specialized hands to carry out the task efficiently.

Two days after the earthquake, a call came from ICCROM, Rome, offering its support in whatever way was needed. Once the needs were explained, ICCROM coordinated, negotiated and funded the sending of two volunteer restorers from the National Centre of Conservation and Restoration (CNCR) in Chile; they also brought cleaning tools, inventory material and packing material which were donated by the Centre. While the CNCR volunteers were travelling, the highest risk heritage sites were assessed and identified, and a working plan was drawn up.



Part of the volunteer-curators picking up a fallen off painting and covered by rubbish pieces. On the picture, we can see Julieta Elizaga and Magdalena Fuenzalida who work at the CNCR of Chile, next to Zully Mercado from Arequipa

The rescue team consisted of six preservers (two volunteer restorers from the CNCR, and four local preservers) and with the help of the Fire Department and owners or custodians of the endangered objects, they worked non-stop for eleven days and were able to rescue (register, surface-clean, pack and store) approximately 2,250 pieces, including paintings, sculptures, books, furniture and pre-Colombian ceramics from Santa Teresa and Santa Rosa monasteries, the Cathedral, the church of the Third Order and the Recoleta and university museums.



In collaboration with the Fire Brigade, various paintings were rescued from a 10-height-metre, in an endangered church. On the picture, we can see an official from the Fire Brigade and Franz Grupp

Lessons Learned from the Earthquake in Arequipa

It is very difficult to take proper action after a disaster. Even when prepared, cool, calm and collected. The first feelings after a disaster are loneliness and helplessness: there is a lot to do; it is difficult to establish priorities; there are not enough hands, there is not enough money.

A decisive element in the successful rescue work after the Arequipa earthquake was receiving international assistance without bureaucratic formalities. The only thing we had to worry about in Arequipa was planning the work and providing the Chilean volunteers with food and lodgings.

Another important aspect was to expand the working team including people from institutions which usually do not work with cultural heritage. The soldiers worked efficiently in saving architectural which otherwise would have disappeared in the path of earth-moving machinery. The Fire Department had a very special role: without neglecting its functions of helping the civil community, it was prompt in sending fire-fighters and equipment to work in the Church of the Third Order where the arch threatened to collapse at any moment, and to rescue paintings hanging from cornices ten metres high.

The owners and custodians of the rescued goods, with members of the religious orders and workers were actively involved in saving their collections. One interesting case was the cloister of the nuns at Santa Teresa. Almost 70% of the monastery building dating from 1710 had been affected; a large number of diverse objects had to be taken out and protected. Today all their collections are stored in three rooms dedicated as technical reserves. As a result of this experience and with their artistic heritage, the community of Santa Teresa is now the best prepared in Arequipa in terms of the assessment, valuation and preservation of its heritage. Because they now know and value their heritage more than before, the nuns have decided to open part of the monastery as a museum of colonial art to share their collections with the world, and with the income generated by the museum, they will be able to preserve their cultural property more effectively.



Painting dismantling in the chapel dated from 1750 which looked like falling down after the earthquake. On the picture we can see the Peruvian curators Franz Grupp and Zully Mercado

The involvement of the community (army, firemen and religious orders) in the rescue work had a dual effect: it led to some eighty people being trained in basic techniques for handling and storing cultural objects, and it helped people realise that cultural objects have a special value, are very fragile and are property of the whole community; therefore, their protection is a task of us all, specialists and non-specialists alike.

Today, more than two years after the earthquake, none of the rescued objects has been damaged again. The makeshift technical reserves where the objects were stored have been regularly monitored to detect any damage or harmful agents developing over time, and fortunately the objects have not deteriorated. The churches, monasteries and museums where the work was carried out are still restored and stable today; and the paintings, sculptures, furniture, books and other objects have been returned to their original places, except for the monastery of Santa Teresa where the collection is still in the technical reserves until the restoration of the church has been completed and funding found for the museum.

After the earthquake, the Municipal Superintendence of the Historic Centre of Arequipa prepared an action plan for emergencies designed to preserve buildings, and including one chapter on the preservation of property. The document sees the training of municipal employees (municipal policemen, inspectors, gardeners etc.) in relation to knowledge of national and local laws for the protection of cultural heritage and basic actions to assess damage. The plan also has provision for lectures in schools and centres of higher education to provide information on the protection of cultural heritage. There is a recommendation that cultural heritage be included in earthquake drills conducted on a regular basis with the people of Arequipa.

International Network to Rescue Cultural Heritage

The local organisation will obviously ensure that the response to any disaster is more and more efficient each time, but with the experience of the earthquake in Arequipa, I am sure that foreign solidarity has provided great motivation for better actions and that it was a decisive factor in the success of the actions undertaken after the disaster.

A person caught in the middle of a disaster looks around and sees only desolation and destruction, whereas a person on the outside, from another perspective, sees a different panorama of problems and possible solutions.

I do not know exactly how much it cost to bring the CNCR volunteers from Chile; there was the cost of tickets, materials and other expenses, but there were no additional costs (the local conservators worked on a voluntary basis), and as our work saved 2,250 pieces, I think the price paid to save each piece was very cheap, just a few cents.

If a rescue network for endangered cultural heritage were set up, it could work with similar costs and even greater success. The network would be comprised of preservers, restorers and similar professionals in the field of cultural heritage registered as volunteers, either as individuals or through an institution. When registering, the volunteers would state their

specialization, the languages they speak, the kind of support they could provide (financial, packing and storage material, monitoring equipment, inventory material, tools, preservation materials and equipment, personal protection equipment etc.) and, of course, their availability to travel to affected sites and work under risky conditions, with minimum comfort and a lot of pressure.

The first task for the network would be for the volunteers to map out the risks of their city or country, detailing areas which, because of geological or social features, are prone to natural or man-made disasters affecting cultural heritage. These maps could be used to develop an "Atlas of Potential Disasters Threatening World Cultural Heritage". The atlas would be a very useful tool for initiatives to raise awareness on disasters, as well as prevention and response. Institutions such as ICCROM, ICOM and ICOMOS are also informed of threats to cultural heritage around the world and with that information would be able to plan educational programmes.

Registered people would give an undertaking that the population and institutions in their area would be actively involved in the event of a disaster threatening heritage. This would mean establishing contacts with fire departments, the army, police, boy scouts and so forth, informing them of the importance of cultural heritage and instructing them on the handling of cultural objects so that these groups could perform set tasks with genuine commitment and technical efficiency as soon as they are called on.

Education is essential. Registered volunteers should establish contacts with ministries, culture secretaries or institutes in their countries so as to coordinate instructions given for the preservation of cultural heritage in the event of a disaster. This pro-active educational campaign must take place at all levels, from the very youngest to the oldest, through schools and universities. Every person must realise the value of cultural heritage and should at least know who to contact when they find cases of endangered cultural property.

A fishing net, as we know, is a device where all the strings and knots comprising have to work at the same time. For the Heritage Rescue Network to work, it should simply require one member to call another. There must be a coordinator in each country or group of countries and one person or institution will obviously have to lead the whole organisation. The leadership will coordinate and lead actions and optimise the resources that each volunteer (individual or institution) can offer according to the type and magnitude of the disaster. ICCROM is an emblematic institution in the preservation of cultural heritage and would therefore be an ideal party to head the Network.

This is simply a plan for a "Rescue Network for Cultural Heritage". Many points need to be amended and even more are to be added, but it is definitely worth devoting our time, both now and later, to efforts designed to preserve the material evidence of the achievements and work of our ancestors.

NB: The person behind the idea and who has been the “remote coordinator” since the inception of the rescue mission is Katriina Simila of ICCROM. The CNCR in Chile, through Paloma Mujica, donated inventory and packing material and sent the volunteer preservers, Magdalena Fuenzalida and Julieta Elizaga, to Arequipa. In Peru, Rossana Kuon was coordinator in Lima; in Arequipa, Zully Mercado, Anita Grupp and Isabel Olivares worked as volunteers. The Voluntary Fire Department of Arequipa and the Peruvian Army helped with their members and equipment. Franz Grupp was responsible for the organisation and management of the work in Arequipa.