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HERITAGE AT RISK

**ICOMOS WORLD REPORT 2006/2007
ON MONUMENTS AND SITES IN DANGER**





INTERNATIONAL COUNCIL ON MONUMENTS AND SITES
CONSEIL INTERNATIONAL DES MONUMENTS ET DES SITES
CONSEJO INTERNACIONAL DE MONUMENTOS Y SITIOS
МЕЖДУНАРОДНЫЙ СОВЕТ ПО ВОПРОСАМ ПАМЯТНИКОВ И ДОСТОПРИМЕЧАТЕЛЬНЫХ МЕСТ

HERITAGE AT RISK

Patrimoine en Péril / PatrimONIO en Peligro

ICOMOS WORLD REPORT 2006/2007 ON MONUMENTS AND SITES IN DANGER

ICOMOS rapport mondial 2006/2007 sur des monuments et des sites en péril

ICOMOS informe mundial 2006/2007 sobre monumentos y sitios en peligro

edited by Michael Petzet and John Ziesemer



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FOREWORD

Over the past years we have seen heritage places and World Heritage sites increasingly threatened not only by traditional causes of decay and development pressures but also by new and emerging risks such as climate change and its impacts on cultural heritage through increased flooding, droughts and coastal erosion to mention only a few. UNESCO set up a Task Force on climate change to focus knowledge and resources and to assess potential threats and actions to be taken and coordinate these. Concerning cultural heritage ICOMOS is a key partner together with ICCROM in developing strategic concepts regarding climate change and World Heritage but also heritage covered by the other UNESCO Conventions in the cultural field. This *ICOMOS World Report 2006/2007 on Monuments and Sites in Danger* demonstrates such new and emerging issues and illustrates the scope of what has to be done in a joint and common effort to redress the situation. It draws through its national and thematic reports the attention of the international community to certain issues and calls for common action to safeguard our precious heritage.

Joint work with ICOMOS and ICCROM has also been successfully carried out on risk management and training following the World Conference on Disaster Reduction (Kobe, Japan 2005) and its framework for action with the International Disaster Reduction

Conference (Davos, Switzerland, 2006). In 2007, a workshop took place on "Reducing risks to collections" (Sibiu, Romania). This work shows the more forward-looking approach undertaken to address potential risks.

In many regions of the world cultural heritage is lost due to military conflicts and civil unrest. UNESCO's actions to protect the heritage and prevent further destruction in Iraq, Afghanistan, or Kosovo (Serbia) are supported by ICOMOS and other non-governmental organizations. These operational measures are complementary to major work in the range of standard setting instruments on cultural heritage at the disposal of the Member States of UNESCO.

This volume complements the work by UNESCO and its Intergovernmental Committees in addressing threats to our common heritage and illustrates a range of diverse issues in heritage preservation in all regions of the world. It calls for united and in many cases – urgent – action at all levels of society to help in the safeguarding of our priceless cultural heritage and the environment we live in for future generations.

Françoise Rivière
Assistant Director-General for Culture
UNESCO

AVANT-PROPOS

Au cours des dernières années nous avons vu des lieux du patrimoine et des sites inscrits au Patrimoine mondial de plus en plus menacés non seulement par des causes habituelles de détérioration et par les pressions du développement mais également par des risques nouveaux et émergents tels que le changement climatique et son impact sur le patrimoine culturel à travers l'augmentation des inondations, des sécheresses, de l'érosion côtière, pour n'en citer que quelques-uns. L'UNESCO a mis en place un groupe de travail sur le changement climatique pour rassembler les connaissances et les ressources et pour évaluer les dangers potentiels et coordonner les mesures à prendre pour les contrer. En ce qui concerne le patrimoine culturel, l'ICOMOS est un partenaire majeur, avec l'ICCROM, dans le développement de stratégies à adopter dans le cadre des effets du changement climatique sur le Patrimoine mondial, mais aussi sur le patrimoine en général qui fait l'objet d'autres Conventions internationales de l'UNESCO dans le domaine de la culture.

Ce *Rapport mondial de l'ICOMOS 2006/2007 sur les monuments et les sites en péril* présente ces nouvelles préoccupations et illustre la portée des actions qui doivent être entreprises dans un effort collectif et commun pour améliorer la situation. Au travers de ces rapports nationaux et thématiques il attire l'attention de la communauté internationale sur certaines questions et appelle à une action conjointe pour sauvegarder notre patrimoine précieux.

Des travaux communs sur la gestion des risques et la formation dans ce domaine, ont également été menées à bien avec succès avec l'ICOMOS et l'ICCROM suivant la Conférence mondiale sur la

prévention des catastrophes (Kobe, Japon, 2005) et son cadre d'action avec la Conférence internationale sur la prévention des catastrophes (Davos, Suisse, 2006). En 2007, un atelier de travail sur le thème "Réduire les risques pour les collections" a été organisé à Sibiu en Roumanie. Ce travail montre une approche adoptée pour faire face à ses risques potentiels d'avantage tournée vers l'avenir.

Dans beaucoup de régions du monde, le patrimoine culturel est détruit à cause de conflits armés et des troubles civils. Les actions de l'UNESCO pour protéger le patrimoine et prévenir d'avantage de destructions en Iraq, Afghanistan, ou au Kosovo (Serbie) sont soutenues par l'ICOMOS et d'autres organisations non-gouvernementales. Ces mesures opérationnelles sont complètent le travail important effectué sur la gamme d'instruments juridiques internationaux sur le patrimoine culturel à disposition des pays membres de l'UNESCO.

Ce volume accompagne le travail fait par l'UNESCO et ses Comités intergouvernementaux en examinant les menaces qui pèsent sur notre patrimoine commun et couvre un éventail diversifié des problématiques liées à la sauvegarde du patrimoine à travers toutes les régions du monde. Il appelle à des actions solidaires et dans la majorité des cas – urgentes – à tous les niveaux de la société pour aider à préserver notre inestimable patrimoine culturel et l'environnement dans lequel nous vivons pour les générations futures.

Françoise Rivière
Sous-Directeur général pour la Culture
UNESCO

PREÁMBULO

Durante los últimos años hemos visto lugares patrimoniales y sitios del Patrimonio Mundial amenazados no solo por las causas tradicionales del deterioro y de la presión del desarrollo sino también por los nuevos y emergentes riesgos como el cambio climático y su impacto en el patrimonio cultural a través de inundaciones, sequía y de la erosión costera, por mencionar solo algunos de ellos. La UNESCO ha establecido un Grupo de Trabajo sobre el cambio climático para poner en comun los conocimientos y los recursos, y que evaluará las amenazas potenciales y acciones a llevar a cabo y se encargará de su coordinación. En cuanto al patrimonio cultural, ICOMOS, junto al ICCROM, es uno de los organismos colaboradores principales en el desarrollo de los conceptos estratégicos sobre el cambio climático y el Patrimonio Mundial, pero también del patrimonio cubierto por otras convenciones de la UNESCO en el campo de la cultura. Este *Informe Mundial del ICOMOS 2006/2007 sobre Monumentos y Sitios en Peligro* demuestra estas nuevas cuestiones emergentes e ilustra el alcance de todo lo mucho que hay por hacer entre todos y en estrecha colaboración para mejorar la situación. A través de los informes nacionales y temáticos se llama la atención de la comunidad internacional sobre ciertos temas y hace un llamamiento a una acción en común para salvaguardar nuestro preciado patrimonio.

También ha sido llevado a cabo con éxito el trabajo conjunto con el ICOMOS y el ICCROM sobre la gestión de los riesgos y la formación tras la *Conferencia Mundial sobre Reducción de Desastres* (Kobe, Japón 2005) y su marco de acción con la

Conferencia Internacional sobre Reducción de Desastres (Davos, Suiza, 2006). En 2007 tuvo lugar un Taller sobre « *Reducción de riesgos en las colecciones* » (Sibiu, Rumanía). Este trabajo muestra una aproximación más avanzada para tratar los riesgos potenciales.

En muchas regiones del mundo el patrimonio cultural mundial se está perdiendo a causa de conflictos militares y civiles. Las acciones llevadas a cabo por la UNESCO para proteger el patrimonio y prevenir más destrucción en Irak, Afganistán o Kosovo (Serbia) son apoyadas por ICOMOS y otras organizaciones no gubernamentales. Estas medidas operacionales son complementarias del principal trabajo en la variedad de los instrumentos estándar establecidos para el patrimonio cultural a disposición de los Estados Miembro de la UNESCO.

Este volumen complementa el trabajo de la UNESCO y de sus Comités Intergubernamentales mostrando las amenazas de nuestro patrimonio común e ilustra una variedad de temas en preservación del patrimonio en todas las regiones del mundo. Hace un llamamiento a una acción conjunta, y en muchos caso urgente, a todos los niveles de la sociedad para ayudar a salvaguardar para las generaciones futuras nuestro inestimable patrimonio cultural y el medio ambiente en el que vivimos.

Françoise Rivière
Subdirectora General para la Cultura
UNESCO

INTRODUCTION

This *ICOMOS World Report 2006/2007 on Monuments and Sites in Danger* is the latest volume of what is already a whole series of World Reports, starting in the year 2000 and followed by the volumes *H@R 2001/2002*, *H@R 2002/2003* and *H@R 2004/2005*. So far this series has also been complemented by three special editions: *H@R Special 2006 Underwater Cultural Heritage at Risk: Managing Natural and Human Impacts*, *H@R Special 2006 The Soviet Heritage and European Modernism*, and *H@R Special 2007 Natural Disasters and Cultural Heritage*. Soon another *H@R Special* on the work of ICOMOS in Afghanistan, i.e. on salvaging the fragments of the Bamiyan Buddhas, will be printed. Thanks to an idea initiated at the turn of the millennium by the undersigned together with Secretary General Dinu Bumbaru and former Vice President Sheridan Burke, "Heritage at Risk" has become a well-known slogan worldwide, as, for example, the successful international conference *Heritage at Risk – Preservation of 20th-Century Architecture and World Heritage*, held in Moscow on 18 April 2006 on the occasion of the International Day for Monuments and Sites, has shown. The subsequent *H@R Special* publication which sums up the topics of this conference deals most of all with the threats to the testimonies of Russian avant-garde architecture of the 1920s. This volume and the *H@R Specials* on underwater heritage and on natural disasters complement the other annual or bi-annual *H@R* publications with their reports on different topics from all regions of the world.

Heritage at Risk

The new World Report 2006/2007 consists of contributions from about 40 countries, complemented by thematic reports from International Committees (underwater archaeology, rock art, vernacular architecture, legal questions, and polar heritage) and by 12 reports on a special focus which is of topical interest worldwide: Global Climate Change (pp. 191-226). Until recently this topic was barely addressed internationally in regard to cultural heritage protection and conservation. The climate change papers discuss, for instance, fundamental considerations of threats to our cultural heritage today and in the future ("every cultural heritage at risk?"), changes in the Polar regions, examples such as the impact on the frozen tombs in the Altai Mountains, disasters like the fires in Australia and Greece, and the impact of Hurricane Katrina on the New Orleans area. The contribution on "Amazonia, Monument of Nature" (pp. 40/41) is another special focus with regard to the correlation between culture and nature. By looking at this correlation from a new angle this paper on Amazonia aims to draw more attention to the very crucial topic of preserving the Amazonian rainforest – a topic which in the recent worldwide discussion on global climate change (GCC) has been unjustly neglected. In this way the subject of last year's International Day for Monuments and Sites, "Cultural Landscapes and Monuments of Nature", will open up new perspectives for our work, if – together with other categories of monuments of nature, such as famous rocks, caves, trees or waterfalls – we consider the South American rainforest, the largest possible monument of nature, as an extraordinary phenomenon combining natural and cultural history. Here we have both natural and cultural heritage at risk.

The annual report by ICOMOS on Heritage at Risk is intended

to highlight problems and issues threatening monuments and sites around the world, and where possible to present case studies from various countries. This meets ICOMOS' objectives to serve as a forum for professional dialogue and exchange, and to disseminate information on conservation principles, techniques and policies. This new report can of course not pretend to be comprehensive in every way. But even if once again only some of our more than 150 national and international committees contributed, when looking at all the reports published in the past years and distributed via the internet, we get an overall picture. The analysis of the reports shows that, apart from the general risks to heritage from natural disasters and physical decay of structures, there are certain patterns in human activity endangering our heritage, e.g. risks from war and inter-ethnic conflicts, risks from development, and other risks already discussed in depth in the Introduction to the previous volume (*H@R 2004/2005*, pp. 12-14).

Among the natural disasters in this report 2006/2007, which are also discussed in detail in the *H@R Special 2007 Natural Disasters and Cultural Heritage*, are the fires in Greece (pp. 76, 220/221) and Australia (pp. 218/219), Hurricane Katrina in the New Orleans region (pp. 167/168, 224-226), the earthquake in Peru (pp. 125-127) and another earthquake in Iran (p. 93). Sadly, the risks from war and ethnic conflicts have not decreased, either. These include the disaster in Iraq (pp. 94/95) and damages to monuments and sites in connection with the war in Lebanon (see p. 107), but also incomprehensible acts of vandalism, such as the total destruction of all monuments at Djulfa cemetery (pp. 37/38).

Time and again serious threats are caused by dams, for example in Turkey where Hasankeyf is being flooded by Ilisu Dam (pp. 156/157) and Alliano by Yortanlı Dam (pp. 157-159). These are cases where all our protests were in vain. As in earlier reports we are also confronted again and again with threats to archaeological sites, for instance ancient Diolkos in Greece (pp. 74-76), and to rural cultural landscapes, the integrity of which is seriously at risk due to changes in agricultural practice and changes in lifestyle and technology, but in particular because traditional vernacular building forms and building techniques are disappearing more and more (on adobe architecture in Mexico see pp. 112-114; on vernacular architecture in danger see also pp. 181-182; moreover, on threats to Lithuanian manor heritage see pp. 108-110). The same applies to small and large ensembles – from villages to historic city centres – where the authenticity and integrity are at risk through demolitions, conversions, the renewal of entire town quarters and through traffic projects. Examples are threats to the roovescape in Graz (p. 35), development pressures in Argentina (pp. 21/22), in historic quarters of Budapest (pp. 80/81, 84-87), in Bratislava (pp. 138-140), in the town of Chisinau in Moldova (pp. 115/116), and in a great number of Spanish towns, such as Salamanca, Lugo, Sevilla and Toledo (see pp. 141-149). A special focus is projects for high-rise buildings jeopardising the visual integrity even of world-famous town skylines, ensembles and cultural landscapes, e.g. the cluster of high-rises behind Belvedere Palace in connection with the new Vienna Main Station (pp. 33/34), skyscraper projects in Prague (p. 57), the planned Gazprom Tower in St Petersburg (pp. 131/132), hotel towers close to Genbaku Dome in Hiroshima and on the outer edge of Neusiedler See (Lake Fertő) cultural landscape (p. 36). Finally, there is a revealing study on possible consequences of skyscraper projects in Istanbul (pp. 159-164). We could also have reported about a whole series of other projects preoccupying the World Heritage Committee time and again, for instance possible threats to

the visual integrity of the Tower of London or about disastrous traffic projects, such as a highway project on the edge of the town wall cutting the ancient city of Damascus in two, or a motorway in Tyr (Lebanon) jeopardising archaeological sites. With regard to traffic projects our publication deals with some World Heritage cases, such as the successful protest against a road close to Humayun's Tomb in New Delhi (pp. 91/92) and the appeal against the destruction of the fishing port Tomo-no-Ura by a new road bridge (pp. 102/103); furthermore there is the possible impact of a tunnel for the Spanish high-speed train on the façade of the church of the Sagrada Familia in Barcelona (pp. 143-145) and finally a contribution on the dramatic history of the Waldschlösschen bridge project in the cultural landscape of the Dresden Elbe Valley (pp. 63/64, 70/71), the latter a project which hopefully can still be stopped.

To sum up, it can be said that the *Heritage at Risk Report 2006/2007* is proof that the situation of the cultural heritage is still highly critical in many regions of the world. While time and again billions are being invested into the preparation of war and destruction, the responsible often lack the necessary commitment when it comes to preserving the threatened heritage of past centuries and millennia. Therefore, we can only hope that the H@R report will inspire further commitments on national and international levels, generate new initiatives in preservation, and provide an additional positive impulse for existing institutions such as the ICOMOS-supported International Committee of the Blue Shield. The effect should also extend to international foundations that are involved in preservation such as the Getty Foundation or the World Monuments Fund. Their good example could also influence other internationally operating sponsors, now that there is also increased awareness of the economic importance of heritage conservation and its special role in terms of "sustainable development". In this sense, with its *Heritage at Risk Report* ICOMOS hopes not only to gain the moral support of the world public in the battle against all kinds of threats, but also to achieve practical results in co-operation with all forces that are interested in the preservation/conservation of the cultural heritage.

Preventive Monitoring and World Heritage

One of the most essential tasks of ICOMOS within the framework of the World Heritage Convention of 1972 is our work as advisory body to the World Heritage Committee and to UNESCO on issues concerning the World Cultural Heritage, in particular the evaluation of monuments and sites that have been placed on the World Heritage List or are under consideration for listing. The mandate and function of the advisory bodies ICOMOS, IUCN and ICCROM result from articles 8 (3), 13 (7) and 14 (2) of the World Heritage Convention in connection with paragraphs 30 and 31 of the Operational Guidelines. One of the responsibilities of the advisory bodies is "to monitor the state of conservation of World Heritage properties" (OG § 31). The role of ICOMOS is described in paragraph 35: "The specific role of ICOMOS in relation to the Convention includes: evaluation of properties nominated for inscription on the World Heritage List, monitoring the state of conservation of World Heritage cultural properties, reviewing requests for International Assistance submitted by State Parties, and providing input and support for capacity-building activities" (OG § 35). Just as article 5 of the World Heritage Convention commits the State Parties to take care of the protection and conservation of the

entire cultural and natural heritage within their territories, i.e. not only of the individual World Heritage sites, every National Committee of ICOMOS also has - in accordance with article 4 of our Statutes - a special responsibility for the monuments and sites of its country, of course in cooperation with all institutions concerned with protection and conservation.

Under these circumstances, based on the different experiences in their countries, individual National Committees (see the examples of ICOMOS Germany, pp. 62-71 and ICOMOS Austria, pp. 35/36) have developed special initiatives for the monitoring of the state of conservation of World Heritage sites in their countries, and in reports they have pointed at the imminent dangers (some reports also published in our H@R series). All in all, this is a programme which could be called proactive or preventive monitoring. With its continuous observation such preventive monitoring differs from the Periodic Reporting described in the Operational Guidelines (OG V, 199-210) and from Reactive Monitoring (OG IV.A, 169-176). For this preventive monitoring refers not only to individual World Heritage sites, but in accordance with article 5 of the World Heritage Convention to the entire cultural heritage of the State Parties, - which means that ICOMOS with up to 8,000 members acts as a sort of general "monument watch" observing the state of conservation worldwide.

The obligation of the State Parties to do Periodic Reporting results from article 29 of the WH Convention, together with chapter V of the Operational Guidelines (OG § 190, 191, and 199-210). Independently of the Periodic Reporting the World Heritage Centre is to be informed as part of Reactive Monitoring about exceptional circumstances or work "which may have an effect on the state of conservation of the property": According to the Operational Guidelines "Reactive Monitoring is the reporting by the Secretariat, other sectors of UNESCO and the Advisory Bodies to the Committee on the state of conservation of specific World Heritage properties that are under threat" (OG § 169). Reactive Monitoring comprises all procedures initiated by reports of the State Parties to the Convention or by information from a third party with regard to measures at or near World Heritage sites. The World Heritage Centre can consult the advisory bodies, i.e. ICOMOS, IUCN and ICCROM asking them for their evaluation.

Practice has shown, however, that the handling of the monitoring mandate in accordance with Reactive Monitoring does not always have the desired results. Especially in acute and problematic cases the whole procedure has proved to be too slow and can only be applied in particularly serious cases. However, with the state of conservation of every World Heritage site bigger or smaller problems and threats may occur which are either not sufficiently taken care of or not recognised early enough by the State Parties or by the authorities for protection and conservation of monuments and sites. All in all, these are an abundance of sometimes very acute threats to the historic fabric, and normally these problems are not mentioned in the process of Periodic Reporting, nor can they be solved in time within Reactive Monitoring. Especially at extensive sites values defining World Heritage can be affected by an immense number of plans and projects. This applies mostly to towns and landscapes which in accordance with the Operational Guidelines are defined as cultural landscapes, as historic towns and town centres or heritage routes (OG Annex 3 - 10, 14, 22/23).

Therefore, in this wide area of conservation problems a continuous proactive observation has to take place, i.e. preventive monitoring, which takes into consideration the more general conservation concerns and the special criteria of the World

Heritage justifying the Outstanding Universal Value. As far as the World Cultural Heritage is concerned, this task can only be tackled by the advisory body ICOMOS and its worldwide net of 8000 members organised in more than 150 national and international committees. The corresponding mandate can be deduced from the above-mentioned articles of the World Heritage Convention, together with the mandate to be found in the Operational Guidelines “to monitor the state of conservation of World Heritage properties” (OG § 31).

It is very much to be hoped that all National Committees of ICOMOS, in special cases supported by the International Scientific Committees, will attend to the task of Preventive Monitoring in the future. After all, the National Committees, which have to look after the state of conservation of the entire stock of monuments and sites in their country, are our first contacts on the national level. It is also easier for the National Committees to get at the necessary information on the state of conservation of World Heritage sites in their country. And they can report on all current threats and problems. The reports by the National Committees will be sent to the International Secretariat of ICOMOS so that our headquarters in Paris can decide how to inform the World Heritage Centre. Then in particularly serious cases the procedure described above as Reactive Monitoring can be the result. In any case, from our experience, involving the ICOMOS National Committees as early as possible with the task of Preventive Monitoring will make it possible in many cases to avoid threats and conflicts with other interests through appropriate counselling. And as some examples in the *Heritage at Risk Report 2006/2007* are showing – for example the changes to the plans for a highway near Humayun’s Tomb in New Delhi (pp. 91/92) or the case of the cluster of high-rise buildings affecting Cologne Cathedral (p. 62) – a public discussion initiated by ICOMOS can at least result in acceptable compromises.

Acknowledgements

The *Heritage at Risk Report 2006/2007*, produced under the guidance of the undersigned President of ICOMOS, includes not only contributions from national and international ICOMOS committees, but also several reports by individual experts and uses quotations from different expertises, statements, articles and press releases. Thanking all colleagues who contributed as authors to this publication and made their pictures available to us, it is also noted, in line with ICOMOS policy, that the texts and information provided for this publication reflect the independent view of each committee and the different authors. Our editorial team had very committed support from an Australian colleague, Susan Duyker, who edited many of the English texts and, together with Pamela Jerome, took care of the climate change papers. John Ziesemer was in charge of the overall production of this publication and did quite a number of translations. I also would like to thank Ioana Cisek from the ICOMOS Secretariat in Munich for her untiring help, as well as Gaia Jungeblodt and the staff of the International Secretariat in Paris, especially José Garcia who added the material to the ICOMOS website. Like the previous editions this report is also available on the internet at www.international.icomos.org/risk.

The publication of the *Heritage at Risk Report 2006/2007* would not have been possible without the financial support given thanks to the accord cadre 2006/2007 with the World Heritage Centre (Cultural Heritage Division) and I want to thank especially Madame Françoise Rivière, Assistant Director-General for Culture, who as successor of Mounir Bouchenaki also wrote the Foreword. Finally, I wish to extend my thanks to the German Federal Commissioner for Cultural Affairs and the Media who helped again to provide the necessary financial and organisational framework of this publication.

Prof. Dr. Michael Petzet
President of ICOMOS

INTRODUCTION

Ce rapport mondial 2006/2007 de l'ICOMOS sur les Monuments et les Sites en danger est le dernier volume de ce qui est déjà une série complète de rapports Mondiaux, commencée en 2000 et suivie par les volumes *H@R 2001/2002*, *H@R 2002/2003* et *H@R 2004/2005*. Jusqu'à maintenant, cette série a été aussi complétée par trois éditions spéciales: l'édition spéciale *H@R 2006 Patrimoine culturel subaquatique en péril: gérer les impacts naturels et humains*, l'édition spéciale *H@R 2006 Patrimoine soviétique et modernisme européen* et l'édition spéciale *H@R 2007 Catastrophes naturelles et patrimoine culturel*. Prochainement, une autre édition spéciale *H@R* sur le travail de l'ICOMOS en Afghanistan, c'est-à-dire sur le sauvetage des fragments des Bouddhas de Bamiyan, sera publiée. Grâce à une idée lancée au tournant du millénaire sur mon initiative et celle du Secrétaire Général Dinu Bumbaru et de l'ancien Vice-président Sheridan Burke, « Heritage at Risk » est devenu un emblème bien connu dans le monde entier, comme l'a démontré par exemple, la conférence internationale couronnée de succès: *Heritage at Risk – Conservation de l'Architecture du XXe siècle et Patrimoine mondial*, qui s'est déroulée à Moscou le 18 avril 2006 à l'occasion de la Journée Internationale des Monuments et des Sites. La prochaine publication spéciale *H@R* qui résume les thèmes de cette conférence traite surtout des menaces sur les témoignages de l'architecture russe d'avant-garde des années 1920. Ce volume et les éditions spéciales *H@R* sur le patrimoine subaquatique et sur les désastres naturels complètent les autres publications *H@R* annuelles ou bisannuelles avec leurs rapports sur des sujets différents dans toutes les régions du monde.

Heritage at Risk

Le nouveau Rapport mondial 2006/2007 est constitué de contributions d'environ 40 pays, complétées par des rapports thématiques de Comités Internationaux (archéologie subaquatique, art rupestre, architecture vernaculaire, questions légales et patrimoine polaire) et par 12 rapports sur un thème d'actualité spécial dans le monde entier: le changement climatique global (pp. 191-226). Jusque récemment, ce sujet était rarement abordé au niveau international pour ce qui est de la protection du patrimoine culturel et la conservation. Les contributions sur le changement climatique traitent, notamment, des aspects fondamentaux des menaces qui pèsent sur notre patrimoine culturel actuel et futur (« tout patrimoine culturel est-il en danger? »), les changements dans les régions polaires, des exemples comme l'impact sur les tombes gelées dans les Montagnes de l'Altaï, des désastres comme les incendies en Australie et en Grèce, et l'impact de l'ouragan Katrina sur la région de la Nouvelle-Orléans. La contribution sur « Amazonie, monument de la nature » (pp. 40/41) est un autre thème particulier sur la corrélation entre la culture et la nature. En mettant en lumière cette corrélation sous un angle nouveau, cet article sur l'Amazonie espère attirer plus d'attention sur le thème crucial de la préservation de la forêt tropicale humide amazonienne - un sujet qui dans la discussion internationale récente sur le changement climatique global a été injustement négligé. De cette façon, le thème de la journée internationale des Monuments et des Sites de l'année dernière, « Paysages culturels et monuments de la nature », va ouvrir de nouvelles perspectives pour notre travail, si – ensemble

avec d'autres catégories de monuments de la nature, comme des rochers célèbres, des cavernes, des arbres ou des chutes d'eau – nous considérons la forêt tropicale humide sud-américaine, probablement le plus grand monument de la nature, comme un phénomène extraordinaire combinant histoire naturelle et culturelle. Ici nous avons à la fois un patrimoine naturel et culturel en danger.

Le rapport annuel de l'ICOMOS sur le Patrimoine en danger est destiné à mettre en évidence des problèmes et des questions menaçant des monuments et des sites dans le monde entier et, quand cela est possible de présenter des études de cas de divers pays. Cela rejoint les objectifs de l'ICOMOS de servir de forum pour le dialogue et l'échange professionnel et de disséminer des informations sur des principes, des techniques et sur la politique de conservation. Ce nouveau rapport ne peut bien sûr prétendre à l'exhaustivité. Mais, même si seul quelques uns de nos 150 Comités Nationaux et Internationaux ont participé à ce volume, quand nous faisons la somme de tous les rapports publiés durant les années passées et distribués via internet, nous obtenons une vue d'ensemble assez complète. L'analyse des rapports montre que, mis à part le risque général sur le patrimoine provenant des catastrophes naturelles et de la dégradation physique des structures, il y a certains comportements dans l'activité humaine qui mettent en danger notre patrimoine, par exemple la guerre et les conflits inter-ethniques, les risques de développement et d'autres risques déjà discutés en profondeur dans l'introduction du volume précédent (*H@R 2004/2005*, pp. 12-14).

Parmi les catastrophes naturelles présentées dans ce rapport 2006/2007, qui sont aussi discutées en détail dans l'édition spéciale *H@R 2007 sur les Catastrophes naturelles et le patrimoine culturel*, on trouve les incendies en Grèce (pp. 76, 220/221) et en Australie (pp. 218/219), l'ouragan Katrina dans la région de la Nouvelle-Orléans (pp. 167/168, 224-226), le tremblement de terre au Pérou (pp. 125-127) et un autre tremblement de terre en Iran (p. 93). Malheureusement, les risques liés à la guerre et aux conflits ethniques n'ont pas diminué, non plus. Ceux-ci incluent le désastre en Irak (pp. 94/95) et les dommages aux monuments et aux sites liés à la guerre au Liban (voir p. 107), mais aussi des actes incompréhensibles de vandalisme, comme la destruction totale de tous les monuments du cimetière de Djulfà (pp. 37/38).

Maintes et maintes fois, des menaces sérieuses sont causées par des barrages, par exemple en Turquie où Hasankeyf est inondé par le barrage Ilisu (pp. 156/157) et Alliano par le barrage Yortanlı (pp. 157-159). Toutes nos protestations pour ces cas précis furent vaines. Comme dans des rapports précédents nous nous sommes aussi trouvés confrontés à maintes reprises aux menaces sur des sites archéologiques, comme l'ancien Diolkos en Grèce (pp. 74-76) et sur des paysages culturels ruraux, dont l'intégrité est sérieusement en danger en raison des changements dans la pratique agricole et des changements dans le style de vie et la technologie, mais en particulier parce que des bâtiments vernaculaires traditionnels et des techniques de construction disparaissent de façon croissante (sur l'architecture d'adobe au Mexique voir pp. 112-114), sur l'architecture vernaculaire en danger voir également pp. 181/182: et encore, des menaces sur le patrimoine des manoirs Lithuaniens voir pp 108-110. Le même phénomène s'applique aux petits et grands ensembles - des villages aux centres villes historiques - où l'authenticité et l'intégrité sont mis à mal par des démolitions, des conversions d'usage, le renouvellement de quartiers entiers de ville et par des projets de circulation. Les

exemples donnés concernent des menaces qui pèsent sur la ligne des toits de Graz (p. 35), les pressions liées au développement en Argentine (pp. 21/22), dans les quartiers historiques de Budapest (pp. 80/81, 84-87), à Bratislava (pp. 128-140), dans la ville de Chisinau en Moldavie (pp. 115/116) et dans un grand nombre de villes espagnoles, comme Salamanque, Lugo, Séville et Tolède (voir pp. 141-149). Une attention particulière est portée aux projets de gratte-ciel mettant en danger l'intégrité visuelle même des lignes d'horizon de ville de renommée mondiale, des ensembles et des paysages culturels, par exemple l'ensemble de bâtiments à plusieurs étages derrière le Palais du Belvédère lié à la nouvelle gare principale de Vienne (pp. 33/34), le projet de gratte-ciel à Prague (p. 57), la Tour Gazprom prévue à Saint-Petersbourg (pp. 131/132), les tours d'hôtel près du Dôme Genbaku à Hiroshima et à la limite du paysage culturel de Fertő / Neusiedlersee (p. 36). Enfin, une étude révélatrice analyse les conséquences possibles de projets de gratte-ciel à Istanbul (pp. 159-164). Nous aurions pu aussi aborder une série complète d'autres projets préoccupant à de nombreuses reprises le Comité du Patrimoine mondial, par exemple des menaces possibles sur l'intégrité visuelle de la Tour de Londres ou des projets de circulation désastreux, comme un projet de route nationale en bordure de la ville de Damas qui la sépare en deux, ou une autoroute à Tyr (Liban) mettant en péril des sites archéologiques. En ce qui concerne les projets de circulation, notre publication traite de quelques cas du Patrimoine mondial, comme la protestation couronnée de succès contre une route proche du Tombeau d'Humayun à New Delhi (pp. 91/92) et l'appel contre la destruction du port de pêche de Tomo-no-Ura par un nouveau pont routier (pp. 102/103); de plus, est abordé l'impact possible d'un tunnel ferroviaire pour le train à grande vitesse espagnol sur l'église de la Sagrada Familia à Barcelone (pp. 143-145) et finalement une contribution traite de l'histoire dramatique du projet du pont Waldschlösschen dans le paysage culturel de la Vallée de l'Elbe à Dresde (pp. 63/64, 70/71), lequel, avec un peu d'espoir, peut encore être arrêté.

Pour résumer, nous pouvons dire que le *rapport Heritage at Risk 2006/2007* est la preuve que la situation du patrimoine culturel est toujours sensiblement critique dans beaucoup de régions du monde. Tandis que l'on investit des milliards pour préparer la guerre et la destruction, les personnes responsables ne s'engagent pas souvent pour la préservation du patrimoine des siècles et des millénaires passés qui est menacé. C'est pourquoi nous pouvons seulement espérer que le rapport H@R inspirera de nouveaux engagements à des niveaux nationaux et internationaux, déclenchera de nouvelles initiatives dans le domaine de la conservation et fournira une impulsion positive supplémentaire aux institutions existantes comme le Comité international du Bouclier Bleu – soutenu par l'ICOMOS. L'effet devrait aussi s'étendre aux fondations internationales qui sont impliquées dans la conservation comme la Fondation Getty ou le *World Monuments Fund*. Leur exemple reconnu pourrait aussi influencer d'autres sponsors internationaux, maintenant qu'il existe également une conscience accrue de l'importance économique de la conservation du patrimoine et de son rôle particulier en termes « de développement durable ». Dans ce sens, avec son rapport *Heritage at Risk*, l'ICOMOS espère non seulement gagner l'appui moral de l'opinion mondiale dans la bataille contre toutes les sortes de menaces, mais aussi obtenir des résultats concrets en coopération avec toutes les forces qui sont intéressées par la préservation/protection du patrimoine culturel.

Suivi préventif et Patrimoine mondial

L'une des tâches essentielles de l'ICOMOS dans le cadre de la Convention du Patrimoine mondial de 1972 est notre travail comme organisation consultative auprès du Comité du Patrimoine mondial et auprès de l'UNESCO sur des questions concernant le patrimoine culturel mondial, en particulier l'évaluation des monuments et des sites qui ont été inscrits sur la Liste du Patrimoine mondial ou sont proposés pour inscription. Le mandat et la fonction des organisations consultatives que sont l'ICOMOS, l'UICN et l'ICROM résultent des articles 8 (3), 13 (7) et 14 (2) de la Convention du Patrimoine mondial en rapport avec les paragraphes 30 et 31 des *Orientations devant guider la mise en œuvre de la Convention du patrimoine mondial*. L'une des responsabilités des organisations consultatives est de « contrôler l'état de conservation des biens du Patrimoine mondial » (OG § 31). Le rôle de l'ICOMOS est décrit au paragraphe 35: « Le rôle spécifique de l'ICOMOS dans le cadre de la *Convention* est le suivant: évaluer les biens proposés pour inscription sur la Liste du patrimoine mondial, assurer le suivi de l'état de conservation des biens du patrimoine mondial possédant une valeur culturelle, passer en revue les demandes d'assistance internationale présentées par les Etats parties et apporter sa contribution et son soutien aux activités de renforcement des capacités. » (OG § 35). Tout comme le spécifie l'article 5 de la Convention du Patrimoine mondial, les Etats parties s'occupent de la protection et de la conservation de la totalité du patrimoine culturel et naturel au sein de leurs territoires, c'est-à-dire pas uniquement des biens du Patrimoine mondial. Ainsi, chaque Comité National de l'ICOMOS a aussi - conformément à l'article 4 de nos statuts - une responsabilité spécifique en ce qui concerne les monuments et les sites de son pays, en coopération bien évidemment avec toutes les institutions concernées par la protection et la conservation.

Dans ces circonstances, basées sur les différentes expériences de leurs pays, des Comités Nationaux individuels (voir les exemples de ICOMOS Allemagne, pp. 62-71 et ICOMOS Autriche, pp. 35/36) ont développé des initiatives spéciales pour la gestion de l'état de conservation de biens du Patrimoine mondial dans leurs pays et ils ont indiqué les dangers imminents dans des rapports (quelques rapports ont aussi été publiés dans notre série H@R). En somme, c'est un programme qui pourrait être appelé « suivi préventif ». Avec un mécanisme d'observation continue, un tel suivi préventif diffère du rapport périodique tel qu'il est décrit dans les *Orientations* (OG V, 199-210) et du suivi réactif (OG IV.A, 169-176). Car ce suivi préventif se rapporte non seulement aux biens individuels du Patrimoine mondial, mais conformément à l'article 5 de la Convention du Patrimoine mondial à la totalité du patrimoine culturel des Etats parties, - ce qui signifie que l'ICOMOS avec ses 8 000 membres agit comme une sorte d'« observatoire général des monuments » scrutant l'état de conservation du patrimoine dans le monde entier.

L'obligation des Etats Parties de faire un rapport périodique résulte de l'article 29 de la Convention du Patrimoine mondial, et du chapitre V des *Orientations* (OG § 190,191 et 199-210). Indépendamment du rapport périodique, le Centre du Patrimoine mondial doit être informé, comme faisant partie du suivi réactif, des circonstances exceptionnelles ou du travail « qui peut avoir un effet sur l'état de conservation d'un bien » : selon les *Orientations*, « le suivi réactif est la soumission par le Secrétariat, d'autres secteurs de l'UNESCO et les Organisations consultatives au

Comité, de rapports sur l'état de conservation de certains biens du patrimoine mondial qui sont menacés » (OG § 169). Le suivi réactif comprend toutes les procédures amorcées par les rapports des Etats parties à la Convention ou par des informations d'une tierce partie en ce qui concerne des mesures dans ou près des biens du Patrimoine mondial. Le Centre du Patrimoine mondial peut consulter les organisations consultatives, c'est-à-dire l'ICOMOS, l'UICN et l'ICCROM en leur demandant leur évaluation de la situation.

La pratique a montré, cependant, que la gestion du mandat de suivi conformément au suivi réactif ne conduit pas toujours aux résultats escomptés. Notamment pour des cas très problématiques, la procédure complète s'est avérée être trop lente et elle ne peut être appliquée seulement que dans des cas précis. Cependant, avec l'état de conservation de chaque bien du Patrimoine mondial, des problèmes mineurs ou majeurs et des menaces peuvent apparaître s'ils ne sont pas traités suffisamment en amont ou s'ils n'ont pas été identifiés assez tôt par les Etats parties ou par les autorités pour la protection et la conservation des monuments et des sites. En résumé, il existe de multiples menaces parfois très aiguës qui pèsent sur le tissu historique et habituellement ces problèmes ne sont pas mentionnés dans le processus du rapport périodique ; ils ne peuvent être résolus non plus à temps au sein du suivi réactif. Notamment pour des biens étendus, les valeurs qui définissent leur statut en tant que Patrimoine mondial, peuvent être affectées par un grand nombre de plans et de projets. Cela s'applique surtout aux villes et aux paysages qui en conformité avec les *Orientations* sont définis comme étant des paysages culturels, des villes et des centres villes historiques ou des routes du patrimoine (OG Annexe 3 - 10, 14, 22/23).

Donc, dans ce vaste domaine des problèmes de la conservation, une observation dynamique continue doit avoir lieu, c'est-à-dire un suivi préventif, qui prend en considération les préoccupations plus générales de conservation et les critères spécifiques du Patrimoine mondial justifiant la Valeur Universelle Exceptionnelle. Dans la mesure où le patrimoine culturel mondial est concerné, cette tâche ne peut être prise en charge que par l'organisation consultative qu'est l'ICOMOS et son réseau mondial de 8 000 membres organisés dans plus de 150 Comités Nationaux et Internationaux. Le mandat correspondant peut se comprendre par les articles de la Convention du Patrimoine mondial mentionnés ci-dessus, ainsi que celui prescrit par les *Orientations* « de surveiller l'état de conservation des biens du Patrimoine mondial » (OG § 31).

Nous espérons que tous les Comités Nationaux de l'ICOMOS, dans des cas particuliers soutenus par les Comités Scientifiques Internationaux, seront attentifs à la tâche de suivi préventif à l'avenir. Après tout, les Comités Nationaux, qui doivent s'occuper de l'état de conservation de la totalité des monuments et des sites dans leur pays, sont nos premiers contacts au niveau national. Les Comités Nationaux peuvent également plus facilement obtenir les informations nécessaires sur l'état de conservation des biens du Patrimoine mondial dans leur pays. Et ils peuvent faire un rapport sur toutes les menaces et les problèmes actuels. Les rapports des Comités Nationaux seront envoyés au Secrétariat International de l'ICOMOS pour que notre siège à Paris puisse décider comment en

informer le Centre du Patrimoine mondial. Ensuite, dans des cas particulièrement sérieux, la procédure décrite ci-dessus comme le suivi réactif pourrait s'appliquer. De notre point de vue et par expérience, impliquer les Comités Nationaux de l'ICOMOS le plus tôt possible dans le suivi préventif, permettra, dans de nombreux cas, d'éviter des menaces et des conflits avec d'autres intérêts, grâce à des conseils appropriés.

Et comme le démontre quelques exemples tirés du *rapport Heritage at Risk 2006/2007* - par exemple les changements d'itinéraire d'une route nationale près du Tombeau d'Humayun à New Delhi (p. 91/92) ou le cas de l'ensemble de tours affectant la Cathédrale de Cologne (p. 62) - une discussion publique initiée par l'ICOMOS peut au moins aboutir à des compromis acceptables.

Remerciements

Le rapport *Heritage at Risk 2006/2007* conçu sur les conseils du Président de l'ICOMOS, inclut non seulement des contributions de Comités Nationaux et Internationaux de l'ICOMOS, mais aussi plusieurs rapports d'experts individuels et reprend des citations de différentes expertises, déclarations, articles et communiqués de presse. En remerciant tous les collègues qui ont contribué comme auteurs à cette publication et ont rendu accessible leur « état des lieux » du patrimoine, il faut noter que, conformément à la politique de l'ICOMOS, les textes et les informations fournis dans cette publication reflètent la vision indépendante de chaque Comité et des différents auteurs.

Notre équipe de rédaction a reçu le soutien considérable d'une collègue australienne, Susan Duyker, qui a révisé de nombreux textes anglais et qui, avec Pamela Jerome, s'est occupée des textes sur le changement climatique. John Ziesemer a été responsable de la production générale de cette publication et a réalisé un grand nombre de traductions. Je voudrais aussi remercier Ioana Cisek du Secrétariat de l'ICOMOS à Munich pour son aide inépuisable, ainsi que Gaia Jungeblodt et le personnel du Secrétariat International à Paris, notamment José Garcia qui a placé la documentation sur le site web de l'ICOMOS. Comme pour les éditions précédentes, ce rapport est aussi disponible sur internet à l'adresse suivante : www.international.icomos.org/risk.

La publication du *Rapport Heritage at Risk 2006/2007* n'aurait pas été possible sans l'appui financier de l'accord cadre 2006/2007 du Centre du Patrimoine mondial (la Division du Patrimoine Culturel) et je tiens à remercier tout particulièrement Madame Françoise Rivière, Sous Directeur général pour la Culture, qui en tant que successeur de Mounir Bouchenaki a également écrit l'avant-propos.

Finalement, je veux remercier également le Commissaire Fédéral allemand pour les Affaires Culturelles et les Médias qui a fourni la structure financière et organisationnelle nécessaire à cette publication.

Prof. Dr. Michael Petzet
Président de l'ICOMOS

INTRODUCCIÓN

La presente edición de *ICOMOS World Report 2006/2007 on Monuments and Sites in Danger (Informe Mundial de ICOMOS 2006/2007 sobre Monumentos y Sitios en Peligro)* es el último volumen de una serie de Informes Mundiales que fue iniciada en el año 2000 y que ha incluido posteriormente los volúmenes *H@R 2001/2002*, *H@R 2002/2003* y *H@R 2004/2005*. Las series han sido complementadas hasta el momento por tres ediciones especiales: *H@R Special 2006 Underwater Cultural Heritage at Risk: Managing Natural and Human Impacts* (*H@R Especial 2006 Patrimonio cultural subacuático en peligro: gestión de los impactos natural y cultural*), *H@R Special 2006 The Soviet Heritage and European Modernism* (*H@R Especial 2006 El patrimonio cultural soviético y el modernismo europeo*), y *H@R Special 2007 Natural Disasters and Cultural Heritage* (*H@R Especial 2007 Los desastres naturales y el patrimonio cultural*). Próximamente será editado otro *H@R Special* (*H@R Especial*) dedicado al trabajo realizado por ICOMOS en Afganistán, como por ejemplo, en la recuperación de los fragmentos de los Budas de Bamiyan. Gracias a una idea iniciada a la vuelta del siglo por quien suscribe junto con el Secretario General Dinu Bumbaru y la entonces Vicepresidenta Sheridan Burke, “Heritage at Risk” se ha convertido en un eslogan bien conocido en todo el mundo como mostró, por ejemplo, la exitosa conferencia internacional *Heritage at Risk – Preservation of 20th-Century Architecture and World Heritage*, que tuvo lugar en Moscú el 18 de abril de 2006 en ocasión del Día Internacional de los Monumentos y Sitios. La consecuente edición de *H@R Special* que incluye los tópicos desarrollados en dicha conferencia se ocupa sobre todo de las amenazas a los testimonios de la arquitectura rusa de vanguardia de los años veinte. Dicho volumen junto con los *H@R Specials* dedicados al patrimonio subacuático y a los desastres naturales complementan las demás publicaciones anuales o bianuales de *H@R* con sus correspondientes informes acerca de diferentes tópicos desde todas las regiones del mundo.

Heritage at Risk

El nuevo *World Report 2006/2007* esta constituido por contribuciones de unos 40 países, complementado por informes temáticos de varios Comités Científicos Internacionales: arqueología subacuática, arte rupestre, arquitectura vernácula, legislación y patrimonio polar. Se incluyen, asimismo, doce informes que se ocupan especialmente de un tema de interés mundial: el cambio climático (pp. 191-226). Este tema ha sido hasta hace poco escasamente atendido internacionalmente en lo que se refiere a la protección y la conservación del patrimonio cultural. Los artículos sobre el cambio climático se ocupan, por ejemplo, de las principales consideraciones en cuanto a las amenazas a nuestro patrimonio cultural en el presente y en el futuro « “every cultural heritage at risk?” (“¿todo el patrimonio cultural en peligro?”) », cambios en las regiones polares, ejemplos tales como el impacto en las tumbas congeladas de los Montes Altai, desastres como los incendios en Australia y Grecia, así como el impacto del huracán Katrina en el área de Nueva Orleans. La contribución acerca de “Amazonia, Monument of Nature” (“Amazonia, Monumento de la Naturaleza”, pp. 40/41) es otro enfoque especial referido a la relación entre cultura y naturaleza. Al poner la mirada a esta relación desde un nuevo

ángulo, este artículo sobre la Amazonia trata de llamar la atención sobre el tema tan crucial de la preservación de la selva amazónica, un tópico injustamente ignorado en la discusión de nivel mundial acerca del cambio climático. Así, el tema del pasado Día Internacional de los Monumentos y Sitios, “Paisajes Culturales y Monumentos de la Naturaleza”, abrirá nuevas perspectivas para nuestro trabajo si, junto con otras categorías de monumentos de la naturaleza, tales como las rocas, cuevas, árboles o cataratas famosas, consideramos la selva sudamericana, el mayor monumento de la naturaleza posible, como un extraordinario fenómeno que combina la historia natural y cultural. Aquí tenemos a la vez patrimonio natural y cultural en peligro.

El informe anual de ICOMOS sobre Patrimonio en Peligro pretende poner en relevancia problemas y emergencias que amenazan los monumentos y sitios alrededor del mundo, y, cuando sea posible, presentar casos de estudio de varios países. Con ello se alcanzan los objetivos de ICOMOS de servir como un foro para el diálogo y el intercambio profesionales, así como de difundir información acerca de los principios de la conservación, técnicas y políticas.

Este nuevo informe no pretende ser abarcador en todos los sentidos. Pero aunque una vez más solo algunos de nuestros más de 150 comités nacionales e internacionales han contribuido, cuando miramos todos los informes publicados en los pasados años y distribuidos por vía de Internet podemos llegar a tener una visión de conjunto. El análisis de los informes muestra que, aparte de los riesgos generales que afectan al patrimonio, tales como los desastres naturales y el envejecimiento físico de las estructuras, hay ciertos tipos de actividad humana que afectan nuestro patrimonio, tales como la guerra y los conflictos étnicos, el desarrollo y otros riesgos ya analizados en profundidad en la Introducción al volumen previo (*H@R 2004/2005*, pp. 12-14).

Entre los desastres naturales que aparecen en este informe 2006/2007, los cuales son también analizados en detalle en el *H@R Special 2007 Natural Disasters and Cultural Heritage*, se encuentran los incendios en Grecia (p. 76, 220/221) y Australia (pp. 218/219), el Huracán Katrina en la región de Nueva Orleans (pp. 167/168, 224-226), el terremoto de Perú (pp. 125-127), así como otro terremoto en Irán (p. 93). Lamentablemente tampoco han disminuido los riesgos derivados de la guerra y los conflictos étnicos. Estos incluyen el desastre en Irak (pp. 94/95), y los daños a monumentos y sitios relacionados con la guerra en el Líbano (ver p. 107), así como también actos incomprensibles de vandalismo, tales como la destrucción total de los monumentos del cementerio de Djulfá (pp. 37/38).

Ha pasado el tiempo y de nuevo se presentan serias amenazas causadas por presas, como por ejemplo, en Turquía, donde Hasankeyf está siendo inundado por la presa Ilisu (pp. 156/157) y Allianoi por la presa Yortanlı (pp. 157-159). Estos son casos en los que todas nuestras protestas fueron en vano. Al igual que en anteriores informes, nos encontramos vez tras vez con amenazas a sitios arqueológicos, como por ejemplo, el antiguo Diolkos en Grecia (pp. 74-76), así como a paisajes culturales rurales, cuya integridad pelagra seriamente como producto de los cambios en la práctica agrícola, los estilos de vida y la tecnología, pero en particular porque las formas y técnicas vernáculas tradicionales están desapareciendo cada vez más. Con respecto a la arquitectura mexicana de adobe, ver pp. 112-114; acerca de la arquitectura vernácula en peligro, ver además pp. 181/182; y acerca de las amenazas al patrimonio de los señorios lituanos, véase pp. 108-110.

Lo mismo puede aplicarse a pequeños y grandes conjuntos, desde las aldeas hasta los centros históricos urbanos en los que la

autenticidad y la integridad se encuentran en peligro como producto de las demoliciones, reconversiones, renovación de barrios enteros y mediante los proyectos de reestructuración del tráfico vehicular. Constituyen ejemplos las amenazas al perfil urbano de Graz (p. 35), las presiones del desarrollo en Argentina (pp. 21/22), en los barrios históricos de Budapest (pp. 80/81, 84-87) y Bratislava (pp. 138-140), en la ciudad de Chisinau en Moldavia (pp. 115/116), y en un gran número de ciudades españolas como Salamanca, Lugo, Sevilla y Toledo (véase pp. 141-149). Se hace especial énfasis en proyectos para edificios en altura que ponen en peligro la integridad visual hasta de perfiles urbanos famosos mundialmente, conjuntos y paisajes culturales, como por ejemplo, el núcleo de torres detrás del Palacio de Belvedere, relacionado con la nueva Estación Principal de Viena (pp. 33/34), proyectos de rascacielos en Praga (p. 57), el plan para la torre de Gazprom en San Petersburgo (pp. 131/132), las torres hoteleras cerca de la cúpula de Genbaku en Hiroshima y en el borde exterior del paisaje cultural de Neusiedler See (Lago Fertő) (p. 36). Finalmente, hay un revelador estudio acerca de las consecuencias de los proyectos de rascacielos en Estambul (pp. 159-164). Podríamos también haber informado acerca de toda una serie de otros proyectos que preocupan de nuevo al Comité de Patrimonio Mundial, como por ejemplo, posibles amenazas a la integridad visual de la Torre de Londres o de desastrosos proyectos de reestructuración del tráfico como el de la carretera en el límite de la muralla de la ciudad, que corta en dos la ciudad antigua de Damasco, o una vía en Tiro (Líbano) que pone en peligro antiguos sitios arqueológicos. Con respecto a los proyectos viales, nuestra publicación se ocupa de algunos casos del Patrimonio Mundial, como la exitosa protesta contra la vía cercana a la tumba de Humayun en Nueva Delhi (pp. 91/92) y el llamamiento contra la destrucción del puerto pesquero de Tomo-no-Ura por un nuevo viaducto (pp. 102/103); más adelante, se expone el posible impacto que tendría sobre la fachada de la Iglesia de la Sagrada Familia en Barcelona (pp. 143-145), la construcción de un túnel para el tren de alta velocidad y, finalmente, se recoge una contribución acerca de la dramática historia del proyecto para el puente de Waldschlösschen en el paisaje cultural del Valle del Elba en Dresde (pp. 63/64, 70/71), proyecto que hay todavía esperanzas de que pueda ser detenido.

Resumiendo, puede decirse que *Heritage at Risk Report 2006/2007* demuestra que la situación del patrimonio cultural es altamente crítica en muchas regiones del mundo. Al mismo tiempo que se invierten tiempo y billones en los preparativos de guerra y destrucción, los responsables carecen del necesario compromiso en lo que se refiere al amenazado patrimonio de pasados siglos y milenios. Por tanto, solo podemos esperar que el informe de H@R inspire compromisos futuros en los niveles nacional e internacional, genere nuevas iniciativas para la preservación y provea de un positivo impulso adicional a las instituciones como el Comité Internacional del Escudo Azul, apoyada por ICOMOS. Este esfuerzo también deberá extenderse a las fundaciones internacionales que se encuentran involucradas en la preservación, tales como la Fundación Getty o el World Monuments Fund. Su buen ejemplo puede también influir en otros patrocinadores que operan internacionalmente en un momento en que se ha incrementado también el reconocimiento de la importancia económica de la conservación del patrimonio y el papel especial que desempeña en términos de "desarrollo sostenible". En este sentido, con su *Heritage at Risk Report*, ICOMOS espera ganar no solamente el apoyo material del público mundial en la batalla contra todo tipo de amenazas, sino además obtener resultados prácticos en cooperación con todas las fuerzas que están interesadas en la preservación - conservación del patrimonio cultural.

Monitoreo Preventivo y Patrimonio Mundial

Una de las tareas más esenciales de ICOMOS dentro del marco de la Convención del Patrimonio Mundial de 1972 es nuestro trabajo como órgano consultivo del Comité de Patrimonio Mundial y de la UNESCO en temas concernientes al Patrimonio Cultural Mundial, en particular la evaluación de los monumentos y sitios que han sido incluidos en la Lista del Patrimonio Mundial o cuya inscripción está siendo considerada. El mandato y la función de los órganos consultivos ICOMOS, IUCN e ICCROM resulta de los artículos 8 (3), 13 (7) y 14 (2) de la Convención del Patrimonio Mundial que se encuentran relacionados con los párrafos 30 y 31 de las Directrices Prácticas. Una de las responsabilidades de los órganos consultivos es "supervisar el estado de conservación de los bienes del Patrimonio Mundial" (DP § 31). El papel de ICOMOS se describe en el párrafo 35: "En lo que se refiere a la Convención, la función concreta del ICOMOS consiste en: evaluar los bienes propuestos para ser incluidos en la Lista del Patrimonio Mundial, supervisar el estado de conservación de los bienes culturales del Patrimonio Mundial, estudiar las solicitudes de asistencia internacional presentadas por los Estados Partes y prestar su contribución y apoyo a las actividades de formación de capacidades" (DP § 35). Así como el artículo 5 de la Convención del Patrimonio Mundial solicita a los Estados Partes que se ocupen de la protección y conservación de todo el patrimonio cultural y natural dentro de sus territorios, no solo de las propiedades específicas inscritas en la Lista del Patrimonio Mundial, todos los Comités Nacionales de ICOMOS tienen, de acuerdo con el artículo 4 de nuestros Estatutos, una especial responsabilidad con respecto a los monumentos y sitios de su país, por supuesto en cooperación con todas las instituciones que se ocupan de la protección y la conservación. Bajo estas circunstancias, basadas en las diversas experiencias en sus respectivos países, los Comités Nacionales, como, por ejemplo, ICOMOS Alemania e ICOMOS Austria (véanse pp. 62-71 y pp. 35/36) han desarrollado sus propias iniciativas para el monitoreo del estado de conservación de las propiedades de sus países inscritas en la Lista del Patrimonio Mundial, y en informes al efecto han señalado los peligros inminentes. Algunos de dichos informes han sido publicados en nuestra serie H@R.

En general, éste es un programa que puede ser llamado monitoreo proactivo o preventivo. Como resultado de la observación continua, el monitoreo preventivo difiere del informe periódico descrito en las Directrices Prácticas (DP V, 199-210) y del monitoreo reactivo (DP IV.A, 169-176). Esta deferencia es debida a que este monitoreo preventivo se refiere no solo a los sitios específicos del Patrimonio Mundial, sino y de acuerdo con el artículo 5 de la Convención del Patrimonio Mundial, a todo el patrimonio cultural de los Estados Partes, lo que significa que ICOMOS, con hasta 8 000 miembros, actúa como una especie de "vigía de los monumentos", observando el estado de conservación en todo el mundo.

La obligación de los Estados Partes de hacer reportes periódicos es un resultado del artículo 29 de la Convención del Patrimonio Mundial, junto con el capítulo V de las Directrices Prácticas (DP § 190, 191 y 199-210). Independientemente del reporte periódico, el Centro del Patrimonio Mundial debe ser informado como parte del monitoreo reactivo, acerca de las circunstancias excepcionales o de que se emprendan obras "que pudieran tener consecuencias en el estado de conservación del bien". De acuerdo con las Directrices Prácticas "El Monitoreo reactivo consiste en la presentación al Comité, por la Secretaría, otros sectores de la UNESCO y los organismos consultivos, de informes sobre el estado de conser-

vación de determinados bienes del Patrimonio Mundial amenazados" (DP § 169). El monitoreo reactivo comprende todos los procesos iniciados por los informes de los Estados Partes de la Convención o por la información brindada por otra fuente con respecto a las medidas en o cerca de los sitios del Patrimonio Mundial. El Centro del Patrimonio Mundial puede consultar a los órganos consultivos como ICOMOS, IUCN e ICCROM para solicitar su evaluación.

Sin embargo, la práctica ha demostrado que la realización del seguimiento basado en el monitoreo reactivo no siempre supone los resultados esperados. En casos agudamente problemáticos el procedimiento en general ha demostrado ser demasiado lento y puede ser aplicado solo en casos particularmente serios. Sin embargo, pueden ocurrir problemas y amenazas de mayor o menor envergadura en cada sitio del Patrimonio Mundial, que no sean tenidos en cuenta o reconocidos con suficiente antelación por el Estado Parte o por las autoridades responsables de la protección y conservación de los monumentos y sitios. Abundan las amenazas, en ocasiones muy agudas, al tejido histórico, mientras que estos problemas no son mencionados en el proceso de los reportes periódicos ni pueden ser solucionados en tiempo con el monitoreo reactivo. Los valores que definen el Patrimonio Mundial pueden ser afectados por un gran número de planes y proyectos, especialmente en los sitios de gran extensión. Esto ocurre principalmente en los casos de las ciudades y paisajes que, de acuerdo con las Directrices Prácticas, son definidos como paisajes culturales, ciudades históricas y centros de ciudad o rutas patrimoniales (DP Anexo 3 -10, 14, 22/23).

Por tanto, es necesario que en esta amplia área de problemas de conservación tenga lugar una observación proactiva continua, por ejemplo, monitoreo preventivo, que tome en consideración preocupaciones de índole más general con respecto a la conservación y los criterios específicos del Patrimonio Mundial que justifican el valor universal excepcional. En lo que concierne al Patrimonio Cultural Mundial, esta tarea solo puede ser llevada a cabo por el órgano consultivo ICOMOS y su red mundial de 8 000 miembros, organizada en más de 150 comités nacionales e internacionales. El correspondiente mandato puede ser deducido de los artículos de la Convención del Patrimonio Mundial anteriormente mencionados, así como el que se encuentra en las Directrices Prácticas: "supervisar el estado de conservación de los bienes del Patrimonio Mundial" (DP § 31).

Es de esperar que todos los Comités Nacionales de ICOMOS, en casos especiales apoyados por los Comités Científicos Internacionales, desempeñen en el futuro la tarea del monitoreo preventivo. Después de todo, los Comités Nacionales, que deben velar por todos los monumentos y sitios de su país, son nuestro primer contacto en el nivel nacional. Es además más fácil para un Comité Nacional, obtener la información sobre el estado de conservación de los sitios del Patrimonio Mundial en su país, así como informar acerca de las amenazas y problemas presentes. Los informes de los Comités Nacionales serán enviados al Secretariado

Internacional de ICOMOS en París, de manera tal que nuestra oficina pueda decidir cómo informar al Centro del Patrimonio Mundial. Entonces, en casos particularmente serios, el resultado puede ser el procedimiento descrito anteriormente como monitoreo reactivo. En cualquier caso y de acuerdo con nuestra experiencia, en la medida en que los Comités Nacionales se involucren lo antes posible en la tarea del monitoreo preventivo, se hará posible en muchos casos evitar, mediante un asesoramiento adecuado, las amenazas y conflictos con otros intereses. Como ejemplos de que una discusión pública iniciada por ICOMOS puede al menos dar como resultado compromisos aceptables, se muestran en el *Heritage at Risk Report 2006/2007* los cambios en los planes para una carretera cerca de la Tumba de Humayun en Nueva Delhi (pp. 91/92) o el caso del núcleo de edificios altos que afectaba a la catedral de Colonia (p. 62).

Reconocimientos

El *Heritage at Risk Report 2006/2007*, elaborado bajo la dirección del abajo firmante Presidente de ICOMOS, incluye no solo contribuciones de comités nacionales e internacionales, sino varios informes de expertos y usa citas de diferentes trabajos científicos, planteamientos, artículos y notas de prensa. Al mismo tiempo que se agradece a todos los colegas que han contribuido como autores a esta publicación y facilitaron sus imágenes, se señala, en línea con la política de ICOMOS, que los textos y la información entregada para esta publicación reflejan el punto de vista independiente de cada comité y de los diferentes autores. Nuestro equipo editorial ha contado con el apoyo incondicional de la colega australiana Susan Duyker, quien editó muchos de los textos en inglés y, junto con Pamela Jerome, se ocupó de los documentos acerca del cambio climático. John Ziesemer estuvo a cargo de la producción general de esta publicación y realizó un gran número de traducciones. Quiero también agradecer a Ioana Cisek del Secretariado de ICOMOS en Munich por su ayuda incansable, así como a Gaia Jungeblodt y al staff del Secretariado Internacional de París, especialmente a José García, quien añadió el material al sitio WEB de ICOMOS. Como en previas ediciones, este informe se encuentra también disponible en www.international.icomos.org/risk.

La publicación de *Heritage at Risk Report 2006/2007* no habría sido posible sin el apoyo financiero gracias al acuerdo marco 2006/2007 con el Centro del Patrimonio Mundial (División de Patrimonio Cultural) y quiero agradecer especialmente a Madame Françoise Rivière, Asistente del Director General para la Cultura, quien, como sucesora de Mounir Bouchenaki también escribió el prefacio. Finalmente, quiero extender mi agradecimiento al Comisionado Federal de Alemania para Asuntos Culturales y los Medios, quien ayudó de nuevo en la gestión financiera y administrativa de esta publicación.

Prof. Dr. Michael Petzet
Presidente de ICOMOS

NATIONAL REPORTS



ALGERIA

Mausoleum of Medracen in Danger

Medracen, a vast mausoleum in the shape of a tumulus possibly dating to the third century BC, is one of the most important sites of the Maghreb. Recently, it became victim of major “repair work” without respect for the value of this monument and its authenticity. Despite protests from ICOMOS Algeria it has not been possible to stop these drastic and harmful interventions. Since the authorities in charge of these measures continued their work regardless of the concerns of national and international professionals, ICOMOS, at the request of ICOMOS Algeria, presented this critical case of the mausoleum proposed for the World Heritage List to the World Heritage Centre. The photographic documentation by ICOMOS Algeria shows the interventions with heavy equipment. Apparently, so far there is no careful planning and documentation.

The Mausoleum of Medracen in the process of inadequate repair work
(Photos: Yassine Ouagueni)



ARGENTINA

All members of ICOMOS Argentina were invited to submit short papers on specific situations of heritage at risk. This report summarises those individual contributions. Risk is mainly caused by development pressures and the lack of proper planning controls, especially with reference to urban heritage, but also individual monuments and cultural landscapes are currently at risk since they are not properly protected or adequately maintained and conserved.

Development pressures in cities

Some risk situations identified in the country are related to the lack of proper planning controls and normative structures to protect the setting of urban monuments or heritage buildings. Even if individual buildings are protected, changes in the surrounding urban tissue diminish the historic or architectural values of the heritage components. As examples of this situation, the cities of Cordoba and Ushuaia can be mentioned.

The city of Cordoba, located in central Argentina, contains some of the finest monuments from the Spanish period, especially the Jesuit Block, inscribed on the World Heritage List. The extension of the city during the 19th and 20th centuries produced new urban areas, characterised by the presence of boulevards and green spaces or neighbourhoods with specific identities. Some risk situations were reported (Photo 1).

The neighbourhood “Nueva Cordoba”, projected in 1886, was the first extension of the colonial city. Plaza España is a circular green space that serves as an entrance to the city park. The plaza was conceived as the core of the neighbourhood and constitutes presently one of the most harmonious urban spaces of the city. Over the 20th century important residential buildings were constructed surrounding the plaza, including historicist and modernist expressions. The resulting townscape is characterised by the coexistence of diverse architectural trends. The importance of this urban architectural ensemble is not in question but the setting of the plaza is currently the subject of strong development pressures. Proper planning would be needed to avoid disrupting the scale through the construction of high-rise buildings and the harmony of the plaza’s surroundings.

One specific case close to Plaza España is the Ferreyra Palace (1911-1916), internationally recognized as one of the best examples of neo-Louis XVI architecture. The surrounding garden enhances the architectural values of the different façades through the introduction of different species of trees and by its organic layouts. The building was expropriated in June 2005 with the purpose of installing a Museum of Fine Arts. Interventions included work to part of the gardens and aimed at “clearing” the view of the building. The complex of bedrooms on the first floor was completely changed to create three large spaces. To the façade facing Plaza España a glass volume and a stairway were added. Interventions are completely inadequate to assure the proper conservation of the monument’s values, its authenticity and integrity.

Urban areas next to the historic centre of Cordoba are known as “neighbourhood villages” and were laid out at the end of the 19th century. Related to the expansion of the railway system, the settlement of industries and the arrival of immigrants, these areas include specific features related to their community life. Testimonies of this particular way of life are, among other herita-



Cordoba, construction of new buildings next to the World Heritage site of the Jesuit Block of Cordoba City (Photo A. Conti)

components, large one-family houses, social and sports facilities, schools and libraries, commercial buildings, railway workshops, hospitals, bars and cafeterias. Since 2002, an important real estate expansion has developed in the city. As expansion of the historic centre is limited the neighbourhoods next to downtown have become the target for renovation. Buildings bearing historic or architectural values are being demolished in order to erect new high-rise buildings and private condominiums. Between 2005 and 2006 more than 100 new buildings were permitted in the General Paz Quarter, an area consisting of some 40 urban blocks. The urban identity is thus modified in terms of height; many inhabitants have decided to move to other areas since they feel that they are “invaded” by the new urban structure. The traditional social tissue is consequently weakened as well.

Ushuaia, located on the shore of the Beagle Channel in the province of Tierra del Fuego, is considered to be the most southern city in the world. It was founded in 1884 and started a process of development from 1902 onwards, when a high-security prison was established. From the 19th century onwards, the area was constantly visited by numerous scientific expeditions, especially due to its proximity to the Antarctic continent. The city’s cultural heritage is linked to a tradition related to scientists, fishermen, tradesmen and missionaries. The city’s historic centre is characterised by the presence of wooden and corrugated iron buildings.

By the end of the 20th century, policies for economic development were based on attracting industry. These policies, along with the rapid development of tourism, led to a significant population increase and associated building construction. Since 2001, new large hotels have been constructed. Their location in the historic area of the town involved the loss of older buildings. A logical equilibrium between the size of new buildings and landscaped areas in accordance with a small city located in a narrow piece of land between the mountains and the sea has not been taken into account. New high-rise buildings are not only constructed by demolishing historic buildings, they also produce a change of scale in the city’s downtown (Photo 2). Ironically, this development is destroying the building stock which is the main tourism resource of the city.

In the city of Posadas, located in northern Argentina by the Paraná River, the possibility of increasing the level of water in relation to the Yaciretá barrage, could affect not only urban areas but

also heritage buildings; among the buildings threatened is the railway station, a building of prominent historic and architectural interest. The Regional Vice-Presidency of ICOMOS and the University of Santa Fe sent a letter to the President of the Republic, explaining the risks and proposing solutions to the situation.



Ushuaia, high-rise buildings in the city's historic centre (Photo L. Lupiano)

Monuments and sites at risk

The lack of proper protection or conservation policies is also affecting individual buildings and archaeological sites. The church of Alta Gracia (province of Cordoba) is included in the Jesuit's *Estancias* World Heritage Site. Partial interventions altered the visual character of the building and deterioration caused by an increase in natural decay. No major conservation work has been undertaken over the last 30 years and the deterioration process has increased over the last five years; the building needs an integral plan for restoration rather than a piecemeal approach.

The Jesuit mission "Santos Mártires del Japón", in the province of Misiones, presents quite an interesting state of integrity due to the fact that no modern village was constructed in the surroundings and that it is relatively isolated from other urban places. However, a provincial route passes through the mission's plaza, threatening

the ensemble of the remains. Agreements between technical staff and provincial authorities could assure the construction of a by-pass so that the route would avoid the archaeological site. In any case, the site is not properly protected.

Cultural landscapes at risk

In the northern area of the province of Cordoba, important testimonies to the process of occupation have been preserved, including cultural landscapes, the royal route system and some *postas* or relays in the route that provided facilities for travellers and storage space. Just a few *postas* have been preserved; some have been demolished or completely altered. The natural landscape that constituted the setting of these buildings is also at risk. The extension of agriculture has replaced the original forests and has altered the original landscape.

Colonia Caroya is located 50 km north of Cordoba City. Immigrants coming from northern Italy settled here from 1878 onwards, producing a typical cultural landscape featuring specific patterns of divisions of the land, tree plantations, irrigation ditches, architectural and less tangible components. The formation of an urban settlement at the beginning of the 20th century generated a crisis in the structure and image of the territory. The lack of specific protection policies poses further risks to this rich heritage site.

Plaza de Mayo constitutes not only the foundational plaza of the City of Buenos Aires, but one of the most significant open spaces in the country. Some of the main historic civic meetings have taken place in this plaza. A current project undertaken by the Government of the City of Buenos Aires plans to completely change the present state of the plaza and to convert it into a paved space with only some trees preserved. The project proposes to interpret the different configurations of the space over time by means of a floor lighting system. The project has been objected to by several professional and civic organisations that stress the risk of altering the country's most important open space.

This report was written on the basis of contributions by the following members of ICOMOS Argentina: Mirta Alá Rué, Sonia Berjman, Leonardo Lupiano, Melina Malandrino, María Rebeca Medina, Hugo Peschiutta, Ana María Rodríguez, María Clara Supisiche and María Teresa Sassi. Alfredo Conti summarised and translated individual papers.

ARMENIA

Castle Amberd

Castle Amberd is one of the famous and valuable architectural complexes of Armenia. Once it was a powerful castle, one of the nine defending castles of Ani. It is situated near the village of Burakan in the Aragatsotn region, on the slope of Mount Aragats. Castle Amberd was built on a promontory formed by rivers, with three sides surrounded by impregnable canyons leaving only the north side accessible.

Its History

The great architect Toros Toramanian supposed that in pre-Christian times this place was chosen as a fortress because of the natural strength of the site. This is proved by some partially preserved pre-Christian battlements in the south-west. Tokarsky, one of the scientists who have explored the ruins of Amberd, supposes that the present castle was built in the 7th century and that it became the property of the Bagratunies in the 9th century when it was reconstructed and enlarged in the north. According to historians, the Bagratunies later bequeathed the castle to Vahram Pahlavuny, to whom the prosperous period of the castle was ascribed.

Description of the castle

The castle battlements were built with huge basaltic stones and

mortar and reinforced with thick brick towers which spring from the promontory on three sides. This position of the castle on the Aragats slope not only made it impregnable, but also offered an opportunity to overlook the entire Ararat valley. The castle with its structures appears like a small town with numerous buildings of different functions (sacred, residential etc). The princely palace is situated in the castle citadel. The northern battlements of the castle were reinforced in the Middle Ages and the second battlement was added, with forcing towers of up to 12 meters. At the end of the promontory is the domed Chamer-like church with fan-shaped spire built by Vahram Pahlavuny in 1026.

Within the three-storey palace situated in the north of the promontory the palace reservoir and some other rooms have been preserved. Two similar but bigger reservoirs are within the castle walls, one of which was built for animals. A bit further to the north, not far from the Palace, is also situated the castle's well-preserved bath-house with stove and two domed small rooms built in the Middle Ages. Immediately next to the bath-house is the chapel, now in ruins.

The castle has two guarded entrances from the sides of the Arkhashan and the Amberdadzor rivers which adjoin to the battlements. Inside the battlements a number of residential buildings and outbuildings can be found.

Archaeological and research work at the castle site was carried out in 1922, 1935 and 1964. Some restoration work was done in the 1970s, mainly at the church. In 2004 restoration and stabilisation work began on structure of the castle.

Although much has been done with regard to stabilization and research, the castle, especially the palace and the citadel, is nonetheless still classified as an endangered monument.



View of the citadel (Photo: Edward Grigorian)

The technical state of the citadel and the palace

The stone walls have been constructed directly on natural shale rock foundations. The walls are built of huge solid basaltic stones with mortar filling. There are numerous cracks in the walls, which are the result either of earthquakes or of the deterioration of the foundation stones. The rock surfaces have been wind-beaten because of the climate. The temperature varies between 35° C in summer and minus 35° C in winter. Due to the destruction of the foundations, the north-east tower has collapsed and fallen into the nearest canyon. The wall originally adjoining this tower is now in danger of falling into the canyon as well. The crack between the wall and the next tower is growing wider and wider, threatening the already damaged wall.

Recent research has proved that the damage to the northern and southern walls have occurred in the last 50 to 60 years. This is shown by old photos, where we can very distinctly see that there

were no cracks then. The main difficulty and problem are that the walls of the citadel and the palace have lost the constructive bond. The walls of 12 to 13 metres height, which have stood for several centuries, have lost their stability, and the process of intensive destruction has begun, endangering the existence of the monument.

The research and stabilisation process of Amberd Castle is being prevented by the circumstance that the middle battlement with all its areas of destruction is between the palace and the northern battlement. To clear and reinforce the inner part of the ruins is full of risk, as for hundreds of years the battlements have leaned upon the ruins. The clearing of the ruin might worsen the already unstable situation.

As a result, the existence of this monument of unique historical-cultural value is endangered. An urgent and immediate intervention will be necessary to stabilise and preserve Amberd Castle.

Mary Danielian
Edward Grigorian



View from the citadel towards the church (Photo: Edward Grigorian)

AUSTRALIA

Introduction

For this issue of the ICOMOS International Heritage at Risk report, Australia ICOMOS has chosen to report on two major processes of review and inquiry, which have provided an important snapshot of the areas of risk to Australia's cultural heritage and the adequacy of the legal and policy frameworks in operation to conserve Australia's heritage.

These processes are:

1. The five-yearly *Australian State of the Environment Report*, completed at the end of 2006, which considered the state, pressures and adequacy of conservation responses for Australia's natural and cultural heritage (as well as the links between human settlements and heritage places, and biodiversity in relation to natural heritage and landscapes).
2. The completion in 2006 of a substantial Inquiry into the 'Conservation of Australia's Historic Heritage' by the Australian Productivity Commission.

Trends affecting Australia's Heritage at Risk

In Australia, there is a statutory requirement for a State of the Environment Report to be prepared by an Independent Committee every five years. There have been three reports, the most recent of these was tabled in the Parliament in December 2006.

The 2006 State of the Environment Report provides an ongoing commentary about a range of risks to natural and cultural heritage places and objects, including environmental decline due to over-clearing in some ecosystems, large-scale bushfires and the long drought, shifts in land use, social change, and lack of understanding, skills and resources. To these can be added the increasing pressures from tourism, urbanisation, industrial/commercial development, and the legislative framework which often inhibits effective management of places at an appropriate whole-of-landscape scale.

Some of the important trends identified for Australia's cultural heritage places and objects include:

- The Condition of Historic Heritage Places remains generally static since the previous report, without improvement [see Box 1].
- Pressures impacting on the integrity and condition of heritage places and surrounding landscapes are experienced in regional growth centres and coastal areas through urban expansion, consolidation and redevelopment; rural population decline can be expected to continue to result in abandoned and deteriorated heritage places.
- The Condition of Indigenous Heritage Places has begun to improve as a result of increased involvement of Indigenous people in site management but there are huge variations in resources, intergenerational involvement and skills available. There is increased recognition by developers and governments that Indigenous people must be consulted about issues affecting their lands, heritage and connection to country.
- The Condition of Heritage Objects and Collections generally relates to storage arrangements, which are inadequate in many

small museums and not environmentally controlled in places with climate extremes; conservation treatment of collections remains a high priority.

- Stronger recognition of Intangible Cultural Heritage in heritage activity has continued, including language, oral tradition, crafts, skills and performing arts. There is continuing interest by Australians in Indigenous art forms, music and oral narratives as intangible heritage and as part of national identity.
- However, the 2006 State of the Environment Report noted the continuing loss of Indigenous languages in Australia, with 110 of the 135 languages considered to be critically endangered and only 18 are considered by linguists to be 'strong'.
- Understanding of Indigenous cultural heritage, especially intangible heritage associated with stories and practices, is increasingly at risk through the lack of transmission of traditional knowledge by Elders to younger generations, and also lack of knowledge about Indigenous heritage in the wider community.
- Political support for heritage is widely perceived to have declined. Despite the enactment of the long awaited reformed national heritage system, stakeholders believe that heritage is 'off the political agenda' and replaced by broader environmental issues like water supply, salinity and re-vegetation in these times of continuing variable climate. In turn, these are highlighted in the national research priorities.
- Changing concepts of heritage were noted.
 - The Natural Heritage Trust dominates the government funding agenda and this has created a discourse in which the word 'heritage' is increasingly linked to nature.
 - There has been an increase in recognition and research about non-Anglo histories and places as our multicultural post-war generation retires and records their memoirs of arrival and living in Australia and as we recognise the wartime issues of alien internment and 60th anniversaries associated with the end of World War II.
- Cultural landscapes are well recognised at the conceptual level, as a tool for integrating and managing all heritage interests in a place, but operational definitions and practical conservation approaches have been slow to develop and there has been very little actual on-ground management. The integrity of heritage landscapes is threatened in the face of transforming developments such as wind farms. [see Illustration 1]
- Professional training programs continue to occur in academic 'silos', based on separate heritage disciplines. Lack of history teaching in school environmental studies/social studies curricula remains an issue discussed nationally, including through the National History Summit convened by the Australian Government during 2006.
- Private residential heritage buildings, listed on heritage registers, have generally been maintained because of private owner preference, their niche real estate value and the period restoration businesses that serve their renovation and maintenance.
- Former government-owned heritage properties have lost heritage values and integrity where they have been redeveloped for new uses, particularly in urban redevelopments such as inner-city post offices.
- Public funding for historic built heritage conservation has declined.



The need for sustainable energy sources in Australia has resulted in the rapid installation of wind farms in parts of the continent. Community debate about these developments has included support for renewable energy sources as well as the need to assess the cultural and natural landscape values of areas suitable for wind-power generation. New assessment and siting guidelines are being developed to respond to community concern to improve the consideration of cultural landscape impacts, although many wind farm developments have already been approved or established.

The risks to Australia's natural and cultural heritage arising from natural hazards have been well recognised. For example, large areas of the continent have been affected by severe wild fire events over the past five years, including two very severe fires in the alpine region of the south-eastern States during 2003 (when over 1 million hectares were burned) and over the summer of 2005-6 [see Illustration 2]. In most cases these bushfires are naturally occurring. There is evidence that prolonged burning will change the distribution of certain forest types such as alpine ash and may lead to loss of that natural heritage type (Gill et al., 2004) while re-invigoration of Indigenous mosaic burning regimes in arid lands has been seen as positive by Indigenous communities and ecologists.

Because cultural heritage impacts are generally poorly recognised in the bushfire response of land management agencies, Australia ICOMOS developed a guideline document to assist the decision making, particularly in the immediate aftermath of the crisis, when many heritage features are further damaged or destroyed through

'clean up' activities [see www.icomos.org/australia]. The recent experiences with these large fires have also provided opportunities for new surveys of Indigenous and historic heritage assets in the affected regions, and to develop new risk-preparedness measures.

The current drought and pressure on water resources has substantially raised community awareness and concern about climate change, although it is well established that Australia has an extremely variable climate. Nevertheless, the enhanced political presence of climate change issues is to be welcomed. Climate change is now gradually becoming a part of the processes of risk assessment and response, with projected changes in land use, and increased occurrence of extreme events (for example, greater occurrence of drought and bushfires in the south, and more frequent cyclones in the north), as well as sea level rises. However, because of the variety of environmental systems across the continent, detailed modelling and identification of risks are occurring. So far, this work has not picked up the cultural heritage impacts and issues in a comprehensive and detailed way.



The Mount Stromlo Observatory, near Canberra in the Australian Capital Territory was severely damaged by the 2003 south-eastern Australian fires, resulting in the loss of important historic buildings, scientific equipment and documents. The Observatory was built in 1911 to fill a solar recording gap in the western Pacific, and is historically significant for its role in scientific research in astronomy and astrophysics in Australia since Federation.

BOX 1: The Condition of Australia's Historic Heritage

This table reports the trends emerging from two sample surveys of historic sites on the national Register of the National Estate undertaken in 2000 and again in 2004. The results of this condition survey suggests only small changes in condition overall, and that certain kinds of historic buildings continue to be particularly vulnerable.

	2000	2004
Commercial premises in urban centres and regional towns	Good condition; but exteriors have high integrity; Interiors: low	Same trend: historical associations and functional significance much diminished
Prominent buildings in rural towns		Adapted by retail chains, especially clothing
Prominent buildings in cities and regional towns	converting to 'modern' retail standards	Increasing number subject to facadism:
Vacant places	42% of those surveyed	Same %
Places subject to conservation works		Increasing deterioration due to no maintenance
Affluent regional centres, including coastal towns		Increasing land values threatening heritage integrity
Former government buildings	Many empty destroyed individual heritage integrity	Streetscape value maintained but modifications
Heritage listed places as a class fare better	Need for more systematic survey consider heritage	Obligations placed on planning approvals to
Heritage listing of places has not been systematic	Minimal protection at the local government level	Listings but many councils are overtly pro-development
Redundant rural buildings of heritage value	Noted as problem known	True scale and extent of this problem still not
Government buildings remain at risk station and Rockhampton Post Office	Echuca railway engine shed, Burra railway Hospital, Townsville Customs House, State Government Printing Office in Perth	Customs House Williamstown, Ararat Mental
Churches: highest integrity and best class of heritage place	Conservation problems developing, such as water penetration redundancy	Trend of ageing church fabric and inadequate maintenance funds continued; increasing
Subdivision of church land		Continuing trend impairing curtilage values
Masonry of heritage buildings degrades integrity	Painting: to detriment of heritage values and	Trend continues
Provision of interpretative information		Ranges from zero to good: Qld Heritage Trails
Interpretative material installed as part of conservation works	Deterioration observed in signage	Continuing trend: town streetscape panels and historic route panels are 'tatty and tired'

Source: Australian State of the Environment Report 2006 (Beeton et al, 2006). Data Reporting System Table NCH-06, based on Pearson and Marshall (2004, pp.17–19)

Areas of Inadequate Policy Responses

Risks to Australia's cultural heritage are in part an outcome of ineffective response measures, in particular the inadequate provision of resources available to the owners and managers of important cultural heritage places.

It is therefore important to evaluate the policy settings established by the three levels of Government – the national/Commonwealth Government, the eight States and Territories, and the 694 local governments across the continent. The policy environment also includes the considerable contribution of the community and professional organisations, and the role of academic institutions.

It was hoped by all these stakeholders that the Australian Treasurer's instruction to the Productivity Commission in April 2005 to enquire into the policy framework and incentives for the conservation of Australia's historic heritage places¹ would lead to new policy and programme approaches.

Australia ICOMOS and most key government and non-government heritage organisations supported a number of the key findings of the Inquiry, such as:

- the importance to the nation of our historic heritage places,
- the role of historic places in contributing to cultural capital,
- the enhancement of social capital through heritage providing a tangible link to the past and reinforcing the sense of community identity,
- the emerging trends of adaptive reuse and heritage tourism,
- the need for enhanced decision-making tools, including data collection and systematic monitoring, and
- the need for improvements to the system in terms of coordination between levels of government, consistency and transparency in the identification of heritage values and the application of thresholds, and the efficiency and effectiveness and efficiency of conservation programs.

However, the submissions also expressed strong disagreement and dismay about the main thrust of the draft Recommendations (December 2005), and disappointment in the lost opportunities represented by the final report (April 2006). This reaction is based mostly on the finding by the Inquiry that heritage protection represents a substantial economic 'burden' for private owners, and questioning whether the social benefits sufficiently warranted these 'onerous restrictions'.

The Productivity Commission had *challenged (and seemingly*

disregarded) central principles and tenets underlying the practice of heritage conservation, and seemed to have provided little of practical or tangible benefit in return (Heritage Chairs of the States and Territories of Australia, 2006:2).

This was the first national inquiry into heritage in over 30 years, and there were high expectations of its potential significance for the future of the national heritage system. As a result, the 418 written submissions offer an unparalleled snapshot of the 'state of heritage' as it is regulated, administered, and experienced at community level in 2005/6 and an unprecedented opportunity to not only assess the 'state of heritage', but also to construct ways to improve the system nationwide.

The three most consistent and compelling messages from the submissions to the inquiry are (Heritage Chairs of the States and Territories of Australia, 2006):

- Insufficient capacity exists at all levels of government to meet community expectations regarding the conservation of Australia's historic cultural heritage.
- This is especially critical at the local level, and a growing share of heritage conservation responsibilities has been shifted to local municipalities, without the accompanying financial and other resources (including technical advice and expertise).
- The lack of a *national strategic framework* which incorporates the roles and activities of all levels of government is a substantial issue.

The Heritage Chairs & Officials of Australia and New Zealand also conducted a national choice modelling survey as part of its contribution to the Inquiry process. The results were overwhelming, showing that 93% of the community see heritage as forming part of Australia's national identity. A similarly overwhelming percentage of respondents considered that it is important to protect Australia's heritage, even though the individual respondent may never visit these places, and that it is important to educate Australian children about heritage (The Allen Consulting Group, 2006).

Registers of listed places have been compiled since the 1970s and as shown in Box 2 below the vast majority of statutory-listed historic heritage places are of local significance. More listed heritage places are in private hands than are in public ownership, especially those of local significance. The emphasis on the 'problems' and the resourcing challenges therefore focuses primarily on the vast heritage resource of local significance.

Box 2: Australian historic heritage places on statutory lists/registers, at 30 June 2005

	<i>World and national heritage lists</i>	<i>Government-owned heritage lists</i>	<i>State and Territory heritage registers</i>	<i>Local government lists</i>
<i>Jurisdiction</i>				
Commonwealth	16	292 ^a
New South Wales	..	6 522 ^b	1 500	26 000
Victoria	..	nsi	1 992	100 000 ^c
Queensland	..	nsi	1 440	na
Western Australia	..	nsi	1 113	16 807 ^f
South Australia	..	nsi ^d	2 195 ^e	4 500
Tasmania	..	nsi	5 326	.. ^g
Northern Territory	..	nsi	175	..
ACT	..	nsi	247	..
Totals	16*	6 814	13 988	>147 000
^a Commonwealth Heritage List. ^b Government-owned and managed places on the NSW s. 170 Register ^c Estimated number of properties covered by individual and area Heritage Overlay controls. ^d Included in State figure. ^e About 27 per cent are residential homes. ^f Includes non-government lists. About 36 per cent are residential homes, 77 per cent are 20 th Century places and 7 per cent are also listed on the State Register. ^g Included in State figure. na Not available. .. Nil. nsi Not separately listed.				

(Source: Table 3.3, Productivity Commission, 2006:36)

The Productivity Commission undertook a survey of all local government areas in Australia. 75% of Australia's 694 local councils responded. Around 50% of responding councils provided some forms of assistance to property owners and community organisations to identify and conserve historic cultural heritage places (ranging from 15% of councils in Queensland to over 80% in New South Wales). The main forms of assistance provided were free heritage advice and grants (Productivity Commission, 2006:38-9).

Submissions were generally in accord that the efficiency and effectiveness of the system is hampered by a failure to fully implement nationally agreed approaches and by the lack of capacity of local government, in terms of skills and financial resources, to properly manage and support heritage conservation at local level. There are also issues arising from the insufficient and/or unnecessarily complicated interactions between systems for heritage protection and urban planning.

The roles and responsibilities of governments, and the adminis-

trative and regulatory arrangements between them, were key issues for many respondents, including for those most involved, the responsible agencies themselves. This relates to the complexities arising from Australia's 'three-tier' structure of government, and the confusion in the community about the different responsibilities and significance thresholds. There were concerns about cost shifting between the different levels of government, and duplication in the processes of listing and statutory approvals, leading to community confusion about how things are expected to work.

A notable example of the lack of protection provided in the three-tier government structure is the extensive and extremely significant rock art of the Burrup Peninsula in Western Australia (see Box 3). A large portion of this landscape has now been included in Australia's National Heritage List. However, issues still remain regarding the long-term conservation of its heritage values in the face of competing development pressures from natural resource exploration and processing, and less urgently, tourism.

Box 3: Burrup Peninsula

Development pressures can inhibit the operation of national and State cultural heritage legislation, including places with potential World Heritage values. One example from Australia is the Burrup Peninsula rock art sites in the Dampier Archipelago in the north-west of Western Australia, which is also the site of Australia's largest liquid natural gas facility on the North-West Shelf.

The Australian Heritage Council assessed the site as having National Heritage values, and after a protracted process it was entered on Australia's National Heritage List by the Commonwealth Minister on 3 July 2007. There was a consistent view of experts that the protection provided by the Western Australian State Government was insufficient. The area is noted by ICOMOS in its thematic study of global rock art sites, and is well known internationally as a very significant rock art cultural landscape. The inclusion of this area in the National Heritage List was welcomed by many organisations and experts throughout the Australian community, including Australia ICOMOS.

Rock art specialists from around the world have expressed concern about the impacts of new development proposals for the Burrup. The World Monuments Fund's 100 Most Endangered Sites list included in June 2007 the Burrup Peninsula, 'one of the world's richest collections of rock art...with up to one million carvings as old as 20,000 years... as among the planet's most endangered sites' (<http://www.worldmonumentswatch.org/>).

Delegates to the Australia ICOMOS national conference, meeting in Fremantle, Western Australia in November 2006 noted the unquestionable significance of the Burrup Peninsula Rock Art sites, and the lack of adequate legislative protection afforded to them, particularly in the face of the substantial and economically important industrial development proposal. Australia ICOMOS requested that national and State governments act with urgency to redress this situation, ensuring the adequate protection for the significant cultural landscape, development and implementation of a strong and culturally appropriate heritage management regime, and all necessary actions to avoid adverse impacts.

While to some extent this call has been answered with the listing of a large part of the area on the National Heritage List, there remain strong concerns about the long term conservation of the area in the face of competing pressures from development. The boundary of the listed area was a controversial element of the compromise between the State and National Governments. This allows for the development to proceed in part of the area, involving the continued relocation of rock art. There is currently no endorsed Conservation Management Plan in place for this significant site, and strong concerns remain about the nature and extent of future development, both within and adjacent to the listed area.



Similarly, there are many examples of inadequate government stewardship of publicly owned heritage assets, including insufficient resourcing, privatisation of management, and poor government adherence to heritage legislation.

Overseas studies and local research were used to demonstrate that there are both market and non-market values of historic heritage places to Australian society and that there is a 'public good' argument for historic conservation that justifies government intervention.

The funding that governments in Australia devote to taking care of our cultural heritage is far less than the amount they allocate to safeguarding the public interest in conservation of natural resources. There is a stark contrast between the funding provided by governments in Australia for the conservation of natural and historic heritage. For example, the \$2.7 billion Natural Heritage Trust (NHT) represents the biggest financial commitment to environmental action by any Australian government. Yet the Act which established the Trust in 1997 specifically excludes historic heritage from funded projects, despite the often indivisible nature of the heritage values expressed in the one place or landscape – natural, Indigenous and historic. There is a case to be made for widening the use of the NHT mechanisms to include cultural heritage. Similarly, the lack of financial incentives for privately owned properties was frequently mentioned. There has been a great deal of debate about the operation of the taxation system, and the need to find new income sources.

Finally, there is a lack of national data collection standards and coordinated programs of data collection and reporting. This makes it impossible to monitor the condition of the heritage estate over time with any accuracy, and also means that the evaluation of the effectiveness of response measures, is anecdotal, impressionistic and ineffective as a basis for development of new policy or funding proposals.

Conclusion

The peer-reviewed and independently prepared State of the Environment Report's theme commentary for Australia's Natural and Cultural Heritage had the following conclusion. It is a call to action for all heritage practitioners working in Australia – and Australia ICOMOS – and a challenge to all levels of Government to find new and more effective arrangements for managing Australia's cultural heritage (Lennon 2006).

Heritage conservation in Australia is at a turning point. Heritage values have changed over the last 30 years since the Australian Heritage Commission Act was passed and reflect changed attitudes, educational standards, technology, economy and demography... The relationship between the Australian Government's heritage administration and State/Territory jurisdictions has been formally established through the National Heritage Protocol (September 2003). However, better integration of the new arrangements with State processes across all areas of heritage conservation still remains the most active requirement. A national policy framework is needed to attain the economic and social benefits of our heritage assets. Heritage is still regarded as special places rather than as a range of values found throughout the environment and encompassing stories, traditions and community associations.

The very high risks being experienced by non-renewable heritage resources must be given adequate voice through specialist advisory bodies to the various Ministers overseeing heritage legislation and programs. There has been a demonstrable decline in the independence, leverage and professional composition of these committees over the last ten years, part of a more widespread trend recognised by some commentators of declining public debate and in the dissenting activities of NGOs. This has been coupled with the de-regulatory thrust of many State governments, a narrowing of the leadership exercised by the Commonwealth government and devolution of responsibilities to the over-burdened and under-resourced local levels of government.

A shared heritage requires public/private partnerships at all levels, public engagement, accountability and continuing education. In a decade of economic prosperity, cultural heritage remains a minnow in the vast sea of boiling issues relating to climate change, water supply and agricultural sustainability.

These factors compound the pressures on Australia's cultural heritage and diminish the effectiveness of the responses. As we look ahead, they therefore pose substantial risks to the conservation and sustainability of Australia's cultural heritage.

This contribution to the ICOMOS International Heritage at Risk 2007 report was prepared for Australia ICOMOS by Jane Lennon, Kristal Buckley, Susan McIntyre-Tamwoy and Peter Phillips. Photographs were provided by Kristal Buckley, Juliet Ramsay and Jo McDonald.

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ⁱ Indigenous cultural heritage was excluded from the terms of reference for the Inquiry.

AUSTRIA

The Austrian examples are notably precarious and the results are not satisfactory in spite of complying with § 172 of the Operational Guidelines. ICOMOS has to learn its lesson – to defend the concerns of cultural heritage more clearly and explicitly against contradicting interests. To hopefully avoid such cases in the future the National Committee of ICOMOS Austria has established a Monitoring Group especially for World Heritage sites.

High-rise buildings behind Belvedere Palace in Vienna – project for the area Main Station Vienna

In combination with the planned “Bahnhof-City” in Arsenalstrasse the project for a new main station is threatening the visual integrity of Belvedere Palace and Park. On the very edge of the core zone of the World Heritage site Historic Centre of Vienna the “Bahnhof-City” with 11 high-rises of up to 100 metres is to be erected. Because of the impact on the main axis Lower Belvedere – Upper Belvedere the high-rise buildings were slightly reduced and rearranged in the revised master plan of February 2006. Consequently, according to the latest view analyses only one 100-metre high-rise building would still be visible in the main axis to the right of the Upper Belvedere. However, the serious impact of the development area on the visual integrity of the main palace – viewpoint in front of the south side of the Belvedere and view of the “Bahnhof-City” from the Belvedere – and of the park to the south were not taken into account in the description and analyses of plans presented to UNESCO by the City of Vienna. On this matter see the following statement by ICOMOS:

The project for the area of the Main Station Vienna-Central Europe (...) adjoins immediately to the core zone of the ensemble Historic Centre of Vienna (inscribed in the World Heritage List in 2001), stretching south with the park of Belvedere Palace. The project for a new main station with a large development area including a series of high-rise buildings situated 2.5 km south of the city centre goes back to an urbanistic competition of 1995. The corresponding master plan was adopted by the Vienna City Council in December 2004 under the condition that “the compatibility of the project with the

importance of the Belvedere complex as part of the World Heritage site must be safeguarded.” The revised master plan of February 2006 shows that some high-rise buildings were modified (reduction of one of the two 100-metre towers to 60 metres, certain changes in locations). (...) However, these changes are not sufficient to ensure a real compatibility with the World Heritage.

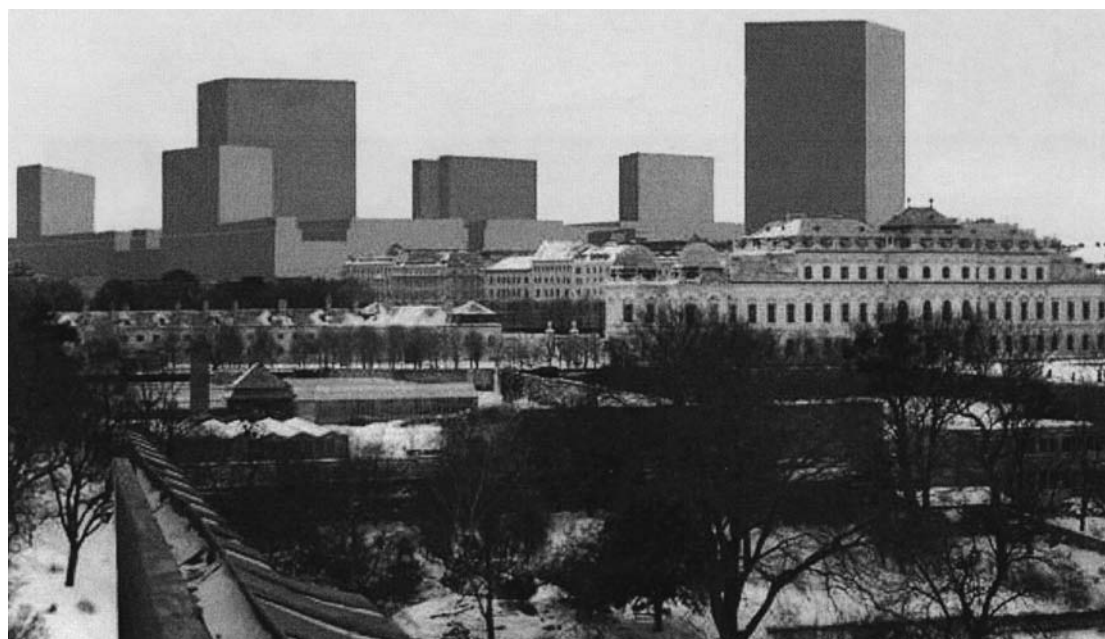
The presentation by the City of Vienna refers first and foremost to the central visual axis Lower Belvedere Palace – Upper Belvedere Palace (also to the visual axis towards St Elizabeth Church). In this context the added computer simulation is also meant to give the impression as if this important historic axis would remain largely undisturbed. In reality, however, the 100-metre tower to the right of the Upper Belvedere Palace would appear above the trees and would also seriously disturb the visual integrity of the famous baroque palace from possible lateral perspectives. Besides, it needs to be taken into consideration firstly that the existing backdrop of trees is without leaves in the winter and thus transparent, and secondly that the illumination of the groups of high-rise buildings at night would interfere with the integrity of the park. Therefore, the heights of the clusters of high-rises need to be reappraised and corrected once more.

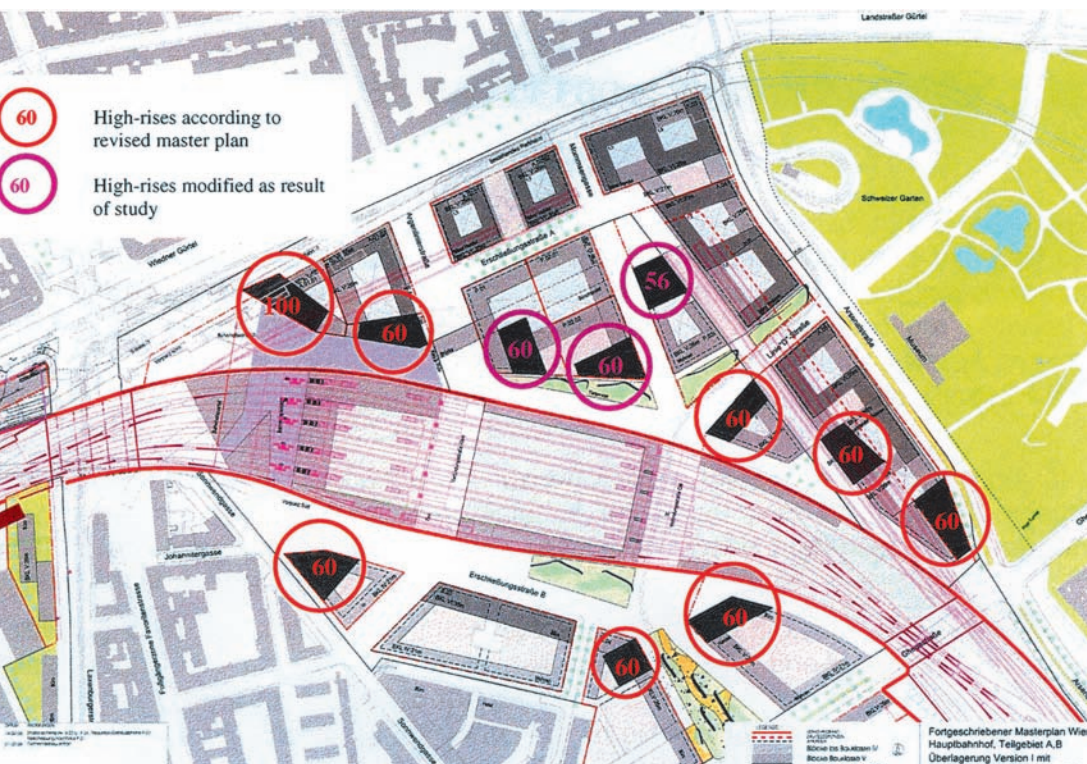
In the evaluation by the City of Vienna the possible consequences of the new urban quarter and the series of high-rise buildings for the south front of the Upper Belvedere Palace and the area of the park which, as part of the core zone of the World Heritage, immediately adjoin to the grounds connected with the main station, are totally suppressed. Here a detailed investigation must be asked for, which also takes into consideration the view from the palace towards the new development area and the consequences for the entire surroundings of the southern Belvedere Park.

Considering that the City of Vienna has tried several times to enforce ruthless projects near the World Heritage sites – for instance high-rise projects close to Schönbrunn Palace – highest caution is also advised in this alarming case. Further details and guidelines concerning the “compatibility” of the project Main Station Vienna-Central Europe with the World Heritage would urgently call for an ICOMOS mission to the site.

Michael Petzet
President of ICOMOS
13 November 2007

Planned high-rise buildings behind Belvedere Palace, view from the roof of Rennweg 16, visualisation of the development of the Südbahnhof area, first project of 2004/05 before the revision of the master plan (Photo: Martin Kupf, Österr. Gesellschaft für Denkmal- und Ortsbildpflege)





Elevation points according to revised master plan for Vienna-Central Europe Railway Station, February 2006 (Wimmer, Masterplan Bahnhof Wien – Europa Mitte – Überarbeitung, 2005/2006)



View from the east side of the park towards the Upper Belvedere (Stadt Wien, Magistratsabteilung 41)

Roof alteration to the department store Kastner & Öhler – an attack on the roofscape of Graz

ICOMOS Austria already gave a detailed account of destructions of the roofscape in the historic centre of Vienna with its roof-on-roof alterations etc (see H@R 2004/2005, pp. 41-45). Here is a similar case in another historic Austrian city, Graz.

The traditional department store Kastner & Öhler is situated amidst the core zone of the World Heritage site “Historic Centre of the City of Graz”. It was constructed by the renowned theatre architects Fellner & Helmer at the end of the 19th century. This store has been remodelled several times in the course of the last century. The latest construction phase resulted in putting up a multi-gabled trench roof above the top floor ceiling, tiled with red clay tiles in accordance with the historic roofscape of Graz. In yet another extension scheme Kastner & Öhler then planned a new roof construction, designed with various capped steep gables with a ridge height more than 9 metres, according to the project of the Spanish architects Nieto/Sobejano, who were the winners of an architecture competition.

In spite of protests from ICOMOS Austria the “compromise” found after a UNESCO/ICOMOS mission in October 2006 only resulted in a slightly reduced solution (slight changes in design and reduction of height). This could be understood as a signal for more roof alterations disturbing the visual integrity of the ensemble.

The result of the competition is a totally inadequate and misunderstood interpretation of a medieval roofscape without any connection to the typology of the building. The multiple gabled and pointed zigzag structure of no regularity shows arbitrariness. Above all a roof covering in metal is now envisaged: a disaster.

ICOMOS Austria holds the opinion that the project is in blatant contrast to the intentions of the World Heritage Convention.

ICOMOS Austria

Wachau Cultural Landscape

The so called „Kellerschloessel“ is situated in Duernstein, one of the most beautiful villages in the Cultural Landscape Wachau. This charming baroque castle was built by the famous architect Jakob Prandtauer during the reign of Hieronymus Uebelbacher, Abbot of the Duernstein Monastery, at the beginning of the 18th century. It was placed as “Lusthaus im Weinberg” at the outskirts amidst the winegrowing cultural landscape. Therefore the castle was always thought to be situated as a solitaire within the vineyards.

Through a re-designation of areas within the immediate surroundings the view has already been disturbed. Now a further residential settlement, the result of a competition, is meant to be constructed. The key question should have been: Is it generally adequate to erect buildings close to the Kellerschloessel? The decision to grant a building permit affects the World Heritage site and the result of this competition poses the problem whether the consistent limitation of exclusively “modern architecture” is justified in such a region.

ICOMOS Austria



Graz, state of the city centre at the beginning of the 1960s



Graz, current state of the historic city centre



Graz, awarded project of the architects Nieto/Sobejano

Altered project after UNESCO/ICOMOS-joint mission



Threat to the cultural landscape at Neusiedler / Fertő Lake

Both ICOMOS Hungary and ICOMOS Austria protested against plans for a 73-metre-high building in Parndorf/Burgenland. The 18-storey hotel building “would seriously damage the Fertő/Neusiedler Lake area inscribed on the World Heritage List as a remarkable cultural landscape. The (...) building would visually destroy the nature reserve of Fertő Lake and its boundaries. After the examples of Vienna and Cologne, another high-rise building is endangering a World Heritage site” (appeal of the Hungarian National Committee of 12 September 2006). The project, situated at the exit of motorway B 50 and already

approved by the town council of Parsdorf, stands for a new escalation in the uncontrolled development of the cultural landscape of the Burgenland. Unfortunately, most of the places on the Austrian side are already severely disfigured by inadequate new buildings – contrary to the much better preserved stock of vernacular architecture in the Hungarian villages on the other side of the lake.

At the General Assembly of the World Heritage Committee it was demanded that the height of the hotel tower be reduced to 47 metres.



Duernstein, construction work in front of the Kellerschloessel



Duernstein, design for buildings to be erected in front of the Kellerschloessel

AZERBAIJAN

Destruction of the Armenian Cemetery at Djulfa – Continued

In the ICOMOS World Report 2002/2003, we submitted a report on the destruction of the outstanding Armenian cemetery of the former town of Djulfa (also Julfa, Jugha) in Nachitchevan, now under Azerbaijan's political sovereignty (pp. 44-47, with photos). The period of time covered by our report ended in January 2003, when the Armenian Bishop of Tabris (Iran) informed us that he went to the Iranian side of the river Araxes opposite to the cemetery of Djulfa to see with his own eyes what had seemed incredible to him: that the 1500 years old cemetery had completely been flattened. Yet, this was not the end.

Between 10th and 14th of December 2005, vandals, who had not been held accountable for their previous crimes, finally succeeded in purging the cemetery area from all the remnants of khatchkars (standing tombstones): Using heavy hammers and pick-axes, about 200 soldiers of the Azerbaijani army reduced the displaced khatchkars to a heap of crushed pieces which were loaded onto lorries and emptied down the bank of the river Araxes.

In early March 2006, the Nachitchevan authorities stationed a firing range on the Djulfa Cemetery and turned the site into a "military zone" so that they could ban foreign missions and observers from entering it. Indeed, in the issue of May 30, 2006, *The Independent* communicated that in mid-April 2006 the Azerbaijani authorities had refused the request of a group of members of the European Parliament to visit the cemetery and, furthermore, that the response of the group to the refusal had been commented by Baku as being "hysterical and full of prejudices".

A comprehensive documentation was submitted to UNESCO in October 2006 by an international parliamentary delegation: *Parliamentary Group Switzerland-Armenia (ed.)*, "The Destruction of Jugha and the Entire Armenian Cultural Heritage in Nakhijevan". (Copies can be ordered from *SAA Switzerland-Armenia Association*,



"Requiem" for Armenian cultural monuments

Bern www.armenian.ch). This documentation includes Mr. Steven Simm's account of his visit to Nachitchevan in August 2005. To sum up his detailed report: Also in the inner regions of the province there is nothing left but some sparse relics of hundreds of Armenian cultural monuments, like monasteries and churches.

Dr. Armen Hagnazarian
Dr. Dieter Wickmann
June 2007

Before its wilful demolition: the cemetery with thousands of standing khatchkars (Photo: Armen Hagnazarian, 1976)





One of the khatchkars as an example of the highly developed Armenian art of masonry, dated 1571 (Photo: Zaven Sargissian, 1987)



Azeri soldiers breaking the khatchkars to pieces with heavy hammers (Photo: Arthur Gevorgian, December 10-14, 2005)



The crushed pieces of khatchkars emptied into the Araxes-facing side of the railway (Photos: Arthur Gevorgian, December 10-14, 2005)



An Azerbaijani "military base" and "firing range" stationed at the site of the annihilated cemetery (Photo: Arthur. Gevorgian, March 2006)



BELARUS

State of Preservation of the Historic City of Hrodna

Hrodna is listed among the oldest Belarusian cities founded at the turn of the 10th and 11th centuries. The historic and cultural heritage accumulated in the 1000 years of its existence is an outstanding example of urban architecture which is a mixture of contacts and interrelations with Western European as well as Byzantine culture and of local traditions. Among the unique architectural monuments of the city there were five 12th-century churches. At present, the historic and cultural potential of the city comprises more than 400 monuments, located in the historic city centre.

In recent years, the condition of Hrodna's monuments and their legal status has been deteriorating. In 1992 the only Hrodna firm working in the restoration field had to stop its activities so that the planned restoration programmes were not carried out. This concerns several individual monuments in the city centre and the planned restoration of the Old Castle from the Renaissance. Consequently, for 15 years no conservation work, so urgently needed for preserving Hrodna's heritage, has been done. The current state of conservation of Hrodna's cultural heritage can be described in the following way:

1. At present, the city authorities do not have any general preservation programme for the historic centre, since they have no understanding for the essential role of the historic and cultural potential of this city and consider this potential as useless lumber.
2. At the same time, the city authorities have launched large-scale municipal improvement activities called "reconstruction" or "restoration". In fact, these measures are reduced to a minimum: mere replacement of old pavements in the centre by modern concrete tiles, simple repair of old stone buildings, repainting of facades, covering of roofs with metal profile sheets, and destruction of green zones. These so-called municipal "improvements" are being undertaken by considerably violating Belarusian laws concerning the preservation of historic, archae-

ological and cultural heritage. They also ignore the rules and methods of restoration and of conservation operations. One of the elements of so-called "restoration" is the planned gradual demolition of Hrodna's historic centre. In 2005/2006 many architectural landmarks were demolished, including monuments of Constructivism (see <http://harodnia.com/a34.php>).

3. The 2003 general plan of the city of Hrodna underlined the necessity of clearing the historic city centre in order to make way for a public recreation area for pedestrians. However, in 2006 the city authorities built a four-lane road through the centre resulting in the demolition of many foundations of 16th-18th-century stone buildings as well as in a partial or complete loss of archaeological strata (<http://harodnia.com/f04.php>; <http://harodnia.com/f01.php>). Archaeological excavations started with delay and covered only a limited area (<http://harodnia.com/f06.php>).
4. The local authorities are planning to build more road sections through the historic city centre, for example by widening and reconstructing Padgornaya Street and constructing a parallel to Vialikaya Trayetskaya Street. This plan will lead to further destruction of the townscape (including Nioman bank terraces) and have negative impact on architectural monuments (such as Old and New castle, the synagogue and others).
5. The authorities rejected all alternative proposals made by town-planners and historians that would offer solutions for reconstruction and for traffic improvements in the historic centre of Hrodna.

For more information see also:

<http://www.charter97.org/eng/news/2006/08/11/belarus>

Aliaksandr Milinkevich

Hrodna, historic view of the Old Castle



Hrodna, Old Castle, inadequate renovation work (Photo: A. Milinkevich)



BRAZIL

Amazonia, Monument of Nature

In the present worldwide discussion about the global climate change (see our special focus on GCC, p. 192 ff.), about melting glaciers, the causes of storms and disastrous fires the South American rainforest, which for decades has been a favourite topic for environmentalists, seems not to have received enough attention. But with its 4.1 million square kilometres the South American rainforest remains a decisive element for the global climate system. When the famous explorer Alexander von Humboldt travelled through the Amazonian forest about 200 years ago, everything reminded him of “the primordial state of the earth”. Nowadays, while each deforested and burnt area of the rainforest leads to the disappearance of countless animal and plant species, the question about the future of this unique ecological system has to be raised again and again and from new angles. In this context, the topic of the International Day for Monuments and Sites on 18 April 2007, *Cultural Landscapes and Monuments of Nature* could also open up new perspectives for the Amazonian rainforest: The largest imaginable “Monument of Nature” is not just a matter of natural heritage at risk (some parts of the Amazonian rainforest are already on the list of World Natural Heritage), it is also a matter of cultural heritage at risk.

Below is the text of an ICOMOS press release and our Amazonia Declaration published on the occasion of the ICOMOS conference in Manaus (16-19 November 2007):

The International Council on Monuments and Sites (ICOMOS) declares Amazonia a “Monument of Nature”

Manaus (Brazil), 19 November, 2007 – In concluding a year of world-wide activities around the theme of “Cultural Landscapes and Monuments of Nature”, members of the International Council on Monuments and Sites (ICOMOS) met in Manaus, Brazil, and declared Amazonia as the First International Monument of Nature. ICOMOS, a world-wide non-governmental organization devoted to the protection and conservation of monuments and sites, is adviser of UNESCO and the World Heritage Committee.

“Over 200 years ago, Amazonia inspired the first use of the expression Monument of Nature by the famous explorer Alexander von Humboldt. Today, in a world concerned over global climate change or the loss of cultural diversity, Amazonia deserves the international recognition. The current interest observed world-wide for the cultural heritage, even in sites seen so far as exclusively natural, is bringing us to pay a very special homage to Amazonia, a vast area so essential to the World and its identity” said Prof. Dr Michael Petzet, the President of this international professional organisation.

Amazonia encompasses a large territory. It includes lands belonging to Brazil, Venezuela, Colombia, Ecuador, Peru, Bolivia, Guyana, Suriname and French Guyana. In Brazil, nine states constitute the Legal Amazonia (Amazonas, Pará, Amapá, Maranhão, Tocantins, Mato Grosso, Acre, Rondonia and Roraimá).

The meeting in Manaus was attended by experts from Argentina, Brazil, Canada, and Germany and its discussions took into consid-



Declaration of Amazonia as Monument of Nature (Photo: M.Pz.)

eration a vast array of experiences and perspectives, including the World Heritage Convention of UNESCO, signed by 184 countries.

This recognition of Amazonia by ICOMOS is a powerful symbol of the commitment of the professional and scientific networks involved in the conservation and protection of cultural heritage to encourage multidisciplinary and international cooperation. “Amazonia is opening a new perspective on heritage and international activities. We look forward to its inspiration in helping ICOMOS pursue its mission to bring experts together to identify and conserve heritage in all its forms, including monuments of nature”, added Prof. Dr Petzet.

ICOMOS will follow up from the Manaus meeting with activities to identify other Monuments of Nature (rivers, forests, mountains, sacred rocks or trees, geological formations, waterfalls, etc.) with its 150 National and International Committees. The conclusion of the Manaus meeting and the text of the Declaration of Amazonia will be made available on www.icomos.org along with other documents of the organisation such as the international charters of conservation and the Heritage at Risk reports.

ICOMOS Declaration of Amazonia as a Monument of Nature

Being aware of the ecological threat to our planet and taking into account the protective measures already implemented or planned by the peoples and governments of the concerned countries;

Appealing to the responsibility of all people and countries benefiting directly or indirectly from the largest continuous forest area on earth;

Especially in honour of the traditional populations that interact with the rainforests resources on the basis of a sustainable development since thousands of years;

ICOMOS declares MONUMENT OF NATURE the tropical rainforest of the Amazon region in its natural boundaries and in its integrity.

Manaus, 17 November 2007



Rainforest, river bank (Photo: M.Pz.)



Rainforest, aerial view (Photo: M.Pz.)

Manaus, dilapidated houses in the historic centre (Photo: M.Pz.)



BULGARIA

Heritage in Danger

The task of presenting specific Bulgarian monuments at risk seems to be very easy and at the same time it is very difficult. The reason for this ostensible contradiction lies in the simple fact that the Bulgarian cultural heritage in general is in a situation of mortal danger.

Realising that this conclusion may sound quite pathetic, we will try to present the impartial facts on which it is based:

1. The present Law for the Monuments of Culture and Museums, which should guarantee the preservation of the Bulgarian cultural heritage and regulate this activity, was adopted in 1969. In the last 18 years it has become overgrown with a number of amendments, which unfortunately cannot compensate for the lack of a general and modern policy of conservation in this conglomeration of decrees, most often dictated by the constantly changing conditions. This law is really unable to reconcile the system for preservation with the new social and economic conditions.
2. The various laws, related to heritage and its preservation, are not only lacking in harmony between one another, but in various items provide contradictory decrees. In a rather critical way this discrepancy is revealed in the Law for the Development of the Territory, where a number of decrees prevent the adequate and consecutive implementation of activities for the preservation of monuments.
3. The funds, provided by the State budget for the preservation of cultural monuments for the whole country, are absolutely insufficient. These funds are mainly used for urgent measures on the most endangered monuments of the highest categories. Considering there are about 40,000 monuments in total these funds are by no means sufficient to take care of all of them. Obviously, in this situation it is impossible to adequately implement any state strategy in the field of the preservation of cultural heritage – maybe this is the reason for the lack of any strategy.
4. At the same time there is a lack of mechanisms to attract and encourage other sources for funding and there is no incentive for sponsorship. There are also hardly any financial stimuli for the preservation of historic buildings: the responsibility to provide funds for their restoration is left entirely to the owners. Unfortunately there is a tendency for the opposite to occur: most owners intentionally expose these monuments to destruction aiming at excluding the monuments from the register, thus getting away from their commitments to the monuments as well as from the restrictions related to their preservation.
5. The responsibility and legal acts in the field of preservation are concentrated mainly in the National Institute for Monuments of Culture, a body of the Ministry of Culture. It's enough to point out that the staff of this institute numbers only about 60 people, who have practically no physical ability to exercise control over the state of monuments and interventions on them. This lack of control is obvious, especially in a situation where as a result of the process of restitution a number of buildings were returned to their previous owners or their inheritors. In most cases the actions taken for the "utilisation" of these buildings contradict the requirements for their preservation as cultural assets.
6. In most cases, when specific building initiatives also affect monuments of culture, the need of the latter to be preserved and adequately exhibited is considered an obstacle to the erection of a new building. The economic interests of the investors, short-

sightedly evaluated by them, usually outweigh the social interests for the preservation of cultural heritage. Unfortunately, we have to point out that the efficiency of this economic pressure arouses suspicions of corruption.

7. And maybe one of the greatest dangers to heritage is the lack of will and determination among the representatives of the executive to use their legal powers for the enforcement of the Law, which though being rather out-of-date and quite imperfect, still provides some protection for our heritage – because of the inaction of the authorities (no matter if there is interest or not) in a number of cases.
8. These are only the most important components of the risk situation of the Bulgarian cultural heritage. Alongside (and in many cases even provoked by them) a number of other factors are also active: a lack of constant care and good maintenance, so important for the protection of monuments, as a result of which a number of monuments are in a process of fast or slow self-destruction, and a great part of those restored in the past are in a rather bad state at present; a lack of security at the archaeological sites, as a result of which they have often become victims of treasure-hunting and vandalism; illegal traffic of cultural assets, etc. Special attention should be drawn to the problem related to the capacity of the people working both in the administrative as well as in the professional spheres of preservation activities. There is also a lack of well trained decision-makers at the local level as well as a lack of licence regime for the professionals with the right to intervene in monuments, which in some cases can be very harmful to the fate of the monuments.

Below, we will point out only six examples of the impact that the above-mentioned risk factors have on Bulgarian heritage. The selected monuments differ both in their typological and historical background, as well as in the category determining their value. The first five have in common that they are all in an extremely endangered state and urgent intervention for their preservation is absolutely necessary, while the sixth monument is a curious case, where a newly built substitute of a destroyed monument remains in its place in the monument register.

Novae archaeological reserve near the town of Svishtov

The main risk influences on this monument are:

- Lack of funds for conservation and maintenance;
- Aggression caused by natural agents – erosion, geological instability of the ground, unfavourable climate with great temperature fluctuations, intensive invasion of vegetation; and
- Vandalism and treasure hunting due to the remoteness of the site from the town and the lack of security.

The archaeological site Novae is one of 44 cultural monuments in Bulgaria with the status of Reserve (this status is determined by a government decision for group monuments of the highest category, i.e. of national importance, to which the highest degree of protection should be provided).

As a result of archaeological research carried out by Bulgarian and Polish teams in the course of several decades, Novae is at pres-



Novae archaeological reserve

ent one of the best investigated Roman camps in Bulgaria. The site is especially representative of the fortified military settlements built on the periphery of the Roman Empire, and some of the findings there are unique evidence of the material and spiritual culture of the period.

Novae was founded in the 1st century AD as a fortified Roman camp on the Danube limes – one of the important points of the fortification system along the Danube river which continued to exist also during the Byzantine Empire. A number of extremely valuable remains and evidences of the town's almost 600 years of existence have been preserved (the last written documents date back to the 17th century).

Founded as a Roman military camp, around the 4th century AD Novae gradually became a town-fortress with mixed military and civil population. New residential buildings were built as well as handicraft workshops and churches. During that period the town became an important military, urban and religious centre.

Remarkable are the remains of the fortification system of the camp and the town, as well as a number of public, residential and religious buildings from the Roman and early Byzantine periods.

Extremely valuable is also the collection of the found artefacts: one of the rare sculpture portraits of Emperor Karakala, bronze statues, inscriptions, coins, glass and ceramic vessels, clay lamps, medical instruments (in the military hospital), wall paintings, etc.

The risk factors mentioned above are a serious threat to the site and question not only its adequate presentation, but also its physical survival.

The church of St. Todor near the town of Boboshevo

The main risk influences on this monument are:

- Lack of funds for conservation and maintenance;
- Active destructive processes, which have led to the critical physical state of the monument and to risking its very existence; and
- Vandalism, a result of the remoteness of the site from the town and the lack of security.

The church of St. Todor is situated in the vicinity of the town of Boboshevo (in southwest Bulgaria), in a natural environment with exceptional and authentic beauty. Through this typical cultural landscape passes a historical pilgrim's way leading to Mount Athos. The church is one of the few preserved religious monuments from the period of the first Bulgarian State. Built at the beginning of the 11th century it is a representative of one of the rarest types of Eastern church architecture, some very few representatives of which have been preserved. Its typical characteristic is the so-called "expressed cross", which is the central element of the plan and space composition of the building and stands out distinctively both in the interior and the exterior of the church. The arms of the cross are covered by semi-cylindrical vaults, while in the centre of the cross rises a high semi-cylindrical drum with four windows, where the dome was set (semi-destroyed today). The walls of the church are stone masonry, while the vaults above the arms and the drum below the dome are brick masonry; the building structure of the drum has a decorative effect: large joints of white lime mortar lie between the red brick belts. These characteristics prove that the building reproduces a very old early Christian type of church architecture. The interior was painted in the 14th century covering older wall paintings. The iconography of the scenes reveals features common with the Cappadocian art tradition, quite different from the Byzantine style of painting dominant at that time. Due to the exceptional characteristics of its architecture and paintings, the church of St. Todor is an extremely valuable typological cultural monument of national importance.

The building and the wall paintings of the church of St. Todor have suffered heavy damages caused by natural destructive processes throughout its long life, by seismic influences, and unfortunately also by acts of vandalism. The church has a partially destroyed structure; the wall paintings are in a rather bad state. In the last century a temporary wooden protective cover was built above to protect the church from further destruction. Unfortunately, the cover itself is now also in a rather bad condition.



Wall paintings in the church of St Todor near Boboshevo



Wall painting in the apse of the monastery church of St Archangel Mihail in Dolna Beshoviza

The monastery of St. Archangel Mihail in the village of Dolna Beshoviza

The main risk influences on this monument are:

- Lack of funds for conservation and maintenance;
- Active destructive processes which have led to a critical physical state of the monument and risk for its very existence; and
- Vandalism and treasure hunting, due to the neglected state of the monument and the lack of security.

The monastery of St. Archangel Mihail in Dolna Beshoviza is located in the municipality of Roman (in West Bulgaria). According to existing records, the monastery church was built in the 14th century, afterwards it was destroyed and rebuilt, repaired and new buildings were added. In the apse of the church well preserved wall paintings exist, revealing some unique characteristics: the images of the Roman popes Sylvester and Adrian, the first paintings of the brothers Cyril and Methodius in the space of the altar, resemblance of the image of the Virgin Mary to the one from the Monastery of Bachkovo. The investigations, the collected historical data and photo research of the icon painting of the church prove the high historical, art and architectural value of the monument, which is of national importance.

The present state of the monastery is disastrous: its west wing is destroyed, its east wing could fall down any minute; the church has serious cracks and unless the treasure hunting excavations in its foundations stop, the church is under serious threat. Urgent measures have to be taken immediately in order to save the surviving building structure of the monument, and in the next stage to carry out the necessary research and design work for future restoration activities.

The church of St. Petka in the village Chuipetliovo, region of Pernik

The main risk influences on this monument are:

- Lack of funds for conservation and maintenance;
- Destructive process in the wall paintings; and
- Incompetent intervention in the wall paintings.

The church St. Petka in the village Chuipetliovo in the region of Pernik (Sofia bishopric) was built in 1860 (the date 1860 inscribed on its east façade is the only evidence for the construction, as the chronicle book of the temple was lost). The church is dedicated to St. Petka, one of the most honoured saints in Bulgaria and on the Balkan Peninsula.

As an architectural and composition type the monument belongs to the one-aisle churches and bears the typical characteristics of the temple construction in the West Bulgarian lands from the second half of the 19th century. The temple has no narthex; its main body is compact and monumental. Cyclopean blocks as well as processed stones were used for the building structure, altered by bricks. The building structure is massive, with thick walls, which entirely take the load of the massive vault. The walls end with a cornice, turning into convex-concave arcs in the east and west, typical for Bulgarian Revival architecture. Above the vault there is a double-pitched wooden roof with tile cover.

There are three distinctive parts in the spacious interior of the temple: altar, nave and upper level; the nave is divided into five equal parts by four arcs, supporting the vault. The vault has an elliptic outline, in the middle it smoothly turns into a flat ceiling. All surfaces of the interior are entirely covered by wall paintings. The iconographic programme is extremely interesting. No records from the icon painters have been preserved, but there is serious reason to assume that two icon painters worked in the temple at different periods of time. The entire layout of the interior has the same monumental impact as the exterior of the church, which is proof of

the high quality and experience of the painters. The church is a cultural monument “of local importance”.

Some of the wall paintings are destroyed, while the greater part of the rest is in a critical condition – with detachment and a covering thick layer of salts. The priest ordered the re-painting of some of the scenes by a local painter without the approval and consent of the National Institute for Monuments of Culture.

The house of Dimitar Jablanski in Sofia

The main risk influences on this monument are:

- Intentional neglect and lack of maintenance by its owner; and
- Lack of intervention by competent authorities, which should demand from the owner to observe the law and in the case of refusal to use sanctions against him.

The house was built in 1907 by the Austrian architect Grunanger for the rich contractor Jablanski. It is situated in the centre of Sofia, close to the Parliament (18, Tsar Osvoboditel boulevard), and belongs to the category of rich family residential buildings typical for Europe at the end of the 19th and beginning of the 20th centuries, which the representatives of the well-to-do-classes built in the most prestigious areas of the big cities.

The building situated in a relatively small garden-yard is a three-storey house, with imposing dimensions, rich architectural and decorative design and monumental impact. Expropriated by the communist government after 1944, for more than 30 years it hosted the Chinese embassy in Sofia. After 1989 it was returned to the inheritors of its last owner.

The building at present is deserted, abandoned and left to destruction. There are indications that the new owner is striving for maximum utilisation of the extremely expensive ground of the building, aiming at impressive profit.

In spite of the numerous public initiatives for the preservation of this emblematic monument, no measures have been taken by the authorised institutions to prevent its intentional destruction.

The house of Dimitar Jablanski in Sofia



Sofia, façade of the house of Nicola Moushanov integrated into new building

The house of Nicola Moushanov

It would be a bit incorrect to say that this monument is at risk, as actually it does not exist anymore – the building was destroyed, in its place a modern six storey apartment hotel was erected. The National Institute for Monuments of Culture reduced the category of the monument, and afterwards it authorised the project for the new hotel with the main motif that the memory of the monument has been preserved there – in the street façade of the hotel a “quotation” (though not literal) of the house façade was incorporated.

This house was of the same type of monument as the Jablanski house – a big and imposing residential building, situated in one of the central streets of Sofia (47, Moskovska street). It was built at the beginning of the 20th century by Nicola Moushanov, prominent Bulgarian politician and Prime Minister during the period 1931–1934.

Special attention should be drawn to the fate of this monument, as it is symptomatic of a kind of “disease” becoming “chronic”. This is the third case in Sofia, where monuments of culture are being destroyed in order to build new hotels on their sites. In all these cases the designs were authorised because the facades of the new buildings quote in some way the disappeared monuments.

CHINA

The People's Republic of China is right to be proud of its ancient culture and has made considerable efforts in past years to preserve its unique cultural heritage. Here also in view of the immense dimensions of some monuments and sites considerable problems arise, - for instance concerning the protection and maintenance of the Great Wall, which is thousands of kilometres long. On the other hand, China's dynamic economic development is connected with a gigantic building boom in the cities and with large projects of road construction, like the new motorways, which in particular confront archaeologists with tremendous problems concerning the protection and rescue of below-ground evidence. In this context, the greatest challenge was, of course, the Three Gorges Dam, the largest dam in the world, about which we already reported in an earlier H@R publication (see *H@R 2000*, pp. 84/85). The following report points out problems after the completion of the dam which is also affecting the environment of the Yangtze River with its cultural heritage:

Government tackling Three Gorges' hidden environmental threats

The government is facing up to the hidden environmental threats stemming from construction of the 180 billion yuan (US\$24 billion) Three Gorges Project, experts and officials said at a workshop yesterday. Environmental damage caused by the largest hydroelectric river dam project in the world needed to be addressed to avert a disaster, participants said at the two-day forum debating the project, in Wuhan, capital of Hubei Province.

On the plus side the dam will prevent seasonal flooding on the lower reaches of the Yangtze River and electricity generated by hydropower will reduce carbon emissions, but the benefits will have an environmental cost, they said. Forum members said the project had "adversely" affected the Three Gorges reservoir



Modern painting of the Yangtze River (detail) indicating the level of flooding (Photo: M.Pz.)

environment. Problems mentioned included disruption of the ecosystem, more frequent natural disasters, severe erosion and landslides, land shortages and ecological degradation. Tan Qiwei, vice-mayor of Chongqing, a sprawling metropolis near the reservoir, said the shoreline had collapsed in 91 places.

Frequent geological disasters have threatened the lives of residents around the reservoir area, said Huang Xuebin, chief of the Headquarters for Prevention and Control of Geological Disasters in the Three Gorges Reservoir. At the forum he described landslides in the reservoir that had produced waves as high as 50 m, crashing into the shoreline and causing damage. Water discharged from the Three Gorges Dam has threatened the safety of protective embankments downstream, Hubei Vice-Governor Li Chunming said.

Both Tan and Li said water quality in the Yangtze tributaries had deteriorated and outbreaks of algae and aquatic weeds had become more common. "We cannot profit from a fleeting economic boom at the cost of sacrificing the environment," Wang Xiaofeng, director of the office of the Three Gorges Project Committee of the State Council, said. Wang added the government had paid a lot of attention to the consequences of construction of the Three Gorges Dam.

The government has invested heavily in programs designed to conserve the ecology of the Three Gorges area, including spending 12 billion yuan to prevent disasters such as landslides. It has also closed or relocated 1,500 manufacturing ventures, constructed more than 70 sewage disposal and waste treatment plants and resettled about 70,000 people from disaster-prone areas.

The Three Gorges Project was launched in 1993, with a budget of 180 billion yuan. Located on the middle reaches of the Yangtze River, the project boasts a 185 m dam, completed in early 2006, and a five-tier ship lock. At least 1.2 million people have been resettled.

(quoted from: *China Daily*, September 28, 2007)

View of a town already deserted and to be flooded, 2005 (Photo: M.Pz.)



CYPRUS

Development constitutes one of the most common factors that affect the cultural heritage of Cyprus. The occurrence of ancient remains during construction projects is very common and the solution that is usually suggested is the incorporation of archaeological sites within the development projects, sometimes with detrimental results for both the ancient site and the modern buildings. The pressures of pre-fixed excavation deadlines often lead to incomplete or inaccurate documentation and to the consequent loss of information.

The archaeological site on the Hill of Agios Georgios (PA.SY.D.Y), Nicosia

The following is a progress report for the site of Agios Georgios (PA.SY.D.Y) and it intends to provide a follow-up of the report for the period 2004/5 (see *Heritage at Risk* 2004/2005, pp. 53/54).

The proposal to build the new House of Representatives on the Hill of Saint George, Nicosia, problematic because antiquities were found after the approval of the building plans (that were selected as a result of an architectural competition), is still pending. Superimposed strata have been revealed, belonging to various phases of the city's history. The site provides evidence for the early habitation of Nicosia during the Late Chalcolithic period (mid – 3rd millennium B.C.), taking back the city's history by about three centuries. The history of Cyprus' capital, although one of the longest in the Mediterranean, was little known to its population. One has to bear in mind that the modern city completely overlies its ancient forerunners and that until very recently no large-scale excavations had ever been undertaken to document its history.

Successive occupation at the site dates from the Archaic period to the end of the Hellenistic period and provides new evidence for the settlement, religion, economy and social organization during

these periods. Furthermore, important evidence has been uncovered, possibly related to the ancient kingdom of Ledra, which has not been identified so far. In addition, architectural remains assignable to the early Christian period until the 16th century A.D., when the city was shifted within the newly built fortifications of the Venetian period, constitute evidence of the city's later historical periods. The study of the remains and in general of the material unearthed (burials, moveable objects etc) will enhance our understanding of the history of Cyprus' capital city and its population.

Suggestions made by the Department of Antiquities, Cyprus, related to the re-designing of the building so that it takes into account the preservation of the excavated remains, have been forwarded and are still being examined by the bodies concerned. The Department of Antiquities, Cyprus, in collaboration with the Town Planning Bureau and the Department of Public Works, has taken on preliminary works for landscaping and making the site partly accessible to the general public. However, no final landscaping or sheltering of the vulnerable parts of the site may be possible before a final decision is made on the future of the site. The excavated remains are conserved annually, but still remain exposed to the elements with irreversible results.

Palaion Demarcheion, Nicosia

The following is a progress report for the site of Palaion Demarcheion in the walled city of Nicosia and it intends to provide a follow-up of the report for the period 2004/5 (see *Heritage at Risk* 2004/2005, pp. 53/54). Unfortunately, the procedures for the completion of the plans for the future of the site are still delayed and as a result, long-term decisions for the conservation, preservation and presentation of the site to the public cannot be made.

The archaeological site on the Hill of Agios Georgios, Nicosia



Despite the fact that the political and ecclesiastical history of the Byzantine and medieval capital of Cyprus, Nicosia, is well documented by written sources, matters such as its topography, architecture, town-planning and the everyday life of its inhabitants are little known. These matters can be clarified by combining the information from the sources with archaeological research. Rarely are archaeologists given the chance to excavate a large area in a busy urban centre, and even more rarely they are given the chance to excavate a large area with undisturbed archaeological strata.

That is why the site of Palaion Demarcheion in the centre of the walled city of Nicosia presented a unique chance for archaeological research. The site was a municipal car-park since the 1960s and this kept the large modern digging machines away. It was the first time that such a large scale systematic excavation had taken place within the walled city.

In 2002 works began for the construction of a new town hall on this site, following an earlier decision of the Municipal Council. Almost half of the site was bulldozed away. It was only in 2004, however, that the walled city of Nicosia was declared an Ancient Monument of Schedule B under the Antiquities Law, which meant that, among other things, the Department of Antiquities controls all excavation works in the walled city.¹ The excavation was carried out during the period 2002-2006. Soon after it was realized that the site was also an archaeological one, it was decided by both the Department of Antiquities and the Nicosia Municipality that the ancient remains should coexist with the new building.

A large part of the Byzantine and medieval city was uncovered during the above-mentioned excavation periods, including two churches with cemeteries, remains of at least four monumental buildings, many workshop areas, a road, a cistern, a noria, a large number of wells of a great variety and numerous other architectural remains. The excavation revealed that the site was continuously inhabited from the 11th to the 19th centuries A.D. This was the first time that the stratigraphy of the Byzantine and medieval city was established and the moveable finds give us a picture of the material culture of its inhabitants during the various periods represented by the site. The whole site is in fact a window to the city's past. There was even an archaeological layer dated to the end of the Middle Bronze Age.

Furthermore, excavations in busy urban centres, with centuries of building activity, are by definition very difficult. That was indeed the case in Palaion Demarcheion; there are many overlapping phases of the city, later walls which destroy, use or replace older ones and so on. The archaeological landscape that has resulted is a highly complex and problematic one.

Palaion Demarcheion, Nicosia



Palaion Demarcheion, Nicosia

First of all, due to the fact that the excavation was carried out under a lot of pressure, long seasons of large-scale excavation took place and as a result the site was quickly exposed, in order to allow the plans for the new town hall to proceed. Currently there is a large archaeological site in the historic centre of the city, which requires everyday care and the development of a strategic management plan, both in terms of conservation and presentation to the public.

Secondly, the site faces a serious drainage problem and during the winter rains it floods. This problem was to be solved with the construction of the new building, but as this was a controversial matter the solution was delayed. We expect that this will soon proceed since Nicosia Municipality has recently finished investigating other possibilities for the location of the new town hall.

Important long-term decisions that will affect the future of the archaeological remains and the strategy that will be followed as far as their conservation and their presentation to the public are concerned, have been pending until today as a result of the decision-making process. Now the site is exposed to the elements and it is not accessible to the public. Final decisions about the future and the conservation strategy of this highly complex site must be taken soon; otherwise this will be at the further expense of the excavated antiquities and the historic information they bear, despite the fact that the Department of Antiquities takes all possible measures for short and medium term protection of the site, such as temporary sheltering and annual first-aid conservation.

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Akanthou / LIASTRIKA

The cultural heritage in the territories of the island that are occupied by the Turkish forces since 1974 is still inaccessible to the Government of Cyprus and the responsible Department of Antiquities. The fate of many churches, ancient monuments, archaeological sites, museums and private collections is well-known. A new threat to heritage that has recently emerged, also in the occupied part of Cyprus, is development. An indicative case was recently observed near the village of Akanthou, on the north coast. The village is surrounded by remains of ancient settlements and this has been known to the authorities at least from the beginning of the 20th century.

For this reason in 1966 a large site with rich archaeological remains was declared an Ancient Monument of Schedule B.² The name of the area today is LIASTRIKA and it is believed by researchers that it is the site of the ancient city of Aphrodision, mentioned by the ancient geographer Strabo. Even though a systematic excavation was never undertaken in the area, there is plenty of material evidence on the surface of the ground, mainly pottery, and among the accidental finds that have been reported is a Greek inscription

and many mosaic fragments. This large site also includes the church of Archangel Michael.

It was recently observed that, at a short distance to the south of this modest church, a huge three-storied building, possibly a hotel, is being illegally constructed within the boundaries of the archaeological site. The erection of this building is detrimental to the archaeological strata and as a result valuable information is lost. Moreover, both the natural and the archaeological environments are altered as a result of the fact that this modern building is also out of scale compared to its surroundings.

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Akanthou / LIASTRIKA, ancient church of Archangel Michael



The same site after the construction of a three-storied building





The Neolithic site of Apostolos
Andreas-Kastros

The Neolithic site of Apostolos Andreas – Kastros

The Aceramic Neolithic site of Apostolos Andreas-Kastros on the Karpas peninsula in the eastern-most part of the occupied territories of Cyprus was one of the most important sites of the Neolithic period on the island of Cyprus since it demonstrated the adaptation of the Neolithic inhabitants to their coastal environment. Apostolos Andreas-Kastros was a fishing settlement dated to the 6th millennium B.C., excavated from 1970 to 1973 by Dr. Alain Le Brun with funding from the CNRS (Centre National de la Recherche Scientifique).

On the 7th of September 2005 the Director of the Department of Antiquities, Cyprus was informed that this important Neolithic site had been destroyed. The destruction was also reported in the Turkish Cypriot newspaper *Afrika* (13/9/05). The site was bulldozed and levelled by the Turkish army and where the archaeological remains used to be the flag poles of Turkey and the pseudo state now stand. Further destruction to the ruins came with the construction of a road opened in order to give access to the flags. According to the Turkish Cypriot article, the army has not been given permission to raise flag poles on the site. The so-called mayor of the occupied village of Rizokarpasso, Arif Ozbayrak, said that his 'municipality' is not responsible for the destruction and that the army had asked them for bulldozers and the community had given them the machines. The destruction of this site obliterates part of the history of Cyprus and indicates a lack of control and sensitivity in relation to the protection of cultural heritage.

The issue of the destruction of the Neolithic site of Apostolos Andreas-Kastros was put forward at the ICOMOS 15th General Assembly in Xi'an, China by the Cyprus section of ICOMOS. The Assembly resolved to "Condemn the destruction of the site of Apostolos Andreas ... and write to Turkey and Turkish Cypriot

Authorities calling for measures to be taken to prevent such destruction and name changes" (see: www.international.icomos.org/xian2005/resolutions15ga.htm).

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ICOMOS Cyprus

Famagusta 2007: An Appeal for International Cooperation

Scratched onto the interior of the east wall of the ruined Cathedral of Saint George of the Greeks in Famagusta is the following inscription (Fig. 1)

How sad I am
Famagusta (is) ruined
Even if centuries passed
However (I am) grateful.³ [Trans]

Though shrouded in melancholy, there is yet a hint of optimism afforded by the anonymous writer of the Greek script, capturing both the triumph and the tragedy of the great city. This is precisely the theme and the balance I wish to develop over the course of this essay and in my appeal for the return of international academia to the wealth of heritage which lies behind Famagusta's impressive walls.

Famagusta, a city of some 35,000 inhabitants on the east coast of Cyprus, has a one-thousand-year history, and is characterized by an uncommon, and virtually forgotten, cultural wealth (Fig. 2). It was founded in 964 (on the site of 3rd century BC Arsinoe), was acquired by the French in 1192, and became a crucial crusader city and port after the fall of Acre in 1291. In later centuries it saw Byzantine, Lusignan, Genoese, Venetian, Ottoman and British dynasties come and go in the ebb and flow of its own turbulent history, and was simultaneously home to Armenian, Jewish, Nestorian, Maronite and Jacobite communities. Today, however, it stands internationally isolated in an unrecognized state at the nexus of East and West.

At the zenith of its medieval wealth and influence Famagusta was described by a German traveller as "...the richest of all cities, and her citizens are the richest of men. But I dare not speak of their precious stones and golden tissues and other riches, for it was a thing unheard of and incredible. I dare not speak of their riches."

The Cathedral of St. Nicholas (Figs. 3 & 4) in the main square of Famagusta became the coronation place of the crusader kings of Jerusalem and was surrounded by perhaps hundreds of smaller, yet exquisite, churches and houses, constructed in the finest Gothic styles appropriated from the Champagne region of France and the Rhinelands. From the port radiated impressive trade connections throughout the known world, especially with: Alexandria, Beirut, Tripoli, Antioch, Damascus, Aleppo, Rhodes, Constantinople, Thessaloniki, Crete, Venice, Valletta, Naples, Pisa, Genoa, Florence, Tunis, Barcelona, Montpellier, Avignon, Bruges, and London. It was even said that the prestige and wealth of the port of Lusignan Famagusta rivalled that of Venice and Constantinople in the early 14th century. The century-long government of the Genoese (1373-1464), however, led to a decline which not even the maritime and enterprising might of the Venetians could arrest when they took over the island (1489-1571). Despite the construction of a palace (Fig. 5) opposite the cathedral, a grand network of fortifications (Fig. 6), and the strengthening of the famed Othello Tower, Venetian Famagusta fell to Ottoman forces in 1571. Four and a half centuries of neglect followed which, combined with exposure to the elements, earthquakes, plague and flooding, left the city almost ruined at the time of the British arrival in 1878. The pioneering Scottish photographer John Thomson, who visited that year, called it "a place of ruins, a city of the dead, in which the traveler is surprised to encounter a living tenant" (Fig. 7).

Today the latest chapter in Famagusta's troubled history is being played out in the larger context of an international social and economic embargo, and a refusal by the international community to recognise the country in which it now finds itself: the self-proclaimed Turkish Republic of Northern Cyprus (also known as 'The Occupied Territories' of the Republic of Cyprus).^{4,5} The region's magnificent heritage has been largely neglected for over three decades, since the Turkish military intervention of 1974 which divided the island into Turkish-Muslim north and Greek-Orthodox south (Fig. 8). The Greek section of the island, fully recognised internationally, has since been integrated into the European Union, while the northern Turkish section of the island remains unrecognized. Despite having voted for re-unification and EU membership under the UN Annan Plan in 2004 northern Cyprus finds itself unfunded and un-assisted, with the exception of substantial financial aid from Turkey. The already fragile legacy of Famagusta's diverse cultural heritage therefore continues to decay, and is used as a politically motivated pawn, indiscriminately played, and often sacrificed, in a propaganda war between north and south. Potential international assistance stays away for fear of being seen to 'recognise'

the break-away republic, while those individuals who risk their careers to work there, are firmly reminded by political lobbyists that there are grim consequences for those who challenge the embargo.

As early as May 2002 the Committee on Culture, Science and Education report in the Council of Europe commented on the collateral damage caused by such a sweeping state of affairs:

"One consequence of the current political situation is the isolation of the academics and professional conservation workers from international contact with colleagues other than those in Turkey.... We should therefore appeal to the wider international academic and professional community for co-operation."

The same Committee called for:

- 1) Breaking down the academic and professional isolation of the north;
- 2) Setting up a European Foundation for the Cultural Heritage of Cyprus (funding conservation of specific monuments, international contacts, inventory of losses etc);
- 3) Co-operation on illegal movement of cultural property.

The report concluded that it was time to look to the future, otherwise the losses would be "of a paneuropean dimension". Since that time, however, no substantial assistance has been forthcoming. Instead, the historic monuments of Famagusta, over 200 of them, are in a state of terminal decline and the cause of enormous concern to experts on the history, architecture and art of Medieval and Renaissance Cyprus (Fig. 9). Professor Nicola Coldstream for example wrote in 2006 that "All the medieval buildings, however, urgently need conservation. The stonework, much of which is now like a sponge, will soon be past saving, so time is on no one's side." The sandstone, which from a distance seems fine (Fig. 10), is, on closer inspection, in an extremely advanced state of decay, erosion pitting up to 15cms in places (Figs. 11 & 12). The collapse of domes, arches and ribbed vaults will in time be inevitable. In particular the exterior of Saint Nicholas Cathedral and St George of the Latins, "one of the finest Gothic buildings of medieval Christendom," are almost beyond repair (Fig. 13). Professor Michel Balard referred especially to the frescoes of the Church of St George of the Greeks (Figs 14 & 15), which, he observed, are literally disappearing through preventable natural causes such as sun and rain. He concluded "The protection is in any case very urgent." Professor Peter Edbury observed the political dilemma astutely when he wrote "It seems to me that, like the old city at Akko (Israel), Famagusta ought to be a UNESCO World Heritage Site, and I suspect that it is largely the fact that since 1974 Famagusta has been in the control of a regime that has been almost universally denied diplomatic recognition that has prevented moves in that direction." Professor Benjamin Arbel simply refers to the monuments in the old city as being in "a deplorable state" (Fig. 16).

Numerous natural and man-made threats endanger the old city, including geo-technical instability, drainage problems, vegetation ingress, water ingress, inappropriate prior conservation, neglect and inadequate maintenance, rapid development and haphazard townplanning, and a lack of conservation expertise. A decade of continued neglect will see further decline and, in one or two cases, possibly catastrophic structural failure. While the cathedral (Lala Mustafa Pasha Cami), Agia Zoni, the Armenian church, and the Nestorian church require only medium-scope maintenance and conservation, many other buildings are in greater peril and already require structural reconstitution (such as the façade of Saint George of the Greeks).

From the frescoes which are bleached off the walls daily in summer or rained upon every winter (Fig. 17), to the walls of the

churches and palaces which are unstable and ready to fall (Fig. 18); from the physical condition of the sandstone which is crumbling, to the removal of cut stone for other purposes and the inappropriate usage of old buildings, there is not much room for optimism. There can be no doubt at all that the magnificent medieval walled city of Famagusta is in desperate need of international co-operation, of professional consultation and of controlled restoration and not continued isolation and embargoes that make all forms of intellectual and professional assistance virtually impossible. As any political observer will also be aware, the solution to the 'Cyprus problem' is as distant today as ever it has been in the past, and so the future of the historic monuments behind this modern political fault line is indeed bleak despite the continued efforts of the local authorities and a handful of international academics who have taken the decision to work at one of the north Cypriot universities. If the international community does not intervene, then many of the greatest crusader churches and Renaissance fortifications (to say nothing of the Ottoman, Byzantine and British legacies) in the Eastern Mediterranean, will disappear. Numerous applications for funding have already been rejected by international organisations who are unwilling to cooperate with the regime in the north despite the obvious reality that it is extremely urgent that they do so.

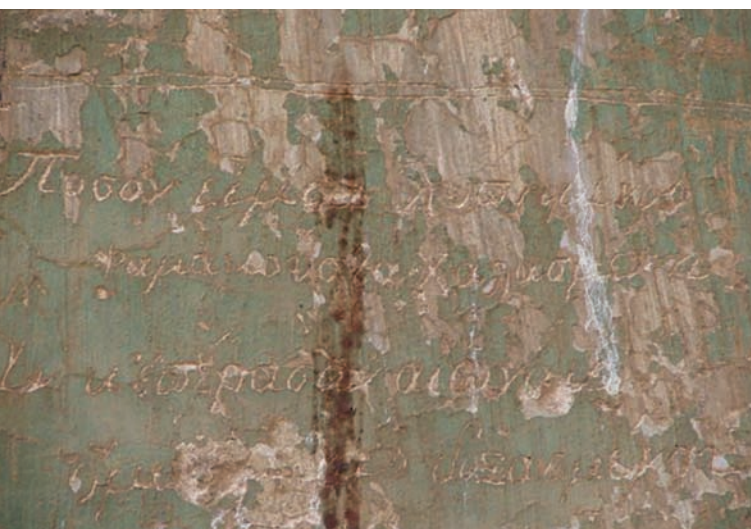
There is a second problem. Although Famagusta is internationally isolated, it is still experiencing un-harnessed development and a rapidly expanding population – a situation exacerbated by the post-Annan Plan climate in northern Cyprus which has encouraged a rate of foreign investment that the infrastructure simply cannot bear (Fig. 19). Famagusta boasts a university with a student population of 14,000 from over 60 different countries. In tandem has come a real estate boom, fuelled by foreign investment principally from the United Kingdom, which is putting tremendous stresses on the region's land and environmental resources. With it has come a subsequent urban sprawl that will soon encroach on Enkomi, Salamis and Saint Barnabas. It is hard to know which is the greater threat – years of international neglect and political obstruction, or rapid, careless and thoughtless property speculation. As mass housing developments are constructed, road systems built, water drainage routes dug, dams built, and all the short-term requirements for an economic boom hastily put into place, who is going to give a second glance at the heritage of the city and environs?

Perhaps this is why the Council of Europe report was so grave when it warned that "The invasion of mass tourism risks being far more devastating than the hostilities of 1974." The report then reminded us that 'The south is a striking example of the threats posed by commercial prosperity and mass tourism to the survival of the cultural and natural heritage. The contrast with the north should be instructive.' These turned out to be the warnings of Cassandra – prophetic but unheeded.

Perhaps this intentional neglect would be understandable if Famagusta lay in a dangerous war zone. It does not. Access to Famagusta is easy and permitted so long as the island is entered "legally" (ie through any port in the south). How long then must Famagusta wait for the expertise and funding that it so desperately needs? And how long can the active obstruction by lobbyists be tolerated? Who would imagine that within academia there are politically motivated professors dedicated to the prevention of external contact (even to talk and prepare preliminary status reports) from arriving in Famagusta because they believe that a solution to the Cyprus problem (and in particular the burning issue of the modern ghost city of Varosha) must be found first? After 34 years of such policies, any "victories" are surely Pyrrhic as the great city they so passionately defend decays and crumbles, as opportunity after opportunity is missed through political obstruction. I am convinced that with or without re-unification of the island the future of Famagusta's rich and turbulent past should be a matter for the international scholarly community to embrace, not neglect. Time, as Professor Coldstream put it, is on no-one's side. The traveller William Turner saw Famagusta almost two centuries ago and wrote: "It is hardly credible that a city so lately flourishing should be so completely ruined as Famagusta. Of its numerous palaces and churches not one remains entire. But the city might easily be restored, for the walls and the fortifications yet remain entire."

In 2007, and in the light of the prevailing and long-term political stalemate on the island, there are those who are beginning to wonder whether or not this chance might yet be missed. Famagusta's destiny lies in the hands of international academia and professional organisations who can, if they wish, decide to return with their expertise and funding to the city. If they do not, they must share in the responsibility of an unenviable fate.

Fig. 1 Greek Graffiti on the wall of Saint George of the Greeks Cathedral in Famagusta



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¹ K.ΔΠ. 596/4.6.2004, p.5754, no. 596.

² K.ΔΠ. 658/22.9.1966, p. 1008, no. 20.

³ My thanks to Yesim Dede for this translation.

⁴ See: Walsh M., Cultural Welfare and Political Stalemate: The Case of Northern Cyprus, in: Going Global: Defining CAA's Role in the International Community, 92nd College Arts Association Annual Conference.



Fig. 2 Saint Nicholas Cathedral through the north portal of Saint George of the Latins

Fig. 3 Saint Nicholas Cathedral – West Façade

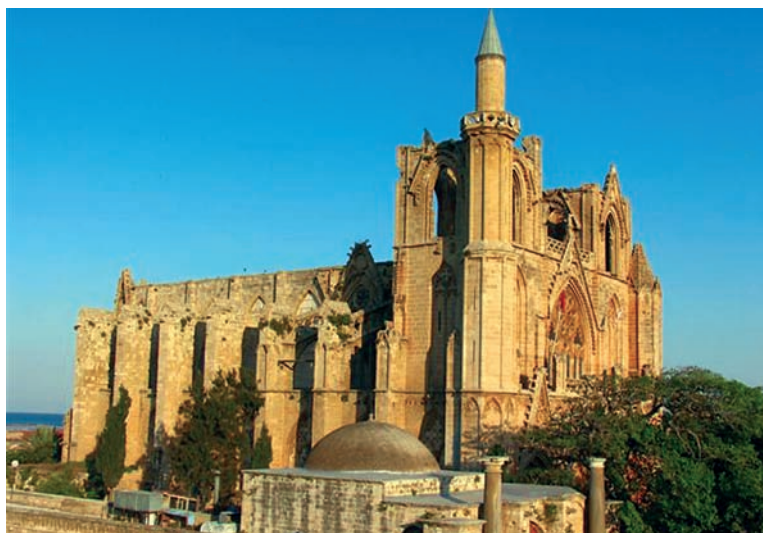
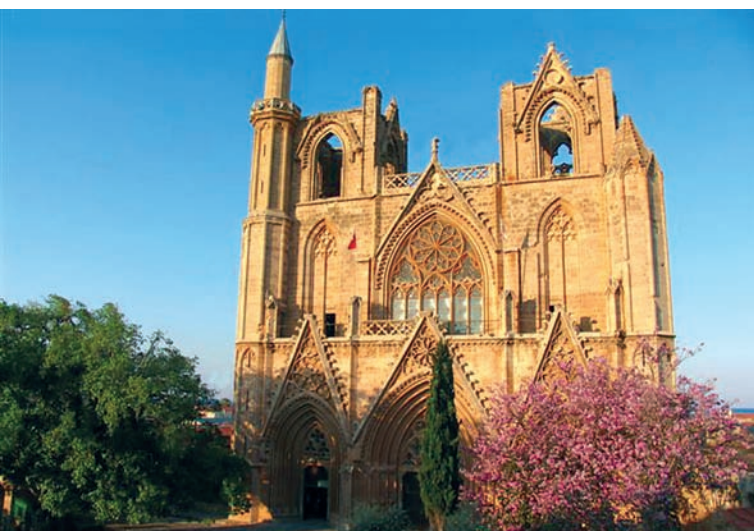


Fig. 4 Saint Nicholas Cathedral with Ottoman Medresa (and columns from Salamis) in foreground



Fig. 5 Entrance to the Venetian Palace

Fig. 6 The fortified walls and moat of Famagusta





Fig. 7 From identified church, past the church of Saint Peter and Paul, to Saint Nicholas Cathedral



Fig. 8 The Ruins of the Orthodox church of Agios Nikolaus

Fig. 9 The Ruins of Saint Mary of Carmel



Fig. 10 The apse (east) of Saint Nicholas Cathedral

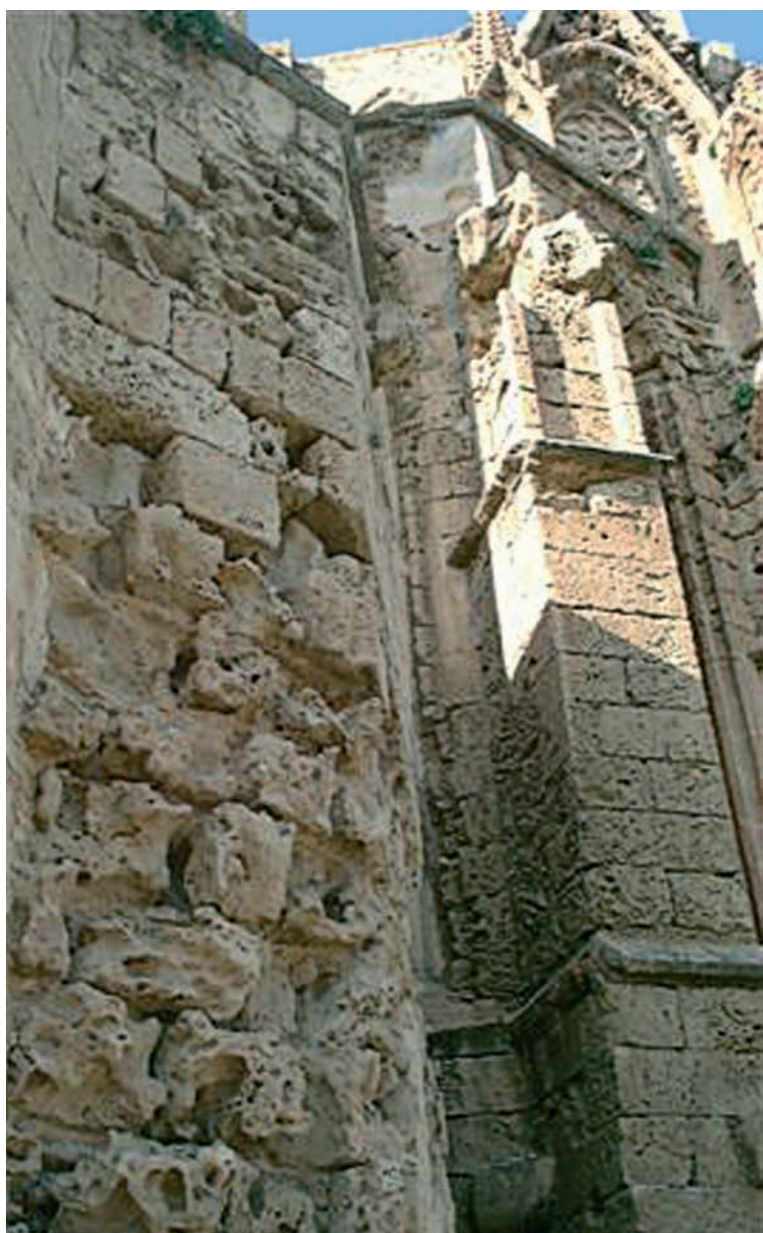




Fig. 12 Stone decay in the decorations of Saint Nicholas Cathedral

◀ Fig. 11 Stone decay in the chapels at the east of Saint Nicholas Cathedral



Fig. 14 Saint George of the Greeks – with Saint Nicholas in background, and Saint Symeon attached to south wall



Fig. 15 Saint George of the Greeks – interior

Fig. 13 The Ruins of Saint George of the Latins



Fig. 16 Sculptural detail on Saint George of the Latins





Fig. 17 Damaged frescoes in Saint George of the Greeks



Fig. 18 An unstable wall – Saint Peter and Paul

Fig. 19 Modern Famagusta encroaches on Saint Nicholas Cathedral



CZECH REPUBLIC

Prague, High-rise Buildings on Pankrac Plain

Since 2005 the Czech National Committee of ICOMOS and the Society for Old Prague have been fighting against the project of further high-rise buildings on Pankrac Plain – an elevated area within the buffer zone of the World Heritage site. After a colloquium of experts in Prague ICOMOS sent the following letter on 3 May 2007 to Mr Pavel Bem, Lord Mayor of the City of Prague, and to the responsible authorities:

Dear Lord Mayor,

The members of ICOMOS, Architect Michal Firestone and Professor Wilfried Lipp, shared with me their experiences from the joint ICOMOS-UNESCO mission and colloquium that took place in Prague one month ago. The topic/purpose of their mission was the current architectural changes and notably the projects for high-rise buildings to be erected on Pankrac Plain within the formally designated Prague World Heritage site buffer zone.

I am most concerned by what I have learned. Prague deservedly has the fame of being one of the most beautiful historic cities in the world, comparable to World Heritage sites as Florence or Rome. The UNESCO World Heritage Committee identified its invaluable urban landscape as a deciding factor when inscribing Prague on the UNESCO World Heritage List.

As a frequent and enthusiastic visitor to your city, I fully share the opinion of ICOMOS experts that the existing high-rise buildings on the Pankrac Plain represent a serious town planning mistake of the past. I must strongly advise against this mistake being repeated today. What concerns me especially is the fact that projects with such deep impact on the historic urban ensemble of Prague may be approved by the city authorities on a case-to-case basis.

The case of Pankrac Plain high-rise buildings shows the urgent need for an appropriate Management Plan for the formally designated World Heritage site and buffer zone.

In the case of Prague, I also miss a vision of such form of poly-

centric development of the city that would prevent the construction of further high-rise buildings in direct visual contact with the historic core. Instead of such action being taken, I am informed that another project for high-rise buildings is being proposed and presented for review. This project is located in Holesovice quarter within the World Heritage buffer zone.

Being concerned that the Pankrac development may constitute an irreversible process of compromising the unique urban qualities of your city, I urgently ask you, distinguished Lord Mayor, to stop the Pankrac project in time, and see to it that the height of proposed buildings be reduced to soften instead of increase further negative impacts.

Because of the importance of this case, I am sending a copy of this letter also to Mr. Vaclav Jehlička, Minister of Culture to the Czech Republic, and to Mr. Francesco Bandarin, Director of the UNESCO World Heritage Centre in Paris.

Yours sincerely,

*Michael Petzet
President of ICOMOS*

In spite of all concerns, at the beginning of September 2007 the Czech Ministry of Culture consented to the decision of the Prague Magistrate to erect two high-rise buildings on Pankrac Plain. The consequences of this decision for the historic centre are regrettable, for the bad example of Pankrac Plain will be an incentive to develop more projects of this kind. First of all there is the Holesovice project, promoted as “The Prague Twins” with the argument that from the windows of the apartments and office studios the future customers will have the most impressive view over historic Prague. We can only hope that the authorities in charge will finally realise that one of the most beautiful city ensembles in the world must not be sacrificed for the economic interests of a few developers.

View of Prague with simulation of the so-called “Prague Twins” project



ECUADOR

En las revistas *Heritage at Risk* 2001-2002 y 2002-2003, el ICOMOS ECUADOR publicó algunos graves casos de atentados al patrimonio en varias ciudades. Si bien en algunos ámbitos institucionales y técnicos escasas mejoras son identificables; conflictos de legislación y competencias, inadecuada planificación y prácticas profesionales insensibles frente al patrimonio continúan vigentes. Muchas veces la insuficiencia de recursos agudiza los problemas, sin embargo, fundamentalmente en las grandes ciudades como Quito, Guayaquil y Cuenca, donde existen importantes recursos financieros, los peligros son actualmente mayores.

En esta oportunidad se presentan especialmente dos relevantes casos: Reconstrucción de la Torre de la Compañía de Jesús y la Ampliación del Palacio del Congreso Nacional en Quito, ubicados dentro del área declarada como Patrimonio Cultural de la Humanidad.

Los atentados se sitúan tanto en el patrimonio cultural antiguo cuanto en el moderno. En el caso de lo antiguo, el tema central es de la autenticidad, las inversiones y el turismo; en el patrimonio del siglo XX, por un lado es la negativa a reconocer su valor e igualmente el desconocimiento y desenfoco sobre la relación del monumento con su contexto urbano. La polémica sobre la segunda tendencia es reciente y difícil por el ímpetu del “desarrollo” de las urbes.

En unos y en otros casos las instituciones protagonistas son, en primer término las municipalidades encargadas del manejo de los bienes patrimoniales, el Instituto Nacional de Patrimonio Cultural responsable legal de los bienes, el ICOMOS y los Colegios de Arquitectos del país; la UNESCO, que muy positivamente se está involucrando.

Reconstrucción de la Torre-Campanario de la Compañía de Jesús en Quito

El conjunto arquitectónico o convento de la Compañía de Jesús es un monumento de primer orden del Centro Histórico de Quito, se halla ubicado entre las calles García Moreno, Sucre, Benalcázar y Espejo, ocupando la manzana localizada al sur occidente de la Plaza Mayor, en el núcleo o zona monumental del área declarada por la UNESCO en 1978, Patrimonio Cultural de la Humanidad.

Su construcción empezó en 1605 y fue concluida en 1766, es un

Convento de la Compañía de Jesús, estado actual



Reconstrucción de la Torre-Campanario de la Compañía de Jesús en Quito después del terremoto 1868

conjunto correspondiente al período barroco iberoamericano, que guarda innumerables tesoros pictóricos y escultóricos de la Escuela Quiteña.

Elemento dominante del conjunto jesuítico fue su torre-campanario de 55 varas, la más alta de la ciudad, separada del templo e integrada al claustro principal.

De acuerdo a la investigación histórica se sabe que la construcción de la torre se la finalizó en 1690. El terremoto de 1859 la afectó seriamente y se terminó su reconstrucción en abril de 1868. Un nuevo sismo de agosto de 1868 volvió a afectarle gravemente y obligó a derrocar sus dos cuerpos superiores, por segunda ocasión, para evitar su caída y salvaguardar de esa manera la integridad del conjunto.

La Torre de la Compañía no pudo ser restaurada como lo fueron en su momento las demás torres de Quito, por falta de recursos económicos; se la remató provisionalmente a la mitad de su altura original como hoy se la conoce. Actualmente, 138 años después de su desaparición, la comunidad jesuita ha decidido recuperar la torre-campanario, para lo cual se ha elaborado un proyecto de intervención, que ha sido sometido a consideración de la Municipalidad para su aprobación y ejecución. El proyecto se lo ha realizado base a un Convenio de Cooperación con la Comunidad de Madrid por 169.984 Euros, donados tanto para los estudios cuanto para las obras, con un tiempo de vigencia de 13 meses.

La propuesta plantea, por una parte la rehabilitación de la base de la torre y por otra, la reconstrucción de los dos cuerpos faltantes. En lo formal se reproducen las características que tenía la torre hace 138 años, en base a descripciones, dibujos y fotografías existentes; complementadas con interpretaciones geométricas hechas por el equipo técnico para establecer la volumetría y altura de la torre, definida en 46 m. En el ámbito funcional, la reproducción incluye también el campanario y el reloj similares a los de la antigua torre, manteniendo de este modo la función original; no obstante la función principal que se introduce es la turística mediante la instalación de un mirador, entre el tercer cuerpo y el remate, al cual se accede por un ascensor emplazado dentro de la parte existente de la torre, mismo que permite también la conexión con el claustro y galerías contiguos.

Para la edificación de los cuerpos faltantes de la torre, se propone un “nuevo sistema constructivo diseñado ad hoc para el efecto”, se trata de “una estructura de soporte laminar fundida en obra, que se dispondrá en las caras externas e internas dejando un vacío al medio”... “para aparentar el volumen y solidez de los muros antigu-

os de la base”¹ El remate piramidal se construirá con estructura metálica, cubierta con láminas de cobre y, los adornos y molduras serán prefabricados.

Todas las instituciones técnicas: Instituto de Patrimonio Cultural, Colegio de Arquitectos del Ecuador, Fondo de Salvamento del Patrimonio Cultural, ICOMOS y la Subcomisión Técnica de Áreas Históricas, han manifestado dudas con respecto al proyecto planteado por la Fundación Iglesia de la Compañía de Jesús, principalmente en temas de carácter jurídico, conceptual y técnico, que generan desconfianza y polémica y que, al no estar adecuadamente resueltos ponen en riesgo la autenticidad e integridad del monumento.

a) La propuesta general apunta a introducir en el conjunto jesuita nuevas funciones que permitan sustentar la restauración y mantenimiento del inmueble y que lo inserten en el mercado turístico, no obstante, se ha presentado a aprobación solamente el proyecto de intervención en la Torre-Campanario, y no el proyecto total de intervención, y tampoco un estudio de impactos.

b) El Convenio suscrito hizo abstracción total de lo relacionado con la normativa de protección del bien patrimonial y del procedimiento de aprobación de planos en las instancias correspondientes del Distrito Metropolitano de Quito y del Instituto Nacional de Patrimonio Cultural, como acción previa a la construcción de la obra; sin embargo se utiliza dicho convenio como mecanismo de presión para la

aprobación del proyecto, aduciendo que si no se aprueba rápidamente, se perderá el financiamiento de la Comunidad de Madrid.

c) El proyecto de reconstrucción no se debe a una necesidad esencialmente cultural, sino a otra de carácter turístico- económica, al haberse perdido materialmente la torre hace más de un siglo, esta ha perdido sus valores culturales y su significado para la sociedad actual, ya no es parte de la memoria colectiva, ni del imaginario de la ciudad. Culturalmente, dado el tiempo transcurrido, en términos de identidad, atributos artísticos o técnicos, singularidad, funcionalidad, etc.; ni para La Compañía de Jesús ni para la ciudad de Quito la existencia de la torre es indispensable.

d) Reconstruir la torre con las características formales de la antigua torre, atenta no solo contra la autenticidad del monumento Compañía de Jesús, sino también contra los valores excepcionales de Quito, que fue inscrita como Patrimonio Mundial por la UNESCO, precisamente bajo ese criterioⁱⁱ.

e) El tema más preocupante y controversial es que el proyecto no considera el principio de reversibilidad, recomendado en las normas internacionales de conservación y plantea tres sistemas constructivos diferentes que conforman una unidad estructural: 1. Muros portantes de ladrillo, existentes, 2. Estructura laminar fundida propuesta para el 3° cuerpo y 3. Estructura metálica para el remate. Adicionalmente, la torre soportará las cargas puntuales móviles del ascensor y las campanas. En función de estas premisas, se desconoce el comportamiento estructural que pueda tener la torre durante el proceso constructivo y más grave aún, durante un evento sísmico, el cual podría afectar no solo a la parte antigua de la torre, sino a todo el monumento. Se hacen imprescindibles, por tanto estudios exhaustivos de la propuesta estructural y de la pertinencia de los sistemas constructivos.

A pesar de la argumentación precedente y de la oposición de las instituciones mencionadas, el 11 de abril de 2007 la Comisión de Áreas Históricas y Patrimonio del Distrito Metropolitano de Quito aprobó el proyecto.

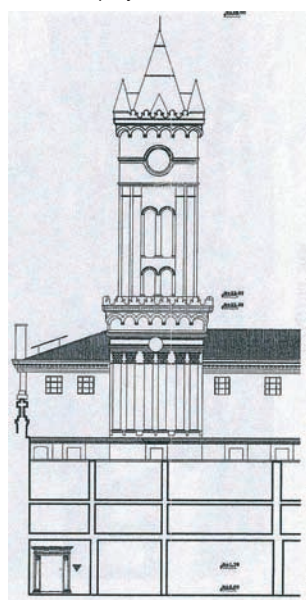
La posición categórica de ICOMOS Ecuador es que, dada la importancia histórica y cultural del conjunto jesuítico cualquier intervención para su salvaguarda es de extrema responsabilidad tanto para la Fundación Iglesia de la Compañía de Jesús, propietaria del bien, cuanto para las instituciones estatales, encargadas por Ley de la tutela y conservación del mismo. Una decisión equivocada podría comprometer los no solo los valores propios del monumento, sino también los valores excepcionales del Centro Histórico de Quito, principalmente su “autenticidad”. Por tanto una adecuada propuesta debería estar enmarcada en las normas jurídicas correspondientes, así como en las recomendaciones y procedimientos técnicos de conservación universalmente aceptados.

Ampliación del Palacio del Congreso Nacional

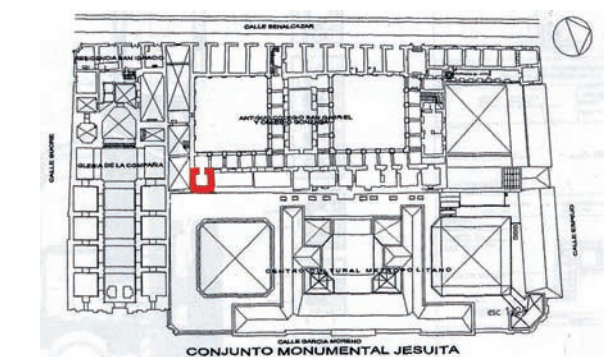
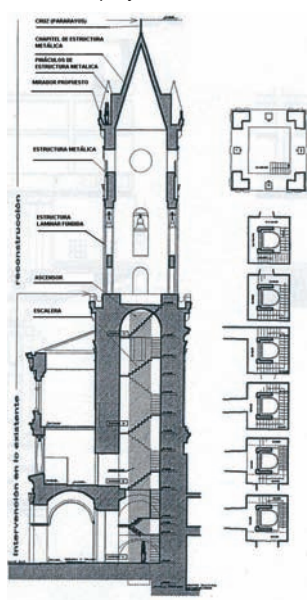
En 1944, la Municipalidad de Quito aprobó el Plan Regulador de Quito, realizado por el arquitecto uruguayo Jones Odriozola. Ese instrumento tenía como objetivo fundamental articular la histórica ciudad con el Quito del porvenir. Esa propuesta, entre múltiples elementos situó hacia el Norte de la urbe al nuevo “centro cívico”, en los llamados “potreros del Rey”.

Como principal componente del Centro Cívico de Quito, en

Torre-Campanario de la Compañía de Jesús, proyecto



Torre-Campanario de la Compañía de Jesús, proyecto, corte A-A



Convento de la Compañía de Jesús, conjunto monumental

1958 se construyó el palacio del Congreso Nacional, una valiosa obra de arquitectura moderna. Su calidad de bien patrimonial se debe a sus valores histórico- testimoniales y simbólicos de un período importante de la historia de la arquitectura y urbanismo de la ciudad y de la historia política del país. Tiene además valores artísticos agregados, ya que son parte integrante del monumento, notabilísimos murales de Víctor Mideros y de Oswaldo Guayasamín.

Tras décadas de saturación de actividades el Congreso Nacional había incrementado notablemente sus funcionarios y requerimientos y, en marzo de 2004 un incendio de notables proporciones, inutilizó al edificio e hizo necesaria una rehabilitación integral. En la intervención (pronta a finalizar) se excluyeron las oficinas de los legisladores y otros servicios que debían encontrar un sitio donde relocarse. Esa relocalización es el motivo de la controversia actual.

La Municipalidad diseñó un “campus legislativo” en la vecindad del Palacio, mediante la demolición de algunos bloques de oficinas; ese proyecto no pudo ser ejecutado por la tenaz resistencia de los afectados. Precipitadamente una oficina técnica del Congreso, carente de profesionales especializados en arquitectura y urbanismo patrimonial, realizó un proyecto de dos torres localizadas en el mismo predio del palacio (ver imágenes), atentando contra el histórico edificio y violando la Ley de Patrimonio y la Constitución.

El debate se centra por un lado sobre el “valor” o no del monumento, al cual se lo pretende retirar del Inventario para dar solución a los requerimientos de la legislatura. A favor del proyecto de las torres se sitúan los legisladores y la Municipalidad y en contra: el Instituto Nacional de Patrimonio Cultural, el ICOMOS, el Colegio de Arquitectos y varias facultades de arquitectura.

Vistas las enormes dificultades de lograr que el monumento y su contexto sean respetados, el ICOMOS Ecuador ha emprendido desde hace varios meses la defensa del mismo. Inicialmente presentó el problema en la reunión de Presidentes de los ICOMOS de América realizada en Zacatecas-México en diciembre 2006 y, logró la redacción de una fundamental resolución que se hizo llegar tanto al Alcalde de Quito, cuanto al Presidente del H. Congreso Nacional, luego contactó tanto a la Cancillería Nacional, representante del Estado ecuatoriano ante el Comité de Patrimonio Mundial, cuanto a la representación de la UNESCO en Ecuador.

En síntesis, careciendo la Municipalidad de argumentaciones científicas, culturales, técnicas y legales está haciendo prevalecer variables políticas, también deleznable puesto que la actualidad la crisis política en que se encuentra el Congreso Nacional es de dominio público. Estando a puertas la Asamblea Nacional



Quito, Palacio del Congreso Nacional, estado actual



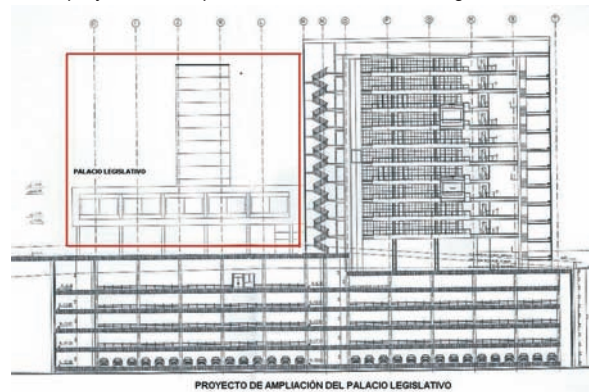
Quito, Palacio del Congreso Nacional, estado actual

Constituyente, lo sensato es esperar sus resultados para conocer los requerimientos que tendrá el futuro Congreso.

Los consistentes planteamientos ICOMOS basados en la Constitución de la República, la Ley de Patrimonio Cultural del país, las Cartas Internacionales pertinentes, así como fundamentos urbanos, sobre todo de tipo-morfología han puesto de relieve las ligerezas municipales y la gravedad del atentado. En una preliminar resolución de la Subcomisión de Áreas Históricas del Municipio, consta textualmente la decisión de desacato a la ley y la arbitraria aprobación del proyecto.

Quito esta a la espera de los criterios del Centro de Patrimonio Mundial sobre estos dos casos, mismos que son de vital importancia.

Quito, proyecto de ampliación del Palacio del Congreso Nacional



ICOMOS Ecuador

¹ Copia textual del expediente técnico elaborado por la Fundación Iglesia de la Compañía de Jesús.

² En el caso de Quito, la ciudad no mantiene su integridad original, su autenticidad está marcada por la expresión de su evolución histórica; posee trazado del siglo XVI, monasterios y templos de los siglos XVI, XVII y XVIII, muchos de ellos afectados por sismos, restaurados o vueltos a edificar en varias ocasiones, arquitectura civil fundamentalmente de los siglos XIX y XX, también se incluyen en esta evolución las modificaciones de su topografía a principios del siglo XX, incorporación de arquitectura moderna desde la década de los 50.

GEORGIA

Jvari (Holy Cross) Monastery in Mtskheta

A mountain rising over the confluence of the rivers Mtkvari and Aragvi near Mtskheta, ancient capital of Georgia, has attracted attention since ancient times. A pagan sanctuary was located on this mountain before the spread of Christianity in Georgia. In the third decade of the 4th century A.D., when Christianity became a state religion, a wooden cross was erected on top of the mountain where it stood for almost two centuries.

From 545 to 586 a church was built north of the cross (minor church of the Holy Cross) and from 586 to 605 a big church (main church of the Holy Cross) was built at the site of the cross. The base of the wooden cross can still be seen in the interior of the church. The buildings of Jvari Monastery are in harmony with the environment and represent a masterpiece created both by man and nature.

The builders of the churches were two generations of rulers (the ruler of Kartli, Guaram, and his son, Stephanos). The territory of the monastery was surrounded by a masonry wall and gate in the late Middle Ages (partially surviving at present).

The site was inscribed on the UNESCO World Heritage List (Ancient Monuments of Mtskheta) in 1994.

Significance

Jvari Monastery is a vivid example of the absorption of Eastern and Western cultural values and of re-adapting them to the local artistic environment. General characteristics of the minor church's ornamental decoration indicate the influence of Sasanian art. The architectural typology of the main church – a tetraconch – did not originate from Georgia, but underwent an original development, different from that in other countries. The outer volumes of the church are in full harmony with the interior space and are artistically ambitious. This feature makes Jvari different from Byzantine churches, in which the organization of the interior space is given higher priority.

The facades of the main church bear figure reliefs accompanied by explanatory inscriptions in old Georgian uncial script. The reliefs show the builders of the church and their family members. Fine proportions and high quality of execution distinguish these reliefs. An influence of Hellenistic traditions is also noticeable.

The building technique and the high standard of engineering for solutions of construction at Jvari Monastery, based on thorough calculations, are still impressive and a vivid testimony to the centuries-old building traditions in Georgia.

Threats

The minor church of Jvari has only partially survived, while the main church is preserved without any major changes, but has deteriorated over the centuries due to earthquakes and invasions. During the last 30 years new threats and dangers to the building have appeared: accelerated erosion of the building stone due to the acidity of the rain water and strong winds; erosion has significantly damaged the reliefs of the church; the minor church of Jvari is left uncovered; an incorrect planning of the conservation works has endangered the authenticity of the minor church of Jvari.

In 2004 Jvari monastery was inscribed on the 100 Most Endangered Sites list of the World Monuments Fund. In 2006, the site received financial support from the Samuel H. Kress Foundation through the WORLD MONUMENTS FUND, Kress Foundation European Preservation Program. Currently works to document and analyze the present condition and to draw up conservation guidelines are underway.

Dr. Tsitsino Chachkhunashvili
ICOMOS Georgia

Jvari Monastery in Mtskheta



GERMANY

The issue of “**Preventive Monitoring**” as an important action of ICOMOS National Committees in countries with World Heritage sites (see also the Introduction, p. 10) is a crucial topic on our agenda. ICOMOS Germany has had a monitoring group since 2001, now consisting of more than 30 members, two or more of whom look after one of the 32 World Heritage sites. They organize on-site meetings, keep an eye on the state of conservation after consulting the responsible authorities and the conservation departments; they advise the planning authorities and point out possible conflicts and they write annual reports which are also sent to the International Secretariat.

From our experience, in many cases it is possible to avoid likely threats and conflicts with other interests through appropriate counseling and by involving the ICOMOS National Committees as early as possible with the task of Preventive Monitoring. And during public discussions (with ICOMOS as a disputatious NGO) at least compromises can be achieved which are acceptable.

The consequences of the devastating fire of 2-3 September 2004 in the **Duchess Anna-Amalia Library in Weimar** stood at the beginning of our last report (see *Heritage at Risk 2004/2005*, pp. 70-72). In the meantime, the building, the repair of which was also discussed in detail at a meeting of our monitoring group in Weimar in March 2005, has been restored in an exemplary way and, together with the saved historic books and works of art, was reopened on 24 October 2007.

The protests against a cluster of high-rise buildings threatening the dominant position and visual integrity of **Cologne Cathedral** (see the detailed report in *Heritage at Risk 2004/2005*, pp. 73/74) were finally successful – a spectacular case receiving worldwide attention: From the beginning ICOMOS clearly expressed its rejection of these plans in public. After the cathedral had been placed on

the list of World Heritage in Danger in July 2004 at the meeting of the World Heritage Committee in Suzhou (China), in 2006 the City of Cologne finally gave up its plans to build this cluster of high-rises; it revised its programme for high-rise buildings and gave new thoughts to the question of a sufficient buffer zone for the cathedral. However, the visual disturbance caused by the RZVK building, which is the only building of this cluster project to have been erected, cannot be repaired. Nonetheless, the deletion of Cologne Cathedral by the World Heritage Committee could be avoided and since the meeting of the Committee in Vilnius in July 2006 the cathedral is no longer on the “red list”.

In 2006/2007 ICOMOS was not only active as “advisory body” of UNESCO and the World Heritage Committee. Our national monitoring group, chaired since 2005 by our colleague Dipl.-Ing. Giulio Marano, was increasingly consulted by the authorities responsible for monuments and sites, also where sites on the German Tentative List were concerned (e.g. Kontorhäuser and Speicherstadt in Hamburg, Wilhelms Höhe Park with Hercules in Kassel). Furthermore, ICOMOS has had to deal with a whole series of German World Heritage cases, among others with Aachen Cathedral (question of expanding the buffer zone and including the town hall); Speyer Cathedral (expansion of a nearby airport); Würzburg Residence (professional advice for the restoration of the staircase with the Tiepolo frescoes); St Mary’s Cathedral and St Michael’s Church at Hildesheim (various restoration projects; also the exemplary restoration of the Hezilo-Leuchter in 2007); Roman monuments in Trier (rejection of an elevator on the exterior of the Porta Nigra, entrance building to the imperial thermae); Hanseatic City of Lübeck (ensemble threatened by commercial buildings); Palaces and Parks of Potsdam and Berlin (problems with new buildings in the border area of the historic grounds); Historic Town

Weimar, Duchess Anna Amalia Library, Rococo hall after the restoration, 2007 (Photo: M. Hamm/Otto Meissners Verlag)



Wittenberg, St Mary's parish church, weathered medieval sculpture, St Andrew, 2007



of Goslar (rejection of a department store project in the centre); Town of Bamberg (problems with new buildings and a shopping arcade); Town of Quedlinburg (technical and restoration mistakes in the Collegiate Church; new constructions in the ensemble); Bauhaus and its Sites in Weimar (restoration of the Meisterhäuser; in 2007 international competition for additional new buildings); Luther Memorials in Eisleben and Wittenberg (questions of restoration and use); Classical Weimar (restoration of the Duchess Anna-Amalia Library); Museum Island Berlin (statement on the restoration concept for the Neues Museum; various plans for modifications; critical evaluation of a new entrance building, in the meantime replaced by a more appropriate design by David Chipperfield); Wartburg Castle (protests against wind generators planned in the surrounding area and a cable car project); Garden Kingdom of Dessau-Wörlitz (threatened by a by-pass); Zollverein Coal Mine Industrial Complex in Essen (critical evaluation of too many interventions in connection with the renewal of the *Kohlenwäsche*; objections against a visually disturbing hotel project, eventually replaced by a more acceptable alternative); Upper Middle Rhine Valley (several statements against the project of a Rhine bridge in St Goar – St Goarshausen); Dresden Elbe Valley (the case of the “Waldschlösschen” bridge); Old Town of Regensburg (various restoration projects; project for a conference centre).

Below a selection of – abbreviated – expertises signed by the President of ICOMOS International, some of which were forwarded to the World Heritage Centre via the International Secretariat of ICOMOS in Paris. At the beginning and the end you will find statements on the “Waldschlösschen” bridge in Dresden, a case in which ICOMOS Germany has been very much involved. The situation resulted in this site being placed on the List of World Heritage in Danger at the meeting of the World Heritage Committee in Vilnius in July 2006. In 2008, this site will be deleted from the World Heritage List, unless a solution can be found after all. Also from the legal point of view this is a spectacular case and, given the federal structure in Germany, a highly complicated case, where the international obligations in connection with the ratification of the World Heritage Convention have to be weighed against the result of a – now highly disputed – public decision.

Dresden, Waldschlösschen Bridge

The cultural landscape of Dresden Elbe Valley was inscribed on the UNESCO World Heritage List in 2004, on the basis of criteria ii, iii, iv and v. The evaluation mission to examine the property prior to inscription had been undertaken on behalf of ICOMOS in 2003. During the mission, the project for the bridge, planned upstream from the city centre (mistakenly mentioned in the ICOMOS evaluation text as “foreseen 5 km down the river from the centre”) was discussed with the authorities. The new bridge had already been foreseen in the urban master plan of Dresden and several alternatives had been subject to an in-depth study, including other locations and the possibility to construct a tunnel. Out of these, the Waldschlösschen Bridge had emerged as the “least bad” solution, and had gained the support of the different authorities, especially of the Saxon Conservation Department (Landesamt für Denkmalpflege Sachsen), i.e. of the State conservation authority, which due to the alleged necessity of the bridge for the traffic sys-

tem of the city has never opposed its construction. However, it insisted explicitly and successfully that the bridge remain low, that means below the bog (Geländebruch) of the Neustädter Hochufer, and that it disappears in a tunnel in the Elbe slope.

In the meantime, ICOMOS has received extensive material on the bridge planning, the most recent being a letter by Mayor Mr. Rossbach of 5 January 2006 with the results of the investigated alternatives for tunnel constructions at the location of the planned bridge. Compared to these documents the information about the so-called Waldschlösschen Bridge which could be found in the application documents of 2003 for inscription on the World Heritage List must be considered as insufficient. For although the crossing of the valley is marked in the zoning map of the City of Dresden from 1999, it is only marked as one option (dash marking in yellow) of five alternatives at other locations. Details such as connecting ramps and tunnels were not included in the application documents which used only photo montages and a written description made



View of Dresden from the Waldschlösschen terrace

Dresden, approved project for the Waldschlösschen Bridge



available by the award-winning design from 1996. Under these circumstances, in the course of evaluating the application documents ICOMOS took note of the City of Dresden's intention to construct a crossing at Waldschlösschen without being seriously concerned since our expert came to the conclusion that the project, which had already been settled with the State conservation authority and was the result of decades of planning, was acceptable.

In the meantime, documents of the planning brief (*Planfeststellungsverfahren*) show the entire extent of the intended building measures, which have resulted in fierce public discussion. These documents were sent to the World Heritage Centre and to ICOMOS on 24 November 2005. ICOMOS wishes to comment on these planning documents as follows:

This valley crossing is no longer an "urban bridge", but instead an important road connection resembling a motorway – in fact it is intended to be a fast connection between the motorways in the north and south of the city. The project will result in tearing apart the affected parts of the city and mostly the valley area of the river Elbe.

Apart from the bridge itself – whose piers need to be reinforced due to conditions imposed by water resources engineering – the valley area and thus also the World Heritage are also going to be disturbed by constructions connecting the bridge with the existing urban road network on both sides of the river, including ramps, accesses to the tunnel and other building elements for un-intersected connections, all of which emphasise the character of a city motorway. Particularly severe are the measures on the northern slope of the Elbe, below the well-known viewpoint "Waldschlösschen", from which the famous view of the reconstructed skyline of the old part of Dresden can be enjoyed just as much as the Elbe countryside with meadows on both sides, the foothills of the Erzgebirge and the first range of hills of the Sächsische Schweiz with the so-called Elbe castles. These are all very important elements of the World Cultural Heritage "Dresden Elbe Valley".

Since the early 19th century the "Waldschlösschen" view was praised in several descriptions and pictures. Enclosed you will find a view of Dresden from the Waldschlösschen terrace, a photo taken in 1939, which better than any written comment illustrates the possible threat to the Elbe landscape by the bridge project. Not to be ignored, either, are interventions in the so-called "Prussian" villa district, an exclusive residential area begun in the mid-19th century, which in its entirety is part of the World Heritage. The increasing traffic noise in the townscape caused by the new bridge and road connection needs to be pointed out as well.

After evaluating the documents, which have now been made available, ICOMOS comes to the conclusion that the realisation of the Waldschlösschen Bridge will lead to a considerable disturbance of the World Heritage site Dresden Elbe Valley. By all means there should now be a pause for thought to be able to inform the World Heritage Committee as well as to discuss less harmful alternatives, including a tunnel construction (for which a new cost estimate seems to exist) and other possible locations.

ICOMOS therefore suggests that the City of Dresden should be asked to extend the time of adjudication (*Vergabe der Bauaufträge*) for the bridge from end of March to at least end of September 2006. This would help avoid an irreversible *fait accompli* as well as the danger of a considerable financial loss for the city if the project cannot be realised.

M.Pz.

10 January 2006

Museum Island Berlin

(...) First of all, we would like to repeat passages from a statement made by the undersigned in his capacity as President of ICOMOS International on 14 June 2004 after a meeting in Berlin on 17 May 2004:

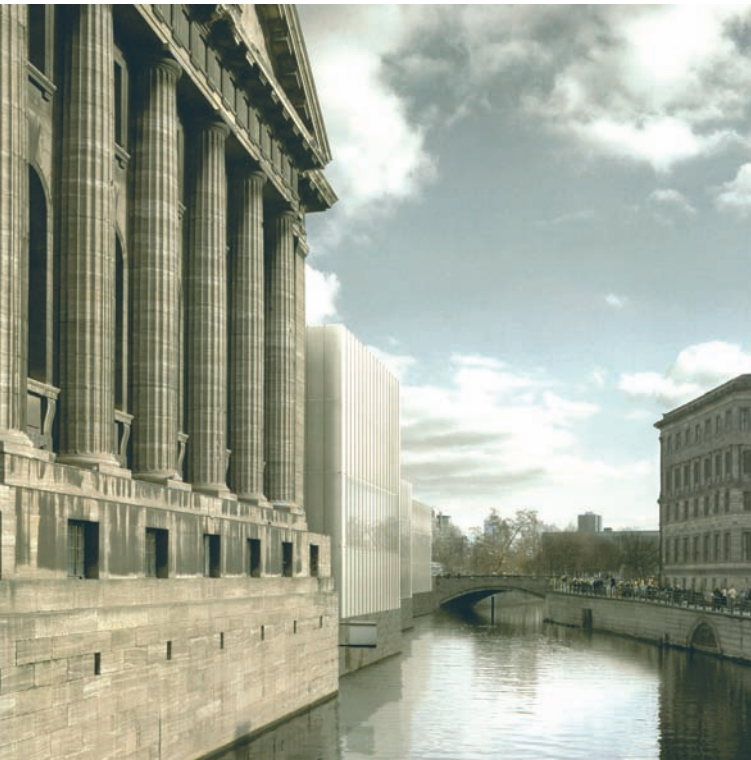
"The meeting on 17 May, during which the entire construction site, including all interiors, was jointly inspected and various solutions were discussed, has shown, however, that at the moment the well-founded conservation concept (published in *Beiträge zur Denkmalpflege in Berlin*, Heft 1, 1994) is being implemented in an exemplary manner.

In the past decades many palace and museum buildings in Germany damaged during the war were often stripped of their interiors with no respect for the historic substance, and all historic remains were removed to create a "neutral" background for the exhibits. Contrary to that in the Neues Museum all preserved parts are being integrated and fragmentary elements carefully completed as far as that is appropriate and necessary. This approach applies also to the entire building, the reconstruction of the Egyptian Court, the main staircase etc.

As fortunately it is intended to return the collections which were originally in the Neues Museum (Egyptian art, prehistory and early history) the more or less fragmentarily preserved wall decorations will be an excellent background in the sense of the authentic spirit which, with regard to the aspect of archaeology, goes well with the preservation of fragments. Rooms with totally retouched interior decorations could be problematic in their interrelation with the exhibits. Besides, there is an excellent documentation and, in accordance with a pluralistic approach, the conservation concept takes the existing historic substance into consideration in every part of the building, thus strictly following the principles of the Venice Charter. The building measures, which will probably be completed by 2009, give reason to hope for a result which will be exemplary in many respects."

A recent visit to the building site of the Neues Museum on 9 September 2007 on the occasion of an international ICOMOS conference in Berlin ("World Heritage Sites of the 20th Century / Gaps and Risks from a European Point of View") has also shown that the historic fabric preserved after the destructions of World War II is being conserved with enormous care and in an exemplary manner. For the necessary modern additions great respect has been shown for the existing fabric which survived the war and the years afterwards. This applies also to the great staircase where the existing old structures are being preserved (there are new considerations to reconstruct the Korenhalle above the staircase). The flights of stairs are being reconstructed in the exact position and proportions of the old one, however in sort of a minimalist form. The plans would even allow an exact reconstruction of Stühler's staircase without any major alterations to what has already been done (except the solid stair strings) – future generations could decide in favour of a different concept. Therefore, it is possible to state once again that from ICOMOS' point of view the currently pursued concept for the restoration of the Neues Museum can be welcomed.

Concerning points A 1-4 (constructions already completed) it needs to be pointed out that the concept which has been followed for years and will be completed in one or two years was welcomed recently also in a resolution by the *Vereinigung der Landesdenkmalpfleger in der Bundesrepublik Deutschland*. Nothing can be said against the reuse of used stones and bricks (points 1, 4).



Berlin, Museum Island, first project for the James Simon Gallery by D. Chipperfield Architects (© 3d works visual computing)

As to points B 1/2 (edifices intended) it must be said first of all that the criticised design by David Chipperfield for a new entrance building between the river Spree and the Neues Museum is no longer valid. The reservations stated by the undersigned ("hingeschachtelt", see also Süddeutsche Zeitung of 11 August 2006) were not against the construction of this necessary building per se, but rather against the design which stood in contrast to the integrity of the Museumsinsel. In the meantime, a completely revised project for the entrance building has been presented with which the World Heritage Center is probably also familiar with. This project developed in the spirit of the Museumsinsel has been

Berlin, Museum Island, final project for the James Simon Gallery by D. Chipperfield Architects (Stiftung Preußischer Kulturbesitz / Yli-Suanto)



generally appreciated. ICOMOS Germany too believes that it is a very good solution. From ICOMOS Germany's point of view no objections are necessary, either, against the design by Ungers (point B 2) for a wing closing the courtyard of the Pergamon Museum – such a wing had already been planned by the architect of the museum at the beginning of the 20th century.

M.Pz.

12 September 2007

Historic Centre of Stralsund

The so-called Quartier 17 (Q17) is situated in the centre of Stralsund immediately south of the town hall and the St. Nikolai church. This very densely built area, mostly with medieval houses, was almost completely destroyed by an air attack in 1944. Only two gable-fronted houses survived on the north side of Badenstrasse. The ruins of the other houses were removed, however only down to the street level. Cellars and foundations have therefore been largely preserved. In this context we would like to point out that in the appraisal of Stralsund and Wismar as World Heritage sites the exceptional importance of both towns' archaeological layers underground were explicitly emphasised. This quality was also confirmed by excavations in Quartier 17 carried out by the State Conservation Office of Mecklenburg-Vorpommern: on all four sides of the street extensive cellar walls, usually up to the full height of the cellars, have been preserved. The exposed medieval walls reflect and document a differentiated typology of houses in correspondence with the social hierarchy. Along Badenstrasse cellars of large and deep houses of the 13th century were excavated, also of shorter houses from around 1300 in Ossenreyer Strasse. Furthermore, cellar remains of simpler houses, so-called "Buden", were discovered along Kleinschmidtstrasse and Heiligenstrasse as well as remains originally belonging to typically larger houses at the corners of the quarter. High-quality findings are still to be expected at the corner of Badenstrasse/Ossenreyer Strasse, where the excavations have not yet been finished. In total, one has to come to the conclusion that, in accordance with the appraisal of the archaeological underground of the town of Stralsund as World Heritage, a rich stock of building remains from the 13th to the 15th centuries still exists, which – like an archive – has preserved the original stock of houses and the parcelling of the quarter.

From ICOMOS's point of view it would be very desirable if this central quarter were newly developed. However, essential criteria for a development compatible with the World Heritage status have not been fulfilled in the available plans by the architecture firm Kara und Hoffmann of March 2007:

- *Through the large two-storey underground garage for c. 250 cars which takes up more than three quarters of the entire block the already mentioned archaeological findings would be almost completely destroyed – a loss of building stock from the Hanseatic era which cannot be justified.*
- *It is to be feared that the construction of the underground garage and the draining of the foundation pit would harm the enormous steeples of the St. Nikolai church only 27 and 50 metres away.*
- *The underground garage is largely meant for the customers of the retail stores which are to be opened here and it has been required as a precondition for attracting an "anchor tenant". With this underground garage the town of Stralsund would*

welcome in principle – will be disadvantageous for the World Heritage the following would be required:

- To give up the underground garage in its presently planned dimensions as a condition for preserving the archaeological remains in this quarter and for avoiding damages to the St. Nikolai church. At best a smaller garage for handicapped persons and residents would be thinkable, perhaps as a parking lift.
- The outlines of the new buildings should follow the historic land parcels (in particular the new buildings should refer to the very early tangential deviation along the Badenstrasse) as a prerequisite for technically solving the preservation of the cellar walls. For instance, it would be possible to use bored piles with projecting plates as foundations for the new buildings.

M.Pz.

26 November 2007

Upper Middle Rhine Valley

(...) For quite some time there have been considerations about the necessity of a bridge connection in the Upper Middle Rhine Valley between the two riverbanks; however, precise plans or even binding decisions have not been made so far. The necessity of such a connection is being justified by the fact that there is no bridge for almost 100 km between Bingen and Koblenz. The traffic across the river is handled by six ferries run by private enterprises. In comparison to a toll-free bridge ferries are disadvantageous in so far as there may be queue times (usually not more than 15 minutes, possibly longer in the main travel season) and that for reasons of profitability the ferries do not operate at night and – a few days every year – also not if there is extremely high or low tide. However, one can assume that during daytime ferries are no serious obstruction. It also needs to be pointed out that in the past the responsible

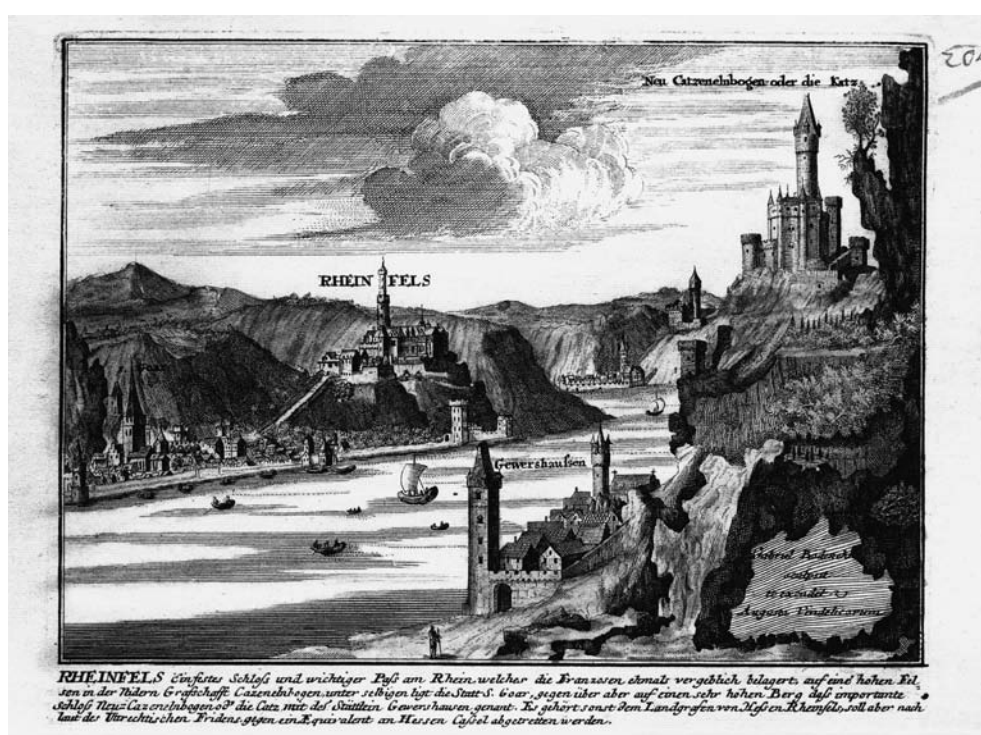
federal authorities did not find it necessary to connect the federal highways B9 and B42 (along the Rhine), B274 (east-bound connection) and the west-bound motorway A61 by means of a bridge – namely because of the low traffic volume.

Positive aspects of the ferries are that for a long time they have been an integral part of life by this river, that they also allow cyclists and pedestrians to cross the river near to where they live, that they enable travellers to have a short but intensive rest on the ferry, plus a number of other intangible reasons.

The expertise at hand by Cochet Consult of August 2007 shows relatively well which aims and hopes are being pursued with a new Rhine crossing. It is especially a matter of a supra-regional and comfortable traffic connection of the area on the right side of the river belonging to Rhineland-Palatinate, or to be more specific of the Rhein-Lahn district, with the left side of the valley and with motorway A61. For years, the industry of this area has been the driving force in asking for such a connection in order to avoid long detours to the Rhine crossings in Koblenz in the north and Bingen in the south. The responsible politicians and the marketing boards hope that such an improved connection to the motorway and to the centres of the State Rhineland Palatinate will also lead to an economic boost by attracting additional companies and making the region more accessible for commuters.

All suggestions for such a Rhine crossing have always concentrated on the area St. Goar / St. Goarshausen, because it is here that one sees the best preconditions for the implementation of the aims mentioned above. During the preparatory stage for the World Heritage application there were already discussions about this project. At every stage ICOMOS always spoke unmistakably against a bridge in this particular area of the World Heritage. ICOMOS's negative attitude is consistent with very similar statements made by the State Conservation Department of Rhineland Palatinate and a number of local associations, societies and private individuals – first and foremost the Rheinische Verein für Denkmalfpflege und Landschaftsschutz.

The reasons for the negative attitude towards a new Rhine crossing



Gabriel Bodenehr d. Ä., view of St Goar and St Goarshausen



Upper Middle Rhine with Loreley, etching from c. 1820



Upper Middle Rhine, view of Wellmich with Castle Maus (Photo: M.Pz.)

in the area St. Goar / St. Goarshausen are:

1. The Upper Middle Rhine Valley as World Heritage is characterised "as one of the most important transport routes in Europe". Surely, this refers mostly to its historic relevance, not so much to the modern transport routes, especially the two supra-regional federal highways along the Rhine and the railway routes. The modern transport routes are a considerable burden both for the local people as well as for the tourists in the valley. This sensitive situation should not be worsened by measures which will lead to additional traffic in the Rhine Valley.
2. The Upper Middle Rhine Valley is furthermore characterised by the very high number of historic buildings and towns, which together with the typical viticulture on terraces and the characteristic flora of the steep slopes have become a synonym for a

Romantic landscape. The immediate vicinity of St. Goar and St. Goarshausen is particularly distinguished by these characteristics, not just because of the world-famous Loreley rock, but also because of the historic townscapes of St. Goar, St. Goarshausen, Wellmich and the castles called "Katz", "Maus" and "Rheinfels" towering above them. In such a historic and romantically inflated landscape a technical construction like this bridge would inevitably be regarded as a disturbing intrusion. The visual integrity of the World Heritage would be seriously harmed. This evaluation applies to all the presented bridge alternatives, also to the one in Fellen-Wellmich preferred in the expertise (option 9.2.5).

3. The tunnel alternative would avoid disturbing the visual integrity. The road could be linked relatively easily to the B275 in St.

Goarshausen and to the local road net in St. Goar; in the expertise no indications were made as to how the traffic is then to be continued, especially in the direction of motorway A61. This deficit also holds true for all bridge solutions. A by-pass of St. Goar around Rheinfels Castle would be a considerable and additional burden to the World Heritage. Leading the traffic through St. Goar would also be a strain to the town and would hardly be possible for larger vehicles. On the other hand, redirecting the road to the south up to Oberwesel would encounter resistance there. Under these circumstances, there is no solution for the additional traffic that is to be expected from a built Rhine crossing. Further and considerable strains and encroachments of the World Heritage would have to be expected.

4. From ICOMOS's point of view the only solution compatible with the World Heritage would be option 8.1, i.e. an intensification of the ferry traffic, both as far as the frequency and the number of ferries is concerned. According to the expertise this would be possible, even if it does not exactly correspond with what the local politicians and market boards want. In this context, one would perhaps have to transfer the landing stage in St. Goarshausen, which at present is very cramped and probably unsuitable for several ferries. The State Government should seriously consider integrating the ferry service in the traffic network, also as far as fees are concerned, and subsidising the ferries outside the normal timetable.

Maintaining the ferry service would be a great advantage for pedestrians and cyclists (the latter being very interesting for tourism) as this would offer them a possibility to cross the river in the middle of the town without having to do a detour of several kilometres (bridge) or change on to bus (tunnel). It seems very likely that with the construction of a built Rhine crossing at least the ferry service from St. Goarshausen would be stopped.

The continuation of the ferry service would also have the very pleasant consequence that not only a traffic mode traditional for the Rhine landscape could be maintained, but also that the family which has been running this ferry for 200 years would be able to continue its work. (...)

M.Pz.

26 November 2007

Bauhaus and its Sites in Dessau

From the point of view of various boards of the State of Sachsen-Anhalt (City of Dessau, State Ministry of Culture, Conservation Department, Stiftung Bauhaus) the present condition of the front part of the Meisterhaussiedlung (buildings designed by the school's professors) is not satisfactory. Largely, the war-related gap in the destroyed semi-detached house Moholy-Nagy and the war-related loss of the director's house (Gropiushaus) are considered as particularly disturbing, also the demolition of the "Trinkhalle" by Mies van der Rohe in 1970. Finally, the rebuilding of the director's house in 1956 in accordance with the ideology of the former GDR, i.e. as a one-storey building with saddle roof, is now considered to be inadequate. Discussions about correcting the unsatisfactory urbanistic situation started after the houses Lionel Feininger, Georg Musch, Oskar Schlemmer, Wassily Kandinsky and Paul Klee had been restored and declared World Heritage (1996).

During the investigations that were carried out together with the restoration of the master houses it was discovered that there had been a number of alterations. In the Bauhaus era 1925-1932 these alterations affected mostly the surfaces which were redesigned by the various professors who lived here. In the 1930s changes were made above all to the outer appearance. For ideological reasons the Nazis changed the buildings' specific Bauhaus shapes. Only through the comprehensive and meticulous investigations of the 1990s it was possible to reconstruct a situation outside and inside that reflects the condition of the Bauhaus era even in its materiality. These investigations also proved that the handed-down plans were not always reliable. The character of the "experimental" architecture of the Bauhaus may also have contributed to the fact that certain details were only decided when the construction was already under way.

The discussed "repair" of the present state considered to be unsatisfactory concerns three different possibilities of procedure:

- The reconstruction of the state at the time of the Bauhaus respecting the conditions of the Operational Guidelines: "Reconstruction is acceptable only on the basis of complete and detailed documentation and to no extent on conjecture".
- The erection of buildings which are recognisably from today and which should not interfere with the visual integrity of the ensemble.
- Maintaining the present state.

The option of a "reconstruction" is being rejected by some experts, because no reliable plans and findings of the destroyed buildings



Dessau, Meisterhaussiedlung, director's house, situation in 1926 (Photo: VG Bildkunst, Bonn, Lucia Moholy)

Dessau, former director's house, now "Haus Emmer", situation in 2004 (Photo: Stiftung Bauhaus Dessau)



seem to exist. This issue would have to be checked from case to case. In this context the most critical point would be the question if a reconstruction of the director's house is imaginable. The so-called "Emmer house", rebuilt in 1956 does contain considerable parts of the original director's house by Gropius – the unaltered garage, the undamaged cellar and the ground-plan structure of the ground floor, which in its most essential parts corresponds with the example of 1925. However, the Emmer house, including its original elements from 1925, can also be considered an important testimony to the way GDR architecture dealt with the Bauhaus. Under these circumstances ICOMOS would give preference to maintaining the present state and has serious concerns against any kind of "adapted" new building.

According to its letter to the World Heritage Centre of 11 June 2007 the City of Dessau decided in favour of a competition for the construction of new buildings in today's architectural vocabulary. From the town planning point of view these buildings are meant to correspond to the original situation. Such a one-sidedly predefined competition can only lead to considerable problems. The winners of such competitions are not infrequently also the most "fanciful" and the most ruthless designs. Under these circumstances, it must be feared that the results of the competition could seriously harm the integrity of the World Heritage site.

Instead of such a one-sidedly predefined competition a competition with a differentiated approach to the three building tasks – the semidetached house Moholy-Nagy, the director's house and the "Trinkhalle" – would be preferable. Such an approach could allow for instance an unproblematic reconstruction of the "Trinkhalle" and of the semidetached house Moholy-Nagy, but in the case of the Emmer house instead of a new building the preservation of the existing one.

Due to this differentiated situation ICOMOS recommends the following:

- Basically, a competition with the aim of repairing the situation in the front area of the Meisterhaussiedlung is considered to be possible.
- The above-mentioned alternatives concerning the handling of the three building tasks should be accepted, which means the possibility of reconstructions (on condition that sufficient documentation exists), evaluating whether "modern" substitution buildings are possible or leaving the present state as it is.
- This would however require a multilevel competition to be tendered: first of all an ideas competition, and then a more detailed elaboration in a second step.

As far as ICOMOS knows the call for tenders for this competition has not yet been formulated so that amendments could still be made. The relevant literature on this topic (Andreas Schwarting, HPC Weidner etc) should be made available to the participants. (...)

M.Pz.

26 November 2007

Dresden, Waldschlösschen Bridge

(...) In this context, we would like to make reference to ICOMOS's statement of 10 January 2006, to the expertise by the Institut für Städtebau und Landesplanung at the RWTH Aachen of April 2006, and to the statement on this expertise by ICOMOS of 27 June 2006. According to these the crossing of the Elbe valley by the planned

four-lane, motorway-like road is on principle highly problematic and wrong, because it cuts the valley into different sections and hurts the visual integrity.

The alternatives presented to the World Heritage Centre in 2007 contain two different planning approaches:

- 1) The attempt to develop a bridge which would be more compatible with the cultural landscape and therefore acceptable;
- 2) The crossing of the Elbe valley by means of a tunnel.

Ad 1

Reference is made especially to the letters by the mayor of Dresden to the World Heritage Centre of 21 May 2007 and of 14 June 2007 (e-mail of 19 June 2007 with report on the workshop of 8 June 2007). Seven engineering companies were invited to submit designs for a "better" bridge. The selection board evaluated two designs as particularly interesting because they can be further developed: Büro W. Sobek and Büro Schlaich, Bergermann und Partner, both Stuttgart. The plans by Sobek were eventually excluded because they had ignored a regulation regarding the Elbe as a waterway. (...) From ICOMOS's point of view this planning approach by Schlaich, Bergermann und Partner can NOT be seriously considered as being compatible with the World Heritage site. No doubt, the entire construction of the Elbe crossing, with foreshore bridge and the actual crossing of the river, is much more elegant and lighter in its appearance than the approved version. But, apart from the fact that in contrast to the design the lanes of the bridge would have to be raised by four metres in order to achieve the permitted overhead clearance for ships (which in turn would have a stronger impact on the valley landscape), this alternative shows no fundamental renunciation of the four-lane, motorway-like valley crossing pursued so far. The positive aspects of these plans are limited to an improved aesthetic effect of the construction, whereas the cutting-in-two of the valley by this road structure would remain unaltered in every respect.

Ad 2

Reference is made to the letter by the architects office gmp – Prof. Marg to the mayor of Dresden of 21 May 2007, to the feasibility study of August 1996 by the City of Dresden regarding the tunnel solution, to a further study on this topic by the City of Dresden of December 2003, to plans made by the City of Dresden and the Büro EIBS of July 1996 and December 2003, to the statements by the engineering company ILF of 16 April 2004 and by the Ing. Gesellschaft Baugrund Dresden of 16 April 2004 with regard to the geological situation in the valley. Reference is made also to the letter from the City of Dresden of 17 October 2007 with the English version of the tunnel study of 8 June 2007 by the engineering company Bung in Heidelberg.

All these studies and expertises by renowned architectural and engineering companies and by the city itself have come to the conclusion that a tunnel instead of the Waldschlösschen bridge could be realised without serious problems, that its construction would not face any major difficulties and that – after the completion of the work – the World Heritage site Dresden Elbe Valley would be largely intact.

ICOMOS follows this evaluation. Ultimately, the approaches of the different studies and expertises only vary in detail, which is irrelevant for the World Heritage. All studies assume that – instead of the so far approved Elbe crossing consisting of a tunnel of 1.2 km (on the northern, right bank of the Elbe) combined with a 0.7 km-long bridge structure – a tunnel system of 1.9 km would be developed. The junctions to the city's road net could be carried out

as already planned; consequently, an interruption of the work begun would only be necessary in certain parts, if at all. The required flood protection of the tunnel would be warranted. The intended use of this crossing by public transport buses would also be possible with a tunnel, just as much as a retrofitting for trams, which was already planned in the feasibility study of 1996.

Crossing the valley by means of a tunnel would largely preserve the visual integrity of the World Heritage once the work is completed.

A comparison of the costs between the so far approved combined tunnel/bridge solution and the recently presented tunnel solution can only be approximate. On the one hand the state of planning of the two solutions differs too much, on the other hand pedestrians and cyclists would not be able to use the tunnel. However, very near to the planned crossing there is a ferry for pedestrians and cyclists, which could continue to be operated (in the case of the bridge solution it would be given up). All in all, from what can be concluded from the available documents even a belated decision in favour of an entire tunnel solution would not lead to a dramatic cost increase.

Therefore, ICOMOS strongly recommends that the tunnel solution, which would be unproblematic to carry out, should be insisted upon.

However, we wish to point out that the tunnel solution is not entirely unproblematic, either. With both solutions the border area of the World Heritage, the so-called "Prussian Quarter" on the right high bank of the Elbe, is going to be affected visually and acoustically by the tunnel exits, to a lesser degree also the left side of the river. But as far as the World Heritage is concerned such disturbances seem tolerable.

Incidentally, the question remains whether such an Elbe crossing is necessary at all. A traffic census made by the City of Dresden in the summer of 2007 has shown that since the opening of motorway A 17 car traffic in the city has decreased by 10.4%.

M.Pz.

18 December 2007

In the years 2006/2007 ICOMOS Germany tried in many other cases to help in conservation questions; it protested against planned demolitions and disfigurements of monuments and sites, and within the range of its possibilities as an NGO it supported the state monument services (*Landesämter für Denkmalpflege*) of the 16 Federal States in critical cases. ICOMOS also commented on dangerous trends in some Federal States to weaken the position of the state monument services in the context of structural reforms of the administration. Below a few examples from a great number of tasks:

Protest against the demolition of the Telephone Cable Factory in Oberschöneweide (Berlin)

With its visible steel frame construction and its radically modern aesthetics the AEG telephone cable factory in Oberschöneweide, built by Ernst Ziesel in 1927/28, was a milestone in Berlin's industrial architecture of the 1920s (see also H@R Special 2006 *The Soviet Heritage and European Modernism*, p. 175). At first a renovation of this building for purposes of the *Fachhochschule* (= technical college) für Technik und Wirtschaft (FHWT), which is being

relocated to the former AEG premises, was planned. However, due to structural problems and the high renovation costs these plans were given up and in 2005 the "unavoidable" demolition of this factory, which had been on the monument list since 1977, was applied for. Sadly, public protest against the destruction, which also came from DOCOMOMO Germany and ICOMOS, was in vain. The building was demolished in 2006.

The mining destruction of Heuersdorf and threats to Nietzsche's gravesite

A number of valuable historic sites in Germany have been destroyed by lignite surface mining. Vast deposits of this low-grade fuel, also known as brown coal, are extracted by the electrical power industry. The mining pits that penetrate several hundred meters into the earth have uncovered petrified trees, mastodon skeletons, artifacts from the New Stone and Bronze Ages, Roman and medieval settlements, as well as the remnants of daily life in more recent periods. Yet modern communities underlie the prerogative of German mining law for devastation wherever coal deposits have been found. While the local population is resettled into new housing, it has proven impossible to transplant more than a vestige of extant historic substance to other locations.

The oldest architectural monument in the village of Heuersdorf near Leipzig (on Heuersdorf see also H@R 2004/2005, pp. 82/83) has been the Emmaus Church. This 820 ton stone structure was transported on a flatbed trailer in October 2007 to the city of Borna 12 kilometers distant by the American-owned MIBRAG mining corporation. The church was first documented in 1297, while dendrochronology has established the roof beams to be about 750 years old. The edifice was remodeled after the Thirty Years' War, with the Romanesque arch still framing the nave as testimony to its pre-Lutheran origins. The weathervane above the later

Heuersdorf, transport of the Emmaus Church to Borna, 2007 (Photo: Jeffrey H. Michel)





Heuersdorf, demolition of the village (Photo: Jeffrey H. Michel)

shingled belfry bears the year 1837. Only three 17th century graves were discovered near the foundation during archaeological fieldwork. The diminutive church apparently served as a chapel of the nearby village of Breunsdorf, which has already been lost to the advancing lignite mine. The present name of the structure was conferred in 1959, when Heuersdorf persisted as a Christian community in Marxist East Germany. Both the Emmaus Church and the larger Tabor Church at the southern end of the town were renovated and maintained by the local population, even as 23 villages and 11 churches were destroyed in the immediate vicinity. Yet over 100 buildings in Heuersdorf, including the Tabor Church with its magnificent late classical architecture, are now being broken apart in preparation for mining. More than 40 structures or parts thereof have been entered into the state registry for historic monuments, a matter of no consequence for energy production. Equally notable in the surrounding fields are rows of truncated willows once used for basket weaving, and the ubiquitous fruit trees along village pathways and in the gardens of timbered farmhouses that reflect centuries of agrarian prosperity.

German mining law, enacted in 1980, does not mandate consideration of technological options such as wind power that would make the destruction of human settlements avoidable. MIBRAG intends to devastate several additional communities southwest of Leipzig to serve a new lignite generating station. The planned mining operations would include the town of Röcken, where the German philosopher Friedrich Nietzsche was born and now lies buried. The 12th century church at the gravesite is far more massive than its counterpart in Heuersdorf; rebuilding it elsewhere would thus cost several million euros. Although no definite decision has yet been made by MIBRAG regarding mining operations in Röcken, several organisations have stated very clearly that the place where this world-renowned philosopher was born should be preserved by all means.

Röcken, parish church with graves of the Nietzsche family (Photo: www.wikipedia.de)



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Ochsenfurt: old bridge across the river Main threatened by demolition

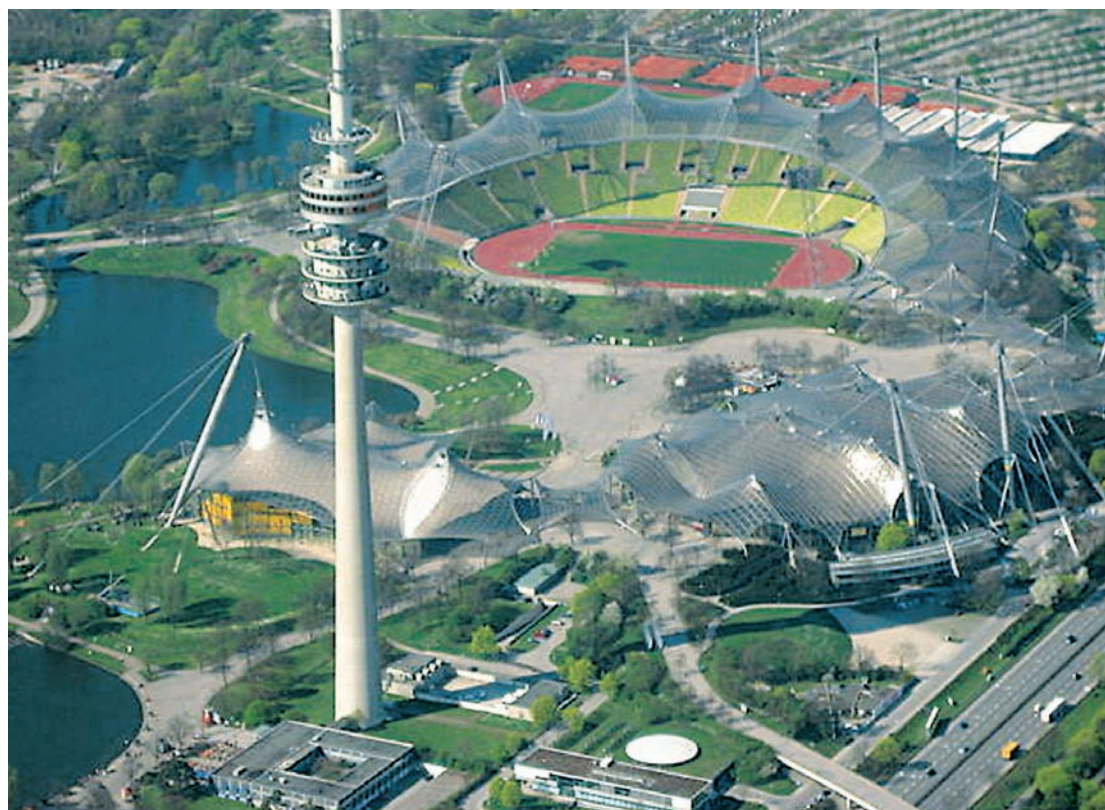


Ochsenfurt, old bridge across the river Main (Photo: Weissbach)

In November 2007 it became known that the District Office of Würzburg had allowed the demolition of the old Main bridge in Ochsenfurt. The unstable part, a steel construction erected in place of the middle part of the bridge which had been blown up during the last days of the Second World War, has already been demolished. The town of Ochsenfurt decided in favour of a completely new bridge. However, as the Bavarian State Conservation Office has appealed this decision and as there has been public protest against the demolition, there is some hope that this historic landmark of Ochsenfurt, parts of which date back to the 14th century, can be saved after all.

Against the total commercialisation of the Olympic Park in Munich

Faced with the alarming news about the consequences of a commercialisation of the Olympic Park in Munich initiated by the City of Munich and the operating company Olympia GmbH, ICOMOS Germany sent an open letter to the mayor of Munich on 17 December 2007. With this letter ICOMOS joins the protests from various parties against the imminent disfigurement of the ensemble designed by Günther Behnisch and his team of architects in cooperation with the engineer Frei Otto and the landscape gardener Günther Grzimek for the Olympic Games of 1972. The erection of the planned Olympiapark-Hotel north of the newly-erected BMW-Welt would be an additional complex that would block the main access to the Olympic Park. Seen from Lerchenauer Strasse the 70-metre-high hotel tower, for which apparently tenders have already been called, would interfere with the original appearance of the Olympic village, which together with the sports sites and their world-famous tent roofs embedded in the park are part of the entire complex. Instead of using opportunities to enlarge the park in its border areas, it seems that the city is quite willing to sacrifice central areas of the park for the benefit of short-term marketing strategies of the operating company. This would gradually destroy the authentic character and integrity of the Olympic Park, parts of the park would be converted into building land for commercial use, thus ruining a cultural monument of international standing. The most depressing examples for this tendency are recent "test designs" by Auer + Weber for a five-storey hotel building around the base of the Olympic tower, to which wings of a wellness clinic in the north-eastern area of the park up to Georg-Brauchle-Ring and Lerchenauer Strasse, event halls and a multi-storey car park are proposed to be added.



Munich, aerial view of the Olympic Park
(Photo: www.wikipedia.de)

GREECE

The Ancient Diolkos

The Diolkos, the unique paved way that enabled Greek warships and merchantmen to be moved overland across the Isthmus of Corinth from sea to sea, has been crumbling into the water at its western end for decades. Neglect and total absence of remediation actions have caused its deterioration.

The Diolkos was probably first built by Periander (625-585 B.C.). Excavations carried out between 1956 and 1962 by Nikos Verdelis enable us to trace the course of the Diolkos for about one kilometer on both banks of the Corinth Canal; its eastern end, reported by Strabo to be at Schoenus (modern Kalamaki), has not been found.

The surface of the Diolkos, varying in width from about 3.5 to about 5 metres, bears the grooves made by the wheels of the trolleys onto which the ships were loaded. There is a part of the monument (today again covered by natural growth) where ruts cut into the blocks were clearly visible.

After its excavation, the Diolkos was abandoned in its exposed position near the Corinth Canal. The wake of the vessels passing through the Canal and the waves coming in from the Corinthian Gulf first eroded the land between the Canal and Diolkos and then proceeded to "demolish" the monument. A photo taken in 1978 by Walter Werner already shows quite a serious erosion front. Today the erosion has swept over the whole width of the monument at a length of several tens of meters. The decay is all the more concerning since the monument has never been properly recorded. Only the German researcher Walter Werner proceeded to make detailed drawings of the vestiges of the Diolkos in, and following, 1988.

Today, an extended paved area of square blocks in front (and to the side) of the Diolkos proper, is also ruined. Neglect has taken its toll also on the part of the Diolkos excavated on the Attica side of the Canal, on the grounds of the Military Engineers' School. Here, a double row of stones resting upon the course of the Diolkos suffered extensive mechanical damage sometime between 1978 and 1984.

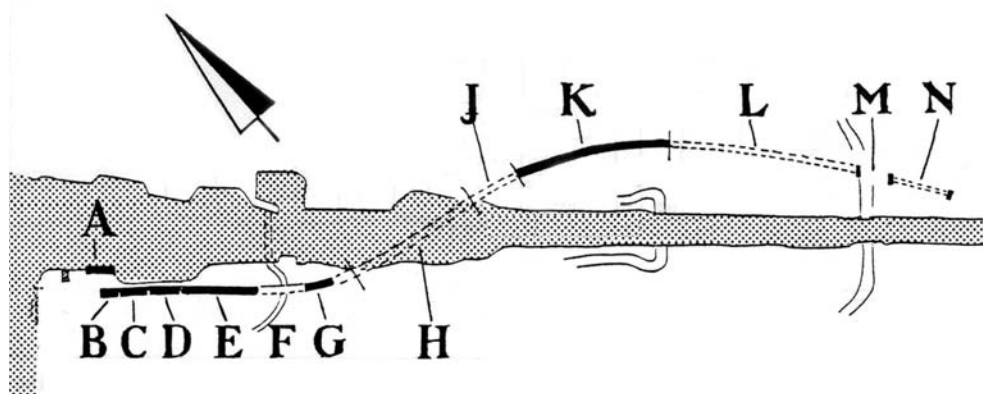
Although documents for almost three decades after 1956 are missing from the local ephorate's archives, it seems that the Canal

Company was never held responsible for damaging the Diolkos. On the contrary, in 1985, with the Diolkos already heavily eroded, the Canal Company was permitted to build a nearby bridge although the initial permit called for a prior study for the conservation of the monument. This obligation was "forgotten" by the Ministry of Culture, which quickly sent a commission and gave the go-ahead for the bridge upon the demand of the Canal Company's President.

Around 1989 the local Ephorate took part in a small study that proposed to embellish with plants, lighting and benches the then "intact" part of the monument, disregarding the quite extensive damaged part of the Diolkos. In 1999, after four decades of abandonment and with the initial part of the Diolkos already heavily devastated, two local members of Parliament presented written questions about the Diolkos. The official answer of the Minister of Culture was that the local ephorate had asked the Canal Company for a "study of the currents", after which measures would be proposed for the monument. Such incidents are only peaks in a constant background of neglect. At the beginning of March 2007 the Direction for the Restoration of Ancient Monuments (DAAM) finally proceeded with the first small rescue action, by supporting two precarious points of the long erosion front. At the end of May, in a meeting at the Ministry of Culture, there was a new understanding according to which the DAAM should have a first study ready and approved within two months. Extended protection measures are expected to follow. This first study will be used as the base for further studies and funding for the protection and restoration of the monument.

The petition for saving and restoring Diolkos has already received more than 5,300 signatures originating from 81 countries (see www.thepetitionsite.com/petition/870477005).

Sofia Loverdou
Science Journalist



A plan of the Diolkos by Walter Werner. The letters C and D correspond to different states of disruption at the time the plan was drawn.

The Diolkos around 1960, in a photo of the En Athinais Arhaiologiki Etairia and the same part in 2006.



Sector "G" (according to Werner's description) as it was after the excavations (in a photo of the En Athinais Arhaiologiki Etairia) and in 2007. An internal report by an antiquities' guard in 1992, saying that the erosion was approaching this part of the monument and urging the local ephorate to take measures, was disregarded.



An interesting feature of the Diolkos, engraved letters which appear with increasing frequency near its western terminal (as can be seen in a photo of the En Athinais Arhaiologiki Etairia taken during the excavations), lies in the sea.



Two preserved parts of the monument, on the Sholi Mihanikou grounds, in images taken by Walter Werner (in color, 1978) and the En Athinais Arhaiologiki Etairia (around 1960). This second part is visible today only in its general form, since it has been covered by natural growth.





An image taken in 1978 by the German researcher Walter Werner shows already serious erosion.



The extended platform which once constituted a part of the western terminus of the Diolkos today lies in ruins.

One of the two points supported at the beginning of March 2006 by the Direction for the Restoration of Ancient Monuments.



Satellite photo of the fires in Greece (Photo: NASA)

Summer fires in Greece (2007)

(see also special focus on global climate change, pp. 220-223)

Message from ICOMOS Greece of 10 September 2007:

Dear President,

Thank you for your interest regarding the latest news from Greece. Our Cultural and Natural Heritage are running a serious risk. In the last two months the fires have threatened firstly the population, the traditional agricultural production, the natural environment and mainly the Hellenic Cultural Heritage.

Today, the situation improved, even though the danger is not completely removed.

Now we are optimistic, because the State is taking measures.

At the same time all the scientific associations and between them the Technical Chamber of Greece and the ICOMOS Hellenic are collaborating with the universities, coordinating and organising proposals for the confrontation of the crisis.

We will keep you informed.

Best regards

Nikos Agriantonis

President of ICOMOS Hellenic

HUNGARY

ICOMOS Hungary's "Historic Preservation Lemon Awards"

The Hungarian National Committee of ICOMOS – in accordance with ICOMOS's international efforts – makes a point of drawing attention to Hungarian cultural heritage in danger, in an attempt to save it. To further this goal the Hungarian National Committee established the "Historic Preservation Lemon Awards" in 2005. Nominations for this "negative distinction" may be made every spring. A jury made up of the best Hungarian experts – art historians and architects – judges which buildings were put at greatest risk by thoughtless owners, and where the most serious mistakes were made during rehabilitation projects. Three endangered buildings are put in the spotlight every year.

Up until now the awards have been given out twice, in 2005 and 2006. The historic preservation experts want to draw the attention of society to threatened historic buildings through the presentation of these regrettable examples. The announcement of the awards occurs during the annual meeting of the Hungarian National Committee of ICOMOS, which has been held for the last two years in conjunction with the International Day for Monuments and Sites. On both occasions the Lemon Awards produced a significant reaction from the press and the media. The efforts of ICOMOS Hungary have proven effective, as the fate of more than one of the poorly cared-for buildings highlighted in previous years has taken a turn for the better. This shows that presenting these unfortunate examples does provide effective encouragement for the preservation of endangered heritage sites, and so it is worthwhile to become familiar with a brief history of these buildings and their difficult fortunes.

Frigyes Barracks (Győr, 42 Baross Gábor St.) Schlichter Family Villa (Győr, houses at 12 Eszperantó Street and numbers 1, 3, 5 and 7 Zrínyi Street)

The Frigyes Barracks were built in Győr's new town center in 1897 according to the urban planning concept of the well-known Hungarian architect, Ignác Alpár. The buildings within this complex were constructed around a large, symmetrical central square. The ballroom, library and clubrooms located in the officer's building were an important site for the cultural life of the city. In the enlisted men's buildings there were large performance halls – music, fencing and lecture rooms – in addition to the dormitory rooms. The barracks were carefully constructed, utilizing the best technical and architectural knowledge of the time.

For a long time the buildings were used by the occupying Soviet forces. When these forces withdrew (in 1989) the buildings were in an acceptable state, with the exception of their façades. The municipal government of Győr requested and received the Frigyes Barracks back from the State, to be used for educational purposes. The municipal government handed the valuable buildings over to the local Universitas Győr Foundation so that the local university could be expanded. The directors of the Foundation then thoughtlessly and foolishly put the valuable complex up for sale and "privatized" it. The buyer – an Austrian-owned building contractor –



Győr, 42 Baross Gábor St., Frigyes Barracks (1897)



Győr, 12 Eszperantó Street, and numbers 1, 3, 5 and 7 Zrínyi Street, Schlichter Family Villa (1898)

Szentendre, 5 Kossuth Street, Pajor House (18th-19th centuries)



planned on demolishing the structures, and wanted to build cheap, speculative apartment houses on the site of these valuable buildings. No efforts were made to preserve the existing buildings.

The “key building” of the complex, the natural focal point and gateway to the surrounding Nádorváros neighborhood, was rightfully placed upon the Hungarian register of historic monuments. However, this did not settle its fate. The complex changed hands again in the middle of the 1990s. The new investor wanted to create a huge shopping mall in place of this complex, along with a long-distance bus terminal and the Schlichter Villa across. Thankfully to this day these plans have not yet been realized. In the first years of the new millennium the barracks buildings that were expertly constructed with funding from the citizens of the town still stood admirably, but their condition has deteriorated to a worrisome degree due to weathering.

The former Schlichter Villa and office building stands in the area between the barracks and the international railway station. The magnificent building was constructed at the end of the 19th century at the same time as the barracks complex. Its appearance follows the picturesque style of late Historicism. The turreted corner building is quite an important element in Győr’s cityscape. Rich stucco decoration is found in the interior of the two-story villa, and the ceiling of the banquet hall is decorated with paintings from 1898 by the outstanding Hungarian artist Erik Bánffy Pauly. The building complex received historic protection at the beginning of the 1990s. The house is owned by the municipal government of Győr and has been empty for years, with its condition visibly deteriorating. The owner has not provided for the simplest conservation steps that could be expected, and has no intention of providing it with a new function.

The dilapidated historic complex of the Frigyes Barracks and the former Schlichter Villa justly deserved the “Lemon Award” for 2005, as a result of fifteen years of incompetent management and no hope for re-use. Since then the fate of the complex has taken a turn for the better. The barracks buildings changed ownership again, and the new investor finally went about rehabilitating the buildings. The officer’s casino building has been renovated and the rehabilitation of the former junior officer’s dormitory is now under way. The relationship between the new owners and

the historic preservationists is not without conflict, but the precious building complex has in any case been spared demolition. On the other hand, the fate of the Schlichter Villa is still uncertain.

Szentendre, Pajor House, 5 Kossuth Street

The building of the former Pajor House – later the land registry – is located on one of Szentendre’s busy streets near numerous other historic monuments and protected historic buildings. This town has been an important site in Hungarian history, and these days it is the tourism center of the Danube Bend region. The building, which has seen better days, was placed upon the Hungarian register of historic monuments in 1958. It was built by the very wealthy Lovcsánszky family in the second half of the 18th century, and later in the second half of the 19th century the original owner’s grandson, Titusz Pajor, enlarged it. This was when it received its Historicist façade.

After the death of this owner a history full of ups and downs began for the building. From 1880 the building was a courthouse, and a jail was constructed in its enormous basement. In 1925 the Reformed Church bought it and used it as a higher elementary school and boarding school. During the Second World War the Rókus Hospital moved here from Budapest. In 1948 the house was placed under State ownership. From the 1950s it was first a police station, then the district council house, and finally in 1972 it became the land registry. In the 1980s the idea was raised to place the town’s historical collection here, but unfortunately this did not come about.

The land registry did not use the building for very long. Instead of rehabilitating it they built new office space. The fate of the empty building that had lost its function seemed to be sealed for good when it was given the “Lemon Award”. It was true that its function as the land registry had not been ideal, but at least it had been in use. It was also true that during this time periodic historic rehabilitations had not been performed, but at least this esteemed historic monument was heated and aired, and the most needed repairs were performed. After receiving the award the condition of the building has further deteriorated, and its salvation seems less and less likely.



Tura, Schossberger Palace (1883)

Tura, Schossberger Palace

The Schossberger Palace in Tura was built in 1883 according to the designs of Miklós Ybl, the most outstanding Hungarian master of the strict Neo-Renaissance style. The two-story building was constructed with an animated distribution of masses, an open carriage-way, a second-floor balcony and distinctive towers. Its seemingly sculpted masses, picturesque roof structure and richly molded chimneys followed the traditions of French Renaissance palace architecture, in accordance with the wishes of the client.

The enormous palace was built at about the same time as the Opera House on Andrásy Avenue in Pest, and the pronounced composition of its interior spaces is especially valuable. The interior spaces were designed in the spirit of the Italian Renaissance and represent Ybl's most mature architectural period. The client's wishes for an imposing building were met by the richly decorated carriage entrance. The elegant series of spaces including the entrance hall and staircase that led to the large parlor created a unique atmosphere. The building's frescoes were painted by Róbert Scholtz, who was Ybl's creative partner in some of the architect's other significant buildings.

After the Second World War the palace came into State ownership, and its management was entrusted to the local government. It was used as an orphanage for a long time, and during this period the preservation of its historic character was taken care of. After the orphanage was closed, the building's condition deteriorated dramatically. In 1981 it was run by a State-owned publishing house, and in 1991 it was privatized. The private owner prepared beautiful, exemplary plans for it, however these were not carried out. Now the building is without an owner and lies in ruins. First the roofing fell into disrepair, and now essentially every structural system is in critical condition. No steps have been taken since the award was given either, and it is feared that this palace of European significance may soon perish entirely.

Gávavancsellő, Dessewffy Palace

The prestigious Dessewffy family erected a magnificent palace in huge gardens that stretch to the banks of the Tisza River. A part of

the building was built in the Baroque style in the 18th century. This was later extended by an early Historicist, Classical Revival wing. In 1896 the complex was then remodeled following a unified design in the Neo-Baroque style. Over the last half century the building has been used for many different functions, but the managers of the esteemed monument have not provided for its proper maintenance. The fate of the building has become critical in the last decade. The palace gardens were partitioned and a large, ungainly mansion was built right next to the building. The low-quality new structure has been separated from the palace by a tall, massive fence. The historically significant palace building has completely lost its connection to its natural surroundings.

The Baroque wing of the palace is now in ruins. Only traces of the murals that decorated the interiors bear witness to the building's former high quality of workmanship. On the other hand the Classical Revival wing has been altered at significant cost and is now used as a disco. The stone cladding in the interior was covered with red paint so that the nightclub would have a more "modern" appearance. During the course of the alterations not even the most basic principles of historic rehabilitation were respected. The exterior façade was also painted in strident colors. The once magnificent palace can hardly be recognized in its altered form. It has lost its former architectural character, and its relationship to the surrounding natural landscape has been severed. The rehabilitation of this building is a sad example of a rehabilitation that was poorly planned and carried out.

Kecskemét, Malom Center

The cityscape of Kecskemét had preserved its unified appearance until recently. The characteristic urban structure had survived, and the scale of the city's buildings had not changed for quite a while. The city's skyline had also preserved its character and the natural surroundings of the protected buildings had remained unmarred.

A few years ago investors appeared in town, and their new projects caused drastic changes in the traditional appearance of the town. The greatest loss was the demolition of the historic complex of enormous mills which had great significance for the agricultural history of the area. The old mill buildings could have been modernized and



Gávavancsellő, Dessewffy Palace
(18th-19th centuries)

in their renovated form could have become a famous sight of the city. However, the investors were given a free hand by the town leaders to implement their designs, and instead of restoring the complex the old buildings were demolished. A shopping mall was constructed in the empty lot that was created by their removal. This new building complex overwhelms the city with its massive presence. The new structure does not fit into the urban structure that was formed through history, and it ignores the town's traditional scale.

The large mass of the building dwarfs the accents, such as the church steeples that had defined the cityscape. The formerly active, small-town streetscape is now dominated by tall, dreary walls. This new element provides a depressing picture from every point in the city. The huge masses of the building stretch upward, and have changed the atmosphere of the entire downtown. In addition, the shopping mall has put the survival of the traditional, lively little shops in the town center in danger. The unwanted transformation of Kecskemét's historic center is an example of what happens when city government gives way to the desires of the aggressively spreading "globalized" architectural methods of shopping malls, which completely destroy the historic character of our towns through their unchecked construction.

Budapest, 6th District, Apartment House at 40 Király Street

According to an unwritten rule of historic preservation, every building erected before 1875 is worthy of preservation. József Hild designed this imposing residence in 1844 for the wealthy Robitsek family on Pest's former main street. In the 1920s the building was enlarged to four stories, but the Neo-classical palace is still contained within its interior. The owner of the building, the district government, decided to demolish the precious building, citing its poor condition and the

high costs of renovation. The demolition of the building was begun on February 16th, 2006.

The building is located within the buffer zone of the Budapest World Heritage site. No repartitioning of lots or new construction exceeding the current scale is allowed to occur in this area. However, after the demolition of the building at 40 Király Street, plans were to unite its lot with that of the neighboring building on the corner. This would create an enormous unified lot, where the owners would like to erect a monstrous apartment house with 99 units that would not fit in with the traditional urban fabric. By doing this, the area would be built up two and a half times as densely, and the number of apartments would quadruple.

Civic groups organized a protest to rescue the outstanding old apartment house, and the demolition has stopped for the moment. However, the owners are neglecting the building, hoping that by accelerating its deterioration it will have to be demolished sooner or later. Not even the presentation of the "Lemon Award" has helped the situation.

The Hungarian National Committee of ICOMOS believes that the number of buildings at risk in Hungary is increasing, and therefore it has again announced "Historic Preservation Lemon Awards" for the year 2007.

Gábor Winkler
ICOMOS Hungary

The Improper Paths of Urban and Real Estate Development in Hungary

The erroneous analysis of the interrelations between historic sites and the utilitarian decisions made under the pretext of urban development seriously endanger the character of protected districts. Through the lack of an evaluation of their character and special requirements, misinterpreted examinations of the settings of historic sites may in many ways endanger our protected historic ensembles and the landscapes surrounding them. Unfortunately, more and more development programs are being created that damage the character of historic sites. The Hungarian National Committee of ICOMOS keeps track of the concepts and decisions related to the new developments to the best of its abilities. We make our positions public in statements and inform decision-makers directly of our views. If we can bring attention to unfortunate incidents, we may be able to avoid repeating them.

Central Budapest in Danger

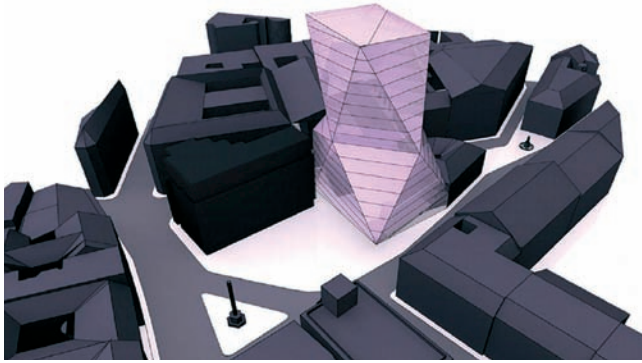
The areas of increasing value in the historic city center attract investors. The spectacular large-scale projects only accommodate themselves to their surroundings in the rarest of circumstances. In historic cities the most valuable areas are found in the city centers, the historic downtowns.

The developers attempt to erect the largest buildings with the greatest amount of ground space on the most valuable sites. Due to the lack of space in historic cities, they can only build upwards. Budapest has so far succeeded in avoiding the construction of skyscrapers.

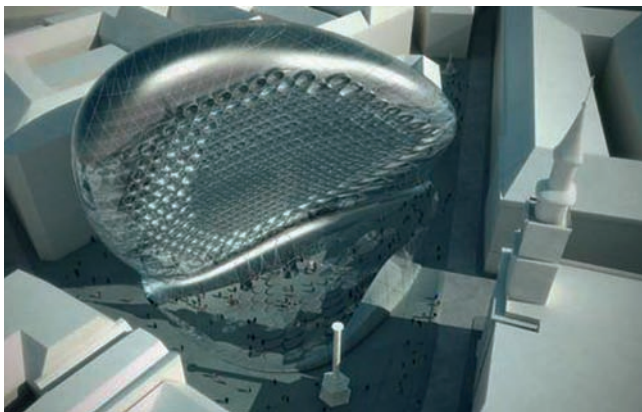
As a consequence of the change in scale of urban architecture, skyscrapers have no consideration for the established urban conditions. It is not by accident that in many places these form an entirely

Budapest, 6th District, 40 Király St. (1844, altered 1920)





The first idea is a high-rise building next to the buffer zone of the Budapest World Heritage area



The second design is smaller, but still an enormous building in the historic urban structure of Budapest

new and separate district of the city. But even so, otherwise carefully fashioned and architecturally valuable buildings that are of enormous scale compared to the existing urban fabric can undermine a historic city. They rise above and dwarf the valuable buildings in the protected area, disrupting the urban fabric and ruining the cityscape. Developers step forward as ardent advocates of progress and modernity and often convince the municipal leaders by announcing that their ventures are a movement against outmoded conservatism.

The downtown area of Pest lying within the World Heritage site that encompasses the historic portion of Budapest may be jeopardized. The urban structure of Pest, which can be traced back to Roman times, and its characteristic development in the 19th and 20th centuries are a particularly important part of the Budapest World Heritage site.

Up until now the city authorities have for the most part been able to protect the essential character of the area. A projected real estate development, which had been poorly examined and clearly lacked restrictions for protecting the character of the area, proposed the construction of a skyscraper in downtown Pest at Szervita Square. Later this proposal was rejected due to fierce opposition, but now there are plans for the construction of an otherwise high-quality structure, which is however completely alien to the historic architecture and streetscape of the area.

The Example of the Big City is Contagious

An example of an overbearing new building destroying the harmony of an area is the *new* shopping mall in Kecskemét. The city is one of the most beautiful Art Nouveau towns on the Hungarian Plain. After the demolition of a valuable abandoned mill near the main square, a gigantic building was erected in its place, which ruined the skyline of

The townscape of Kecskemét



The townscape of Kecskemét with the new shopping mall



the city. The mall rises above the church steeples, completely dominating the cityscape. A basic requirement for new buildings is that they comply with the prescribed obligations to be integrated with their surroundings. All development that surpasses the established construction height adversely affects the cityscape, and therefore it should be prohibited.

Small Town Main Squares are at Risk

Many Hungarian towns have preserved their historic centers. In the best cases the local governments also believe that the protection of these centers is important. Ever greater attention is being given to the revival of historic main squares. However, the centers and protected districts of more and more of our historic cities are being threatened due to pretensions of grandeur and over-eager designers. Small Hungarian towns have essentially begun to compete with one another in thoroughly altering their main squares.

Work begun in the interest of revitalizing the towns – in many places with good intentions – has started a process of destroying the historic centers. Instead, the renovation of the historic city centers is increasingly serving to satisfy pretensions of grandeur that alter the character of the given town squares. Wild dreams have turned protected architectural districts into historical fantasylands. There is no doubt that the historic districts must serve the modern town, but this should not result in the loss of their authentic character. Authenticity demands that historic town squares be revitalized through their own historic character and status. It is not the presence of functions adapted to today's life that represents a threat, but instead that in many cases the display of hackneyed elements with no connection to the traditions or history of the town becomes the main objective. The determining approach for the rehabilitations is not the preservation of the historic district. Buildings completely discordant with their surroundings – historized fountains, bandstands and fake ruins, etc. – seem out of place.



The renewed chaotic main square of Vác



The renewed "Romanesque" gate in the authentic Baroque walls

These renovations generally arise from the support of international financial sources. Due to the strict deadlines and lack of resources during the preliminary planning period insufficiently prepared and investigated application materials are produced. When they are judged favorably the submitted plans may not be altered later, and the ensuing results of research cannot modify the plan. Subsequently, there is no opportunity to assert the professional principles of historic preservation or to make alterations on the basis of more thorough research. Therefore, a situation may arise where inaccurately identified medieval ruins are restored into something that was never there, and during the preservation of a Baroque square a huge imitation of a medieval city gate is erected, damaging a historic Baroque building.

Cultural Landscape at Risk: the Tokaj World Heritage Site is Endangered from Three Directions

In Szerencs, at the gateway to the World Heritage site listed as the Tokaj-Hegyalja Cultural Landscape, the construction of an enormous straw-burning power plant is being planned on land next to the main trunk road. This project has received every kind of support, as it will produce bio-energy and create jobs. A huge investment of this size has to be stopped because it is to be built at the gateway to a World Heritage site. Nobody has examined what effect the project would have on the World Heritage site.

The power plant is to be located at the worst place possible. The complex consisting of several massive block buildings is alien to the landscape. Certain portions of the generic planned complex will be 34 meters tall, or nearly 10 stories, a vulgar sight in an area protected as a World Heritage site. Its presence seriously endangers the preservation of the landscape's characteristic values, and the protection of the World Heritage site. The landscaping planned around the buildings as a result of protests is an insufficient solution. Nor has the fact that the planned power plant stands in direct conflict with the city of Szerencs's current regulatory plan, which only permits buildings of nine meters in the area, stopped it from going forward. The overpowering ambition and the funding that has come from far away have even forced the city into making damaging changes to its regulatory plan. The power plant's presence will seriously harm the Tokaj wine region World Heritage site, and it will become a blemish on the landscape.

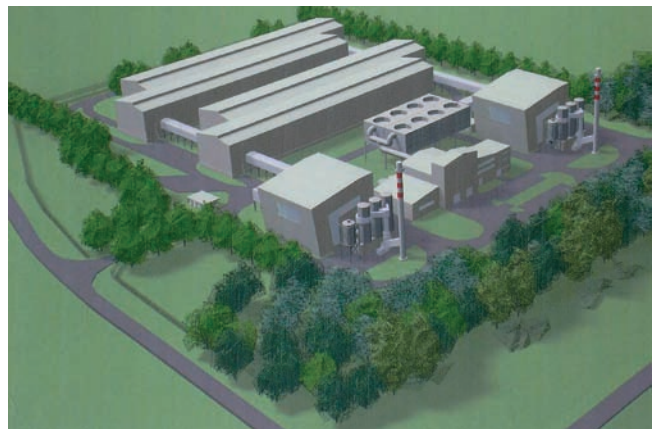
Other dangers also threaten this cultural landscape. A beautiful canyon-like valley is the target of a search for the most suitable site for a seven-kilometer-long reservoir. It is planned to create this massive rearrangement of nature within the buffer zone of the World Heritage site, on the outskirts of Abaújszántó in the valley of the Aranyos Creek. If it is constructed, a significant portion of the World Heritage site will be put in serious danger.

The third source of danger is expected to come from Slovakia. There are plans to erect a new straw-burning power plant right next to the border in Trebisov. Due to the prevailing winds the pollution from the power plant would cover the Tokaj wine region. If the project is completed it will not only endanger the World Heritage site, but also the vineyards that produce the grapes for the world famous Tokaj wine.

Enormous financial opportunities are inherent in energy production. It is not coincidental that the lobbies representing its interests have such great weight. Nor is it accidental that the alleged benefit for energy production is always able to push the efforts to defend the interests of historic preservation, construction regulations and environmental conservation into the background.



The first plan for the power station in the cultural landscape of Tokaj



...and the second one (?!)

Will the Project Being Implemented at Hajógyári Island Become a Model Development?

Most developments that damage cultural heritage may be traced back to an insufficient preparation of the plan. When the first drafts are in tune with the concerns of historic preservation and archaeology, then the new project can enjoy this special bonus without causing any disturbance to the investment program.

The Roman remains on Hajógyári Island in the Óbuda section of Budapest are an important part of the Limes Romanus, which is on Hungary's tentative list for nomination to the UNESCO World Heritage List (as a section of an international proposal). Therefore, the only projects that are acceptable on the island are those of a size and scale that will not endanger the scientific knowledge, preservation or presentation of any of the elements (both known and yet to be discovered) of these world-famous ancient remains. The preliminary development plan did not consider the area's archaeological assets. Because of the protests of the Hungarian National Committee of ICOMOS and the compromise that followed, the developer has accepted the responsibility to present the findings from the excavations at an international conference, and to consent to the positions of the convened experts. The developer has agreed to modify his plans on their basis. Following this an independent committee of experts will be created at the recommendation of ICOMOS. Their task will be to observe and supervise the proper protection of the archaeological remains during the course of the project. We have confidence in the fact that on the basis of the opinions of the committee, which is made up of noted professionals, there will

be the opportunity to present the valuable Roman ruins in a professional manner. If this cooperation proves to be successful, this process could become a model for the implementation of other similar projects in regards to the preservation of cultural heritage.

The Hungarian examples show that sensible urban development and established urban planning can provide one of the most important frameworks for historic preservation. It is no accident that great pressure is being exerted upon the drafter of the plan, since money is on the line. The examples above refer to challenges from recent times.

Due to the initiative of the UNESCO World Heritage Center, precisely on the basis of the lessons learned from these kinds of situations, and in the effort to avoid further similar instances, the "Vienna Memorandum" was adopted in 2005 as an official guideline, which among other things makes clear that:

"...Living historic cities, especially World Heritage cities, require a policy of city planning and management that takes conservation as one key point for conservation. In this process, the historic city's authenticity and integrity, which are determined by various factors, must not be compromised..."

continuing that

"...urban planning, contemporary architecture and preservation of the historic urban landscape should avoid all forms of pseudo-historical design, as they constitute a denial of both the historical and the contemporary alike. One historical view should not supplant others, as history must remain readable, while continuity of culture through quality interventions is the ultimate goal..."

and

"...Decision-making for interventions and contemporary architecture in a historic urban landscape demands careful consideration, a culturally and historic sensitive approach, stakeholder consultations and expert know-how. Such a process allows for adequate and proper action for individual cases, examining the spatial context between old and new, while respecting the authenticity and integrity of historic fabric and building stock..."

We think it is important to bring attention to development plans that are contrary to the goals of historic preservation. That is to say, plans can easily come from frightening notions. If business interests dominate the plan, then it will be built even if it causes irreparable damage.

Gergely Nagy
President
ICOMOS Hungary

Report on the Condition of the Old Jewish Quarter of Pest

Due to repeated transformations, historic alterations and urban developments that have occurred from the 18th to the 21st centuries we have inherited an extraordinary and uniquely valuable urban district where uniform construction from the first half of the 19th century has survived along the interior streets of a well-preserved organic 18th-century network of roads and squares. A neighborhood has survived here to this day defining the culture of the Jewish community that started to settle here in the middle of the 19th century and has remained here for nearly two centuries despite all the historic ordeals. Along with the Castle District and

the Downtown this Old Jewish Quarter of Pest is one of Budapest's oldest and most valuable architectural and historic ensembles.

Its individuality and significance is provided by its irregular, crooked streets that contrast with the neighboring historic districts of the city, by the varied division of plots and their construction, by the consistent architecture of 19th-century buildings recalling the neo-classical period, by the secretive network of passageways that are characteristic of the Jewish merchant's quarter, by the oriental mystique of the three major and two minor synagogues, by the outstanding works of Art Nouveau architecture found here, and by the unique combination of all these elements.

1980-2002

In the 1980s the first block reconstruction area was designated in this district, based on the judgment of its value at the time. The construction of offices that began in the 1980s, and the processes that began transforming the urban fabric in 1990 and have accelerated since 2002 – consisting of a series of irresponsible demolitions, and the replacement of these buildings with cheap, poor-quality new constructions that do not respect the established scale – have seriously disrupted the harmony of this unique architectural and cultural ensemble.

At the end of the 1980s the idea of constructing the proposed "Madách" Avenue as a pedestrian street along the model of Andrassy Avenue was reintroduced. This, however, does not meet the current standards and would endanger the unique character of the district. The urban regulatory plan related to the construction of the pedestrian street was first passed in 1990. According to the plan, the buildings along the pedestrian street – which would cut through the organic network of streets and valuable 19th-century buildings that have survived to this day – would be permitted to be several times larger than the current constructions. (The value of the measure indicating building density for traditional construction in the interior lots is 2-2.5, while in the plan this value would be 5.5-6. This same value in the protected historic district of Paris is 3.5.) The 18th-century streets, seven to nine meters wide and bordered by historic buildings, would have to serve as the new pedestrian street, which would be closed to automobile traffic and have parking garages above and under ground. This would have a disastrous effect on the streets crossing the two oldest roads parallel to the pedestrian street (Dob and Király Streets), if in addition to the 29 building lots already empty the demolition of a further 26 buildings prescribed in the plan were to occur. Apart from intruding on the historic arrangement of streets and lots, including the demolition of more than a thousand apartments, the only church in the capital serving the Romanian Orthodox community (since 1910) and the only ritual baths in the Jewish Quarter would also have been demolished according to the plan.

This plan, which was equally insensitive to cultural, architectural and religious values, was modified in 1999, but did not change in essence.

In 2001 another regulatory plan was prepared for the area around the Dohány Street Synagogue built in 1854 (this is Europe's largest functioning synagogue). This, similar to the 1990/1999 plan, continues to think in terms of demolition instead of rehabilitation aimed at preserving the area's character. The local government and the historic preservation agency have approved this regulatory plan as well.



Demolition of Dob Street

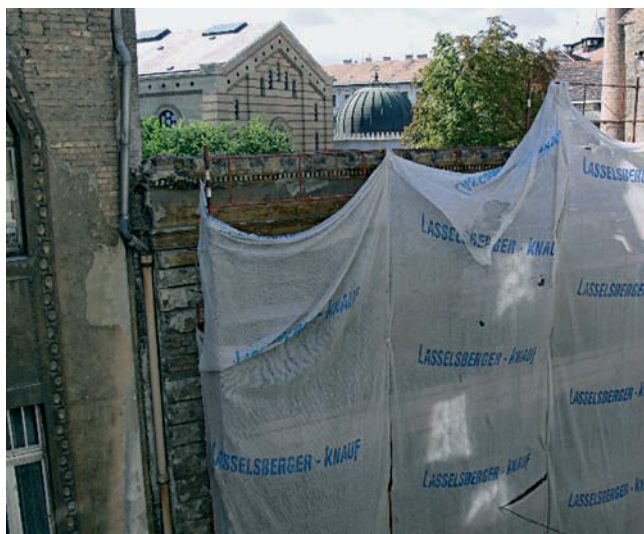
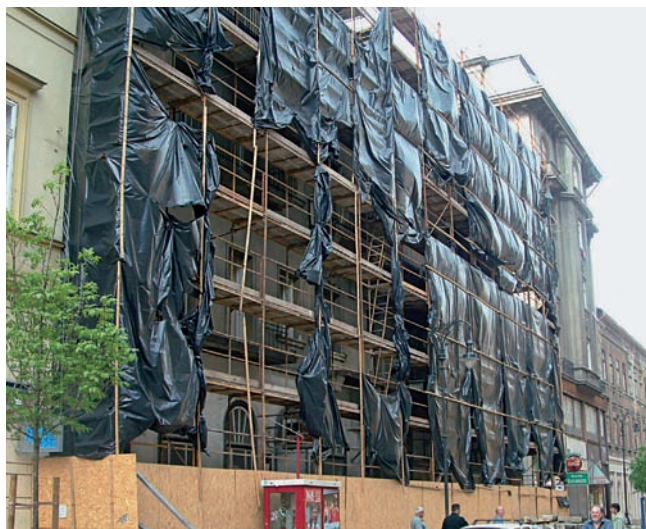


Complete transformation of some streets in the protected area: New buildings in Holló Street, in the center of the protected area



Sight plan of the new authorized zoning plan in the immediate vicinity of the Synagogue in Dohány Street

Neo-classical building waiting to be demolished in Király Street. At this site the local government wants to construct a building with 100 flats.



Demolition of historic buildings in Síp Street, close to the Synagogue in Dohány Street.

Demolition of historic houses in Síp utca, in the background the Synagogue can be seen



2002-2004

In 2002 the quarter, which is part of Budapest's 7th District, became part of the buffer zone for the Budapest World Heritage site when the site was expanded to include Andrassy Avenue. Despite this, the regulatory plans previously prepared and adopted were not suspended, even though they did not consider the area to have a character worthy of preservation, but instead classified it as a site for unrestrained real estate development.

In the time since the Budapest World Heritage site was expanded to include Andrassy Avenue and the site's buffer zone was demarcated (2002), developments in line with the outdated regulatory plans that are still in effect have even accelerated. Between 2002 and 2006 the 7th District municipal government sold 47 properties, along with demolition permits in most cases, to private investors on condition that the residents be removed from the historic buildings. The eviction of residents and the demolition in interior cross streets have begun, and therefore the irreplaceable buildings that preserved the original profile and character of the streets are missing from several of them. These intrusions are affecting or have affected precisely the most valuable aspects of the area, its organic structure and early bourgeois houses. Nor have they spared the characteristic residences from the turn of the 20th century, which contained factories and workshops for providing traditional Jewish services.

2004-2006

In the spring of 2004, after seeing the senseless destruction as well as the shoddiness and unacceptable scale of the new construction erected in place of the demolished buildings, a community movement was founded to save the Old Jewish Quarter of Pest. Due to the initiative of the organization "ÓVÁS!" ("PRESERVATION!"), in April 2004 the Hungarian Office of Cultural Heritage ordered that the "Old Jewish Quarter of Pest" as a section of the buffer zone of the protected Andrassy Avenue World Heritage Site receive temporary protected historic status, and in November 2004 it provided permanent historic district protective status for the area. In April 2005, 51 buildings were registered as historic structures, including buildings that would have been demolished according to the regulatory plans and the decisions of the local government. However, the regulatory plans that plainly endanger the character of the quarter have yet to be repealed to this day, despite their incompatibility with the area's protected status. Local government decisions are made, and demolition and construction permits are issued on the basis of the old plans.

In fact, in 2005 and 2006 another four lots were sacrificed for the site of the aforementioned pedestrian street. Furthermore, the approach and the parameters of the new plan for the only square located in the central part of the quarter, Klauzál Square, are along the same lines as the previous plans. Nevertheless, in 2005 the Management Plan for the World Heritage Site and its buffer zones was completed and accepted by the experts of the Hungarian Office of Cultural Heritage and of the Budapest municipal government. Unfortunately however, the recently re-drafted regulatory plans remain in sharp conflict with the approach and expectations of the Management Plan. To this day the Management Plan has not become a law, executive decree or Budapest city ordinance. Due to this, the expectations established in the Management Plan are ignored by the district government, whose interests lie in the demolition and construction of buildings that are out of scale.

Moreover, even the Hungarian Office of Cultural Heritage cannot enforce the provisions of the Management Plan, because its decisions during the approval of permits must correspond to the legally valid regulatory plans. A management organization has yet to be set up. Only the "ÓVÁS!" organization is recording and making an attempt to reign in the increased pace of large-scale changes.

Unfortunately, despite its status as a protected historic district, in reality the demolition of unprotected buildings within the buffer zone and its surrounding areas continues unabated, and construction permits are issued on the basis of plans that have seemingly – at least in public statements – been denounced by everyone. All of this is occurring in full knowledge of, but in spite of the fact that during the course of the previous decades large European cities have been rehabilitating their Jewish quarters without exception. Furthermore, these other cases occurred despite the lack of a surviving Jewish community still living there.

2006-2007

By 2006 the situation had further worsened. Today, in a portion of the interior blocks made up of Classicist, Historicist and Art Nouveau buildings nearly 40 % of the buildings are missing, or have been replaced by developments similar to housing projects. Certain streets are now unrecognizable. Since 2005 the "ÓVÁS!" organization has asked for a ban on alterations to the district until a

Demolition and construction activity in one of the streets of the protected area (Holló Street)



new regulatory plan and a rehabilitation program that conforms to the Management Plan's preservation requirements are created, but up until now in vain. They also have requested in vain the otherwise expected establishment of a Management Organization, or the legal enforcement of the Management Plan. Up to this point neither has happened.

The drafting of a new plan, through a joint commission between the City of Budapest and the 7th District, which would consider the Old Jewish Quarter of Pest a unified protected district, seemed to have begun at the end of 2006. However, currently the preliminary program for creating the plan has not even been accepted yet. Without the ordering of a ban on alterations and a radical reexamination of inappropriate earlier decisions, the preservation of the area's character is inconceivable. This is because, on the one hand construction and demolition permits that have been issued, but not yet utilized, are not rescinded – citing the rights acquired by the investors – and on the other hand it is due to the unchanged legal conditions in effect until the new plan is put into force (in one or one and a half years) that provide the opportunity for unwanted demolitions and development to occur based on the earlier plans. Here they have placed the rights acquired by the investors above the rights of the community. By the time the new plan is passed, and the rehabilitation or management organization is formed that has

been planned for years by the City of Budapest, the removal of the residents will have taken place. The buildings are being demolished, and construction orientated towards building large-scale apartment houses is continuing. Due to the lack of a rehabilitation plan and related over-development, the green spaces that currently exist – courtyards, gardens, yards and passageways – will be built over and lost, and the narrow streets will be choked with an intolerable amount of traffic.

The Hungarian National Committee of ICOMOS made a statement in 2006 calling attention to the protection of the area's character, and later set forth in a letter directed to the Mayor of Budapest that the introduction of a ban on alterations to the area is necessary until a new regulatory plan is completed and put into effect.

This large historic architectural ensemble with its 200 years of history, where the largest Jewish community in the cities of Central Europe has lived and where despite the horrors of 1944 they have remained in the streets and buildings of what had become a ghetto, will be destroyed in a few years before our eyes – if nothing happens to stop the destruction.

The Board of Directors of the
Hungarian National Committee of ICOMOS

INDIA

The Temple Sites at Telkupi ("Bhairavasthan") Jaina Architectural Remains Submerged by Panchet Dam in Jharkhand and West Bengal

With his report on the consequences of the Panchet Dam, erected half a century ago, Bulu Imam is complementing his report in Heritage at Risk 2004/2005, pp. 94-103 ("Threatened Jaina Heritage Route in Jharkhand and West Bengal"). More than 20 temples from the 8th to 12th centuries (Pala period) were submerged between 1956 and 1962 by the waters of the Damodar river. In the meantime, the remains of these ruined temples are becoming visible again in the silted-up reservoir.

During the mid-1950s the fate of the twenty-odd temples at a place ancestrally known as Bhairavasthan was sealed during the submergence of a large area along the banks of the river Damodar on the border of Jharkhand and Bengal through the construction of the Panchet Dam across the river. The Dam was built by the Damodar Valley Corporation (DVC) which was following the Dam building models of the Tennessee Valley Authority (TVA) dam building project on the Tennessee River in USA with big dams like the Norris Dam on the Clinch river, and the Wilson Dam on the Tennessee river. This project was India's first big industrial project begun and supervised under the constant attention of the Prime Minister after whom the project was called Nehru's Dream.

For the archaeological heritage of Jharkhand it was a catastrophe apart from the human and ecological aspects. Hundreds of villages were submerged in over six large dams and thousands of smaller dams. Like the TVA the DVC ignored the territorial rights of indigenous societies who had lived on the land ancestrally.

Bhairavasthan was some nine kilometres from Telkupi on the south bank of river Damodar. This location falls about thirty kilometres south of the town of Dhanbad. When the local villagers saw the waters of the Damodar river rising in 1957 they immediately informed the Archaeological Survey of India in Calcutta, and asked it to immediately arrange for the translocation of their stone and brick temples dat-

of the temples in original condition in 1957 is inadequate and we have to rely on the photos taken in 1872-73, by Beglar; the photos of Bloch in 1903, and those of Bose in 1929. This is supplemented by the photos of the ASI Eastern Circle taken in 1960. Beglar had documented Temples 2, 3, 4, 5, 6, 7, 8, 12, 15, and 18 in 1872-73. We have to rely on his photos and documentation to get a picture of the Bhairavasthan temples in their pristine condition.

The Director General of the ASI visited the Telkupi site with Dr. Mrs. Debala Mitra and they went to Bhairavasthan and according to Mitra in the Preface to her monograph on Telkupi (1969) they learned locally that most of the temples and the greater part of the village had gone under water and find only the tops of Temples 6, 8, 9, 10, 14, 15 and 16 protruding above the waters of the Damodar, and temples 17 and 18 standing at the edge of the water. The Eastern Circle photos of 1960 show the temples mentioned above standing above the water in fairly reasonable condition on dry land. There was still a chance to remove the temples. In the photograph of 1962 taken by the West Bengal Directorate of Archaeology, the temples are submerged. What happened could only be the result of extreme negligence, and callousness on the part of the development authorities. This should not have occurred again. But in the Chandil Dam on the Suvarnarekha river this is precisely what happened nearly forty years later.

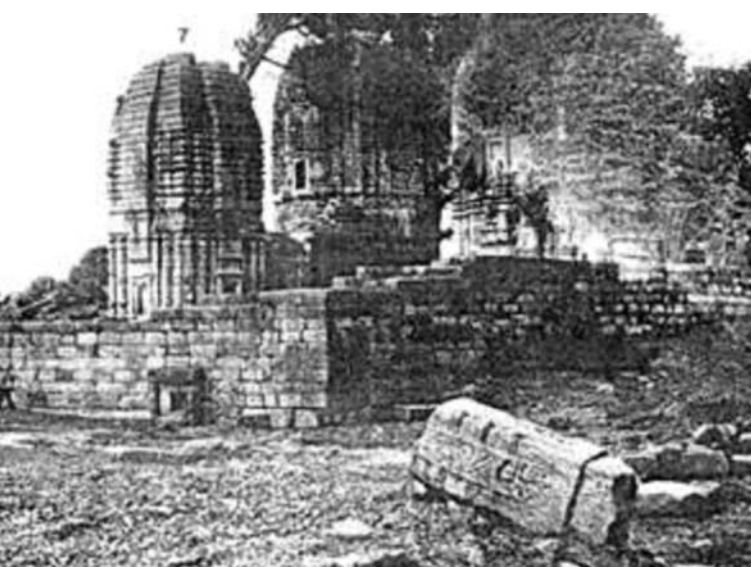
Truly it had earned its name River of Sorrows. The West Bengal Government was thereafter asked to order the dewatering of the area so that the Temples could at least be examined and possible translocation considered. But it was too late and the authorities concerned considered dewatering the area impractical and the most priceless Jain temple architecture of Jharkhand and West Bengal was needlessly destroyed and became "The Ghost Temples of Telkupi". Even now villagers say that at evening they can hear *kir-tans* being sung across the waters and boatmen pray before entering the waters lest they by mistake guide their craft over a temple...

Telkupi in local traditions was the place where the legendary Jain king Vikramaditya used to come from Dulmi, a place a hundred kilometres to the south near the ill-fated Icha and Chandil dams in what is now Seraikela-Kharsawan district, and rub oil on his body then return back to Dulmi where he would bathe in the tank called Chhatara Pokhar. Beglar notes that in the Manjhi Santal songs of Telkupi sexual freedom for girls was recorded during the annual spring fair during March-April (Sarhul), a tradition which Colonel Dalton upholds in his ethnological observations of Bengal.

Telkupi was under the Rajas of Panchet and Kashipur in the area called *Shikarbhum*, or "Land of Shikar (i.e. hunting)" which was the old name of Hazaribagh district until the arrival of the British in the eighteenth century, and when Dhanbad was within the district. Telkupi is about a hundred and thirty kilometres southeast of the Jain temple centre of Parasnath Hill, and thirty kilometres south of Dhanbad town today. Half the waters of the Panchet Dam are in Jharkhand and half in West Bengal. Some images of the temples are in Jharkhand at Katapatthar in Dhanbad district, and some in local temples or private houses on the West Bengal side of the border in Puruliya district.

The earliest reports of the Telkupi Temples is by J. D. Beglar who visited the place on two occasions. His report records three clusters of temples, the largest consisting of thirteen temples on the banks of the river Damodar which was the Bhairavasthan. W. W. Hunter in his work *Statistical Account of Bengal* refers to "eight or nine of these temples at Telkupi on the Damodar". He refers to the image of Bhairava being worshipped. For clarifying the tribal ancestry of the

Temples 3, 4, 6, 7, 8 & 10 at Bhairavasthan (Bloch's photograph, 1903)

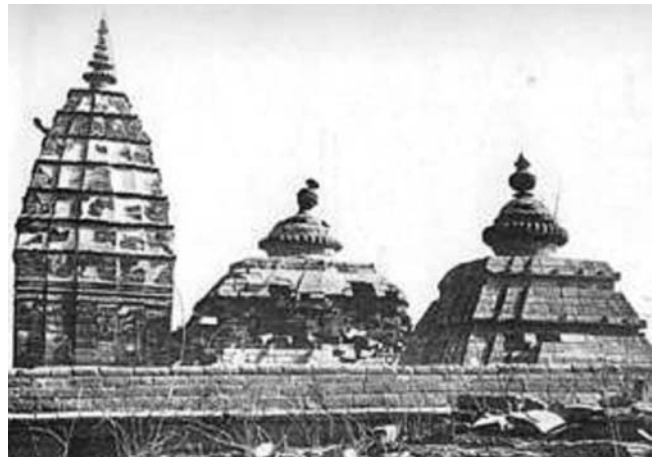


temples Bhairava is an ancient forest form of Shiva accompanied by two dogs and is a particular cult. W. W. Hunter also refers to Bhairavasthan as a Jain site with some Buddhist influence also. This is important in trying to understand the early nature of the site in the Pala period when they were built and when the local religion was Buddhist and Jain. The temples originally may have numbered over forty, but even before the Panchet Dam the banks of the river must have eroded sufficiently to destroy many temples on its banks. In 1903 Bloch of the Bengal Archaeological Survey refers to the temples, and he specifically refers to the worship of Bhairav, Kali (Tara?), Mahadeva (Shiva), Linga (Shiva), and Surya (Alokitesvara?). Bloch also took some photographs at Bhairavasthan (Temples 3, 4, 6, 7, 8, 10, 11, 12, 13). Bose took some photos of temples in 1929 (Temples 8, 10, 14). The last photographs of the ruins were taken in 1960 by the A.S.I. Eastern Circle after the Damodar had done most of its work. Misra's photograph of 1957 was taken just as the waters were rising and getting ready to reach the temples. This photograph shows Temples 8, 6 and 10 in quite good condition, although the trees have been removed from their vicinity. The Eastern Circle photographs of Temples 8, 6, 9 and 10 of 1960 show them damaged but standing above dry land, and apart from No.6 most have a lot left in them, especially Temples 8, 9 and 10. At this time translocation was still possible. This was not even attempted. Two years later, in the photograph of May 1962 taken by the West Bengal Directorate of Archaeology, the Temples are shown more than half submerged with Temples 8, 9 and 10 bravely trying to hold themselves up while Temple 6 is a heap of stone slabs. The beautiful and profusely decorated temple 19 seen in Bose's photograph of 1929 was completely destroyed as shown by the Eastern Circle photo of 1960. At this time Temple 18 was standing on dry land at the edge of the waters and would meet a similar fate.

Today Temple 10 is still submerged up to half its height, but in the earth at the edge of the dam, due to the flooding and silting up of the reservoir. There is no trace of temples 8 and 9. The Panchet Dam has lost much of its water and silted up and the temples have become ruins, once again giving a possibility of archaeological excavation and reconstruction. Was this necessary? Some of the Jaina statuary from Telkupi temples has found its way to the Bhairav mandir, an unroofed enclosure in village Katapathar (Jharkhand) where they are standing in the open. Others are in Shivpur mandir in the village of Shivpur (West Bengal).

According to W. W. Hunter in his *Statistical Account of Bengal* (List of Ancient Monuments of Bengal, 1896) the image from Telkupi of Bhairav from which Bhairavasthan gets its name, was of Lord Mahavira, the 24th Tirthankara of the Jains. In the opinion of F. B. Bradley-Birt the statuary was Jaina (Chota-Nagpore: A Little-Known Province of the Empire, 1903/1910, p. 181). In the INTACH survey of Jaina monuments of South Jharkhand (Purulia, Seraikela, 2006) the Jaina statuary was invariably found in the sites with similar temple architecture as the Bhairavasthan temples of Telkupi. There is therefore every reason to assume Telkupi was a Jaina temple cluster. Further evidence is had by the fact the legendary Jain king Vikramaditya is believed to have come annually to Telkupi on pilgrimage.

Obviously, the Temples were originally sites of Jaina worship before or during the Pala period. Earlier they would have been local aboriginal worship sites and Gram Devtas or village deities under trees (*Chandi*, *Burhi Ma*, mother goddess) have been recorded. That there was a variance of worship is borne out by the fact that many of the temples faced in several directions. Temples 2, 4, 5, 8 faced east; Temple 1 faced south; Temples 3, 12, 13 faced west. Some of the Temples did not have porches, while some like Temples 6, 8, 10 had porches.



Temples 10 with porch and Temple 9. With compound wall in front. (Eastern Circle photograph, 1960)



Temples 8, 9 and 10, partly submerged by Waters of river Damodar impounded by the Panchet dam. (West Bengal Directorate of Archaeology photograph, May, 1962)



Telkupi Temple No.10 (the last of the Telkupi temples standing). Note that the dam has silted up and agriculture is being practiced. There are no signs of temple 8 and 9.

The questions which remain unanswered for us are: Why did the Archaeological Survey of India in Calcutta not act sooner? Why could the West Bengal government not intervene? Why could Prime Minister Nehru not be appealed to? Above all, the finger points at the Damodar Valley Corporation itself and the question begs answer why it was allowed so openly to destroy a National Heritage of the greatest importance. The tragic feature of Telkupi has been that only a few of the images were removed before the waters of the Damodar rose above them, while most of the stone

images which were free were washed away in the lapping of the current of the waters. The people were, it seems, loth to touch them for fear of desecrating the hallowed Temples.

Debala Mitra in 1959-60 recorded seeing submerged images of *Maheshasuramardini*, *Ganesa*, and *Uma Mahesvara* of the Late Pala period under the waters. She also noted a submerged *Vishnu* image in Temple 9, and an *Ambika*, and *Andhakasura-vadha* statue in the porch of Temple 10. TS boatmen refused to let him remove the submerged statues as they considered it would bring bad luck. That modern India should have thus treated one of its most precious archaeological and religious sites is a matter of great shame. Many villages apart from Telkupi were submerged along with their temples and statuary by the Panchet Dam. No lesson was learned from Telkupi and the same exercise was repeated a hundred kilometres to the south less than fifty years later in the southern tracts of Vikramaditya's kingdom from Dulmi and Patkom to Ichha on the Suvarnarekha river in the building of the Chandil Dam, wherein scores of Jain Temples and villages were submerged. A few pieces were salvaged by zealous local conservationists and found place in a small museum at Patkom.

Bulu Imam
Convener
INTACH Hazaribagh Chapter
Sanskriti
Hazaribagh



Remains of Jaina statuary from the Telkupi Temples



Rama Setu and Setusamudram Project, Protest against Channel Passage through Adam's Bridge

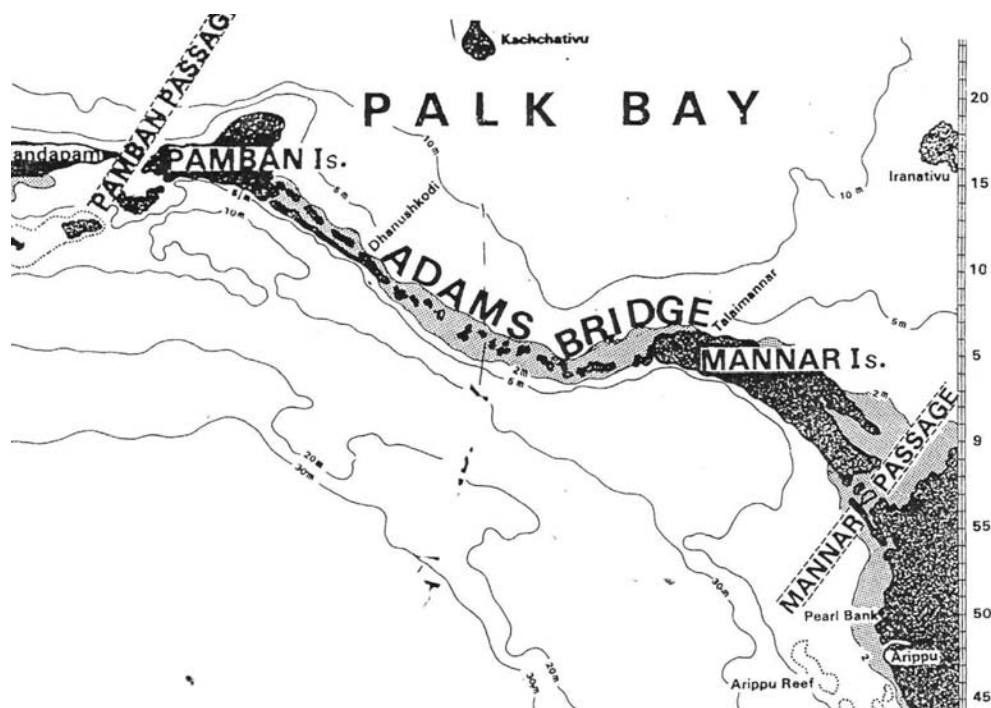
An international seminar organised by the Rameswaram Rama Setu Protection Movement on May 12, 2007 in Chennai, was inaugurated by Dr. S.R. Rao who is the founder of Society of Marine Archaeology in India and member of ICUCH. Scientists and professionals have urged the government to review and realign the Setusamudram Channel Project (SSCP), without impacting Rama Setu. SSCP which creates a channel passage in the Indian Ocean has serious security implications and a disastrous impact on the long-term ecological stability on the coastline of Tamilnadu and Kerala.

Rama Setu is an ancient monument of national and international importance. Presenting overwhelming archaeological, epigraphical and scientific evidences, seminar participants resolved that Rama Setu should be declared and protected as a World Heritage Site. Experts noted that by aligning the channel close to the medial line, an international waters boundary is likely to be created between India and Srilanka in violation of the consistent stand so far taken by the two countries, declaring the Gulf of Mannar and Palk Straits as 'Historic Waters' hence Internal Waters. Fishermen are concerned that such a boundary, under pressure from the US Navy, will prevent the exercise of their historic rights to the aquatic resources in the waters. A demand was made that tsunami protection measures should be made an integral part of the project to prevent the devastation of Tamilnadu and Kerala coastline and desiccation of thorium resources of Manavalakurichi, Aluva and Chavara, in case of another tsunami caused by recurrent earthquakes in the Indian Ocean region. Participants in the seminar noted that Sir AR Mudaliar Committee Report of 1956 clearly stated that any idea of cutting a channel through Rama Setu should be abandoned because of the problems of maintaining a mid-ocean channel and the turbulence of the Indian Ocean waters. This turbulence is now enhanced by the events such as the tsunami which struck the Indian Ocean coastline on December 26, 2004 resulting in the death of over 250,000 people.

Press Release: Save Rama Setu: letter of 30 March 2007 from Dr. S. R. Rao addressed to the Honourable Minister for Shipping and Transport, Govt. of India

Dr. S. R. Rao earnestly requests the Hon'ble Union Minister to save the traditionally-known Rama Setu mentioned in various Puranas as a bridge built by the legendary Hero of Ramayana. He notes that it is of great emotional value as a sacred tirtha.

Dr. Rao requests the Hon'ble Union Minister to see that the cutting of the rock or any kind of damage to the rock is avoided and adds, "It is no less important than Swami Vivekananda Rock where a memorial is built. Alternate routes suggested by experts may kindly be considered in the interest of saving the Underwater Cultural Heritage of India, namely Rama Setu or Adam's Bridge. My study of the submergence of Poompuhar shows that most of the ancient sites on east coast are being swallowed by the sea. The latest victim is the shore temple at Tarangambadi. During my two visits to Sri Lanka, as a member of the ICUCH, I visited the Rama Setu site and had discussions with Commander Devendra Somasiri, another member of ICUCH from Sri Lanka about its importance as a Heritage site."



Map showing Adam's Bridge

The geographical location that connects the Indian main land and Sri Lanka, which were culturally united in the early period, is known as Palk Strait (India) and the Gulf of Mannar (Sri Lanka).

A cursory look at the sketch map illustrates the problems of navigation in the above area. Separating the Gulf of Mannar in the south from the strait in the north is a chain of islands, reefs, shoals and shallows, consisting of the island of Mannar, Ramar Bridge (also known as Adam's Bridge), the island of Pamban and Ramesvaram. Significantly the strait is flanked by two ancient temples, Ramanatha temple and Thiruketesvara temple on the Indian and Sri Lankan sides respectively. On the Indian side it attains importance because of its association with the Ramayana epic.

Successful protest against six-lane road proposed close to Humayun's Tomb in New Delhi

In a letter of 28 July 2006 to Shri Mani Shankar Aiyar, Chairman of the 2010 Commonwealth Games Committee at the Ministry of Youth and Sports, ICOMOS protested against the plans for a highway near Humayun's Tomb (see *Hindustan Times*, 12 July 2006). On 1 September 2006 ICOMOS received a positive answer in so far as alternative plans will be respecting the visual integrity of this famous monument. Here is the wording of the two letters:



New Delhi, Humayun's Tomb

28 July 2006

Dear Sir,

Humayun's Tomb, New Delhi, India

ICOMOS (the International Council on Monuments and Sites) is very concerned to hear that the Delhi municipal authorities are planning to construct a major highway of six lanes which will be passing within 40 metres of the World Heritage site of Humayun's Tomb (inscribed in the World Heritage List in 1993), the first garden-tomb on the Indian subcontinent dating from 1570.

Please be informed that the inscription in the World Heritage List does not only oblige the relevant State authorities to look after the conservation of the monument or site itself, but also to guarantee its visual integrity. No doubt, the latter will be seriously disturbed if the municipal authorities go ahead with their road construction plans.

The outstanding artistic quality of Humayun's Tomb and its spectacular situation in a carefully designed garden should not be sacrificed for short-term considerations, such as an improvement of the traffic route to Nehru Stadium during the 2010 Commonwealth Games.

ICOMOS therefore urges you to reconsider the road construction plans and find alternatives.

In view of the dramatic consequences for the visual integrity of Humayun's Tomb and other protected monuments in its vicinity ICOMOS is also going to inform the UNESCO World Heritage Center of the threat.

Yours sincerely,

Prof. Dr. Michael Petzet
President

1 September 2006

Dear Prof. Dr. Michael Petzet,

I am in receipt of your letter dated 28.7.2006, in connection with the proposal to build an underground road linking N11-24 (Nizamuddin Bridge) to Sabz Burz round about on Mathura Road passing near the World Heritage Site of Humayun's Tomb.

In this connection, I am to inform that you are probably referring to the earlier alignment of the proposed road, which was passing at a distance of 42 metres from the wall of Humayun's Tomb.

Now the alignment is proposed to be altered in the following manner:

- The proposed road has been shifted north of Subj Burj and the alignment will have twin tunnels of 11 m diameter each, 5 m below ground level. The corridor will pass through these tunnels at a depth of 12.1 m below ground surface and each carriage-way will be two-lane (7.5 m) and not three-lane as proposed earlier. Due to shift of alignment the nearest point of alignment will now be 276 m from the wall of Humayun's Tomb, against 42 m of the earlier proposal.
- Since it is a tunnel corridor below ground from Lodhi Road to Railway Track, so the visual integrity of Humayun's Tomb will not be disturbed.
- As the road will be passing through the tunnels at a depth of 12.1 m below ground level, so it will not cause any damage to the garden.

Further, I may add that the purpose of above road is to meet an imperative need to decongest Bhairon Road and Ring Road and to provide for a short route between East Delhi and Central/South Delhi, which will incidentally facilitate a smooth flow of traffic from Games Village to Jawahar Lal Nehru Stadium during the Commonwealth Games 2010.

Yours sincerely,

K. S. Mehra
Principal Secretary
Govt. of National Capital Territory of Delhi

IRAN

In the Islamic Republic of Iran the historic city of Bam was devastated by an earthquake on 26 December 2003 (see *Heritage at Risk 2004/2005*, pp. 105-110, including the text of the “Bam Declaration and Recommendation” of 20 April 2004). The consequences of this earthquake were also discussed in detail at the ICOMOS Germany conference on “Cultural Heritage and Natural Disasters” (Leipzig, 27/28 October 2006, soon to be published in a *Heritage at Risk Special*). In the meantime, Iran was afflicted by another severe earthquake:

Between 30 and 31 March 2006, large earthquakes reaching over 6 on the Richter scale struck the area of Borujerd City, Lorestan Province. In the city and surrounding village areas, there

were approximately 40 cultural heritage properties which suffered damage. A mission report of the UNESCO Tehran Cluster Office made a detailed list of the damages inspected in April 2006. This list of damaged monuments mentions, among other objects, Jame Mosque in Borujerd City, where apparently part of one of the minarets has fallen and there are significant displacements and major cracks in the remains of the broken and still-standing minarets and the main ivan. In addition, it mentions the Shrine of Imamzadeh Khalegh Ibn Ali in Bozazma village. The structure of this shrine located closest to the epicentre of the earthquake suffered dramatic damage and the dome which is of special historic value is threatened by collapse.



Borujerd City, damaged Jame Mosque

IRAQ

Also from the conservation point of view the situation in Iraq remains disastrous (see also H@R 2004/2005) and the alarming loss of cultural heritage continues.

Attack against the Askariya Shrine (Golden Dome) in Samarra

In 2006/2007 several holy shrines were damaged and devastated in the sectarian reprisals that swept the country after an explosion destroyed the Askariya shrine's famous Golden Dome on 22 February 2006. The Askariya shrine is one of the most revered sites of Shiite Islam. It contains the tombs of the tenth and eleventh imams, Ali al Hadi (d. AD 868) and his son Hassan al Askari (d. AD 874). The Askariya shrine has been continually added to since the tenth century, often by Iranian rulers – its great dome was rebuilt in 1623 by the Safavid Shah Abbas and was first covered in golden tiles by the Qajar Shah Nasir al Din in 1868. On 13 June 2007 the Askariya shrine was once again attacked; this time both minarets were blown up.

Samarra, Askariya shrine before the demolition
(BBC News)



The ongoing looting of Iraq's cultural heritage

2,000-year-old Sumerian cities torn apart and plundered by robbers. The very walls of the mighty Ur of the Chaldees cracking under the strain of massive troop movements, the privatisation of looting as landlords buy up the remaining sites of ancient Mesopotamia to strip them of their artefacts and wealth. The near total destruction of Iraq's historic past – the very cradle of human civilisation – has emerged as one of the most shameful symbols of our disastrous occupation.

Evidence amassed by archaeologists shows that even those Iraqis who trained as archaeological workers in Saddam Hussein's regime are now using their knowledge to join the looters in digging through the ancient cities, destroying thousands of priceless jars, bottles and other artefacts in their search for gold and other treasures. In the aftermath of the 1991 Gulf War, armies of looters moved in on the desert cities of southern Iraq and at least 13 Iraqi museums were plundered. Today, almost every archaeological site in southern Iraq is under the control of looters.

In a long and devastating appraisal to be published in December, Lebanese archaeologist Joanne Farchakh says that armies of looters have not spared "one metre of these Sumerian capitals that have been buried under the sand for thousands of years. "They systematically destroyed the remains of this civilisation in their tireless search for sellable artefacts: ancient cities, covering an estimated surface area of 20 square kilometres, which – if properly excavated – could have provided extensive new information concerning the develop-

Askariya shrine, after the destruction of the golden dome on 22 February 2006 (BBC News)



ment of the human race. "Humankind is losing its past for a cuneiform tablet or a sculpture or piece of jewellery that the dealer buys and pays for in cash in a country devastated by war. Humankind is losing its history for the pleasure of private collectors living safely in their luxurious houses and ordering specific objects for their collection.

Ms Farchakh, who helped with the original investigation into stolen treasures from the Baghdad Archaeological Museum in the immediate aftermath of the invasion of Iraq, says Iraq may soon end up with no history. "There are 10,000 archaeological sites in the country. In the Nassariyah area alone, there are about 840 Sumerian sites; they have all been systematically looted. Even when Alexander the Great destroyed a city, he would always build another. But now the robbers are destroying everything because they are going down to bedrock. What's new is that the looters are becoming more and more organised with, apparently, lots of money." Quite apart from this, military operations are damaging these sites forever. There's been a US base in Ur for five years and the walls are cracking because of the weight of military vehicles. It's like putting an archaeological site under a continuous earthquake."

Of all the ancient cities of present-day Iraq, Ur is regarded as the most important in the history of man-kind. Mentioned in the Old Testament – and believed by many to be the home of the Prophet Abraham – it also features in the works of Arab historians and geographers where its name is Qamirnah, The City of the Moon. Founded in about 4,000 BC, its Sumerian people established the principles of irrigation, developed agriculture and metal-working. Fifteen hundred years later – in what has become known as "the age of the deluge" – Ur produced some of the first examples of writing, seal inscriptions and construction. In neighbouring Larsa, baked clay bricks were used as money orders – the world's first cheques – the depth of finger indentations in the clay marking the amount of money to be transferred. The royal tombs of Ur contained jewellery, daggers, gold, azurite cylindrical seals and sometimes the remains of slaves.

US officers have repeatedly said a large American base built at Babylon was to protect the site but Iraqi archaeologist Zainab Bahrani, a professor of art history and archaeology at Columbia University, says this "beggars belief". In an analysis of the city, she says: "The damage done to Babylon is both extensive and irreparable, and even if US forces had wanted to protect it, placing guards round the site would have been far more sensible than bulldozing it and setting up the largest coalition military headquarters in the region." Air strikes in 2003 left historical monuments undamaged, but Professor Bahrani, says: "The occupation has resulted in a tremendous destruction of history well beyond the museums and libraries looted and destroyed at the fall of Baghdad. At least seven historical sites have been used in this way by US and coalition forces since April 2003, one of them being the historical heart of Samarra, where the Askari shrine built by Nasr al Din Shah was bombed in 2006."

The use of heritage sites as military bases is a breach of the Hague Convention and Protocol of 1954 (chapter 1, article 5) which covers periods of occupation; although the US did not ratify the Convention, Italy, Poland, Australia and Holland, all of whom sent forces to Iraq, are contracting parties.

Ms Farchakh notes that as religious parties gain influence in all the Iraqi provinces, archaeological sites are also falling under their control. She tells of Abdulmir Hamdani, the director of antiquities for Di Qar province in the south who desperately – but vainly – tried to prevent the destruction of the buried cities during the occupation. Dr Hamdani himself wrote that he can do little to prevent "the disaster we are all witnessing and observing". In 2006, he says: "We recruited 200

police officers because we were trying to stop the looting by patrolling the sites as often as possible. Our equipment was not enough for this mission because we only had eight cars, some guns and other weapons and a few radio transmitters for the entire province where 800 archaeological sites have been inventoried. Of course, this is not enough but we were trying to establish some order until money restrictions within the government meant that we could no longer pay for the fuel to patrol the sites. So we ended up in our offices trying to fight the looting, but that was also before the religious parties took over southern Iraq."

Last year, Dr Hamdani's antiquities department received notice from the local authorities, approving the creation of mud-brick factories in areas surrounding Sumerian archaeological sites. But it quickly became apparent that the factory owners intended to buy the land from the Iraqi government because it covered several Sumerian capitals and other archaeological sites. The new landlord would "dig" the archaeological site, dissolve the "old mud brick" to form the new one for the market and sell the unearthed finds to antiquity traders. Dr Hamdani bravely refused to sign the dossier. Ms Farchakh says: "His rejection had rapid consequences. The religious parties controlling Nassariyah sent the police to see him with orders to jail him on corruption charges. He was imprisoned for three months, awaiting trial. The State Board of Antiquities and Heritage defended him during his trial, as did his powerful tribe. He was released and regained his position. The mud-brick factories are 'frozen projects', but reports have surfaced of a similar strategy being employed in other cities and in nearby archaeological sites such as the Aqarakouf Ziggurat near Baghdad. For how long can Iraqi archaeologists maintain order? This is a question only Iraqi politicians affiliated to the different religious parties can answer, since they approve these projects."

Police efforts to break the power of the looters, now with a well-organised support structure helped by tribal leaders, have proved lethal. In 2005, the Iraqi customs arrested – with the help of Western troops – several antiquities dealers in the town of Al Fajr, near Nasseriyah. They seized hundreds of artefacts and decided to take them to the museum in Baghdad. It was a fatal mistake. The convoy was stopped a few miles from Baghdad, eight of the customs agents were murdered, and their bodies burnt and left to rot in the desert. The artefacts disappeared. "It was a clear message from the antiquities dealers to the world," Ms Farchakh says.

The legions of antiquities looters work within a smooth mass-smuggling organisation. Trucks, cars, planes and boats take Iraq's historical plunder to Europe, the US, to the United Arab Emirates and to Japan. The archaeologists say an ever-growing number of internet websites offer Mesopotamian artefacts, objects anywhere up to 7,000 years old.

The farmers of southern Iraq are now professional looters, knowing how to outline the walls of buried buildings and able to break directly into rooms and tombs. The archaeologists' report says: "They have been trained in how to rob the world of its past and they have been making significant profit from it. They know the value of each object and it is difficult to see why they would stop looting." After the 1991 Gulf War, archaeologists hired the previous looters as workers and promised them government salaries. This system worked as long as the archaeologists remained on the sites, but it was one of the main reasons for the later destruction; people now knew how to excavate and what they could find. Ms Farchakh adds: "The longer Iraq finds itself in a state of war, the more the cradle of civilisation is threatened. It may not even last for our grandchildren to learn from."

Robert Fisk

"It is the Death of History", in: *The Independent*, 17 September 2007

ISRAEL

Preliminary Damage Assessment Report: Israel Heritage after the 2006 War

The Israel World Heritage Committee at its 3rd extraordinary session (20 August 2006) set up a taskforce to survey the damage ensuing from the current conflict and mainly the damage by Hezbollah rockets in Israel.

In general, the recent war in Lebanon has brought massive damage to the Galilee, the northern part of Israel, and in particular to sites from Mount Carmel and Beit Shean to Zefat and Acre. The northern part of Israel has a high concentration of heritage sites due to its continuous history of thousands of years.

Fortunately, no real damage was caused to the five sites inscribed on the World Heritage List. But several other monuments and sites were damaged by rockets:

- Meron Old Synagogue, located on a junction of Sasa/Zefat: A rocket hit close to the synagogue and set a fire which heated and cracked stones and walls.
- Crusader Fortress Hunin/Margaliyot, located in Margaliyot: A number of rockets fell into the centre of its courtyard and affected the walls and mortars of the stones.
- Nazareth: Rockets hit the city, but there was no damage to religious heritage.
- Old Zefat: The city was badly hit, although the extent of the damage cannot yet be estimated due to the unforeseen impact on the foundations and the city's infrastructure. An ancient 14th-century cemetery and the Abuav synagogue were directly hit. Old buildings in the Maayan area received a direct hit leading to severe cracks.
- Roman Mausoleum in Kefar Giladi: The fire damaged stones and walls.
- Tel Kadesh, located in the Metzudat Koah area: Fire caused by rockets affected all walls.
- Roman temple, located in National Park near Tel Kadesh: This site

was directly hit by several rockets. Walls and stones cracked.

- Haifa: Dozens of rockets hit the city directly. Some historic buildings in the old city were damaged, including the El Itaihad building, the building of the historic communist newspaper, which was completely destroyed.
- There are numerous historic museums scattered in the Galilee. Two of them were indirectly hit: Bat Galim (Haifa) and Kefar Giladi. The damage was to windows and glass cases for presentations

Conclusion

The direct damage to archaeological sites is minimal. However, the indirect hits in the vicinity of these sites, including the effects of impact and fire, have severely damaged many of the sites mentioned above, especially stones and walls. The impact on the stability as well as on the exposure of the sites, including damage manifested in the chemical composition of the stone, has not yet been determined. Due to the dangers and risks some sites are now closed for visitors until the damage has been finally assessed and rectified.

Abbreviated version of the damage assessment report submitted by the Israel National Commission for UNESCO, the Israel World Heritage Committee and ICOMOS Israel.

(On the Middle East conflict and its consequences see also the Lebanon report, p. 107)

Hunin/Margaliyot, Crusader fortress



Old Zefat, cracks on an old building in the Maayan area





Roman temple in the National Park near Tel Kadesh



Haifa, destroyed El Itihad building



Kefar Giladi, remains of the Roman mausoleum affected by fire

ITALY

Environmental and monumental SOS from Florence: Damages due to wrong ideas of modernity and embellishment

Almost 100 years ago Max Dvofák, in his still topical publication *Katechismus der Denkmalpflege* (*Catechism for the Protection of Monuments*), gave a list of the dangers threatening ancient monuments, including the “misunderstood ideas of progress”, the “presumed exigencies of the modern age” and “the eagerness of a wrong embellishment”.

It is unfortunately exactly what is happening in Florence as a consequence of some choices of urban planning taken in the last decades by the administrators, who want to relieve an artistic city from its secular “immobility” and to open it up for the economic and social exigencies of the new age of globalisation.

The consequences of the decision to locate a large exhibition and fair centre in the Renaissance monument of the Fortezza da Basso, already denounced in the 1960s as an unsustainable proposal, are visible today as its infrastructure and parking system endanger the monumental complex of the Fortezza designed by architect Sangallo and of its public gardens designed by Giuseppe Poggi,

while Florence was capital of Italy (1865-1870).

The construction of the fast open-air metro network with trains of 35 metres length in a reserved carriageway is dramatically threatening the public trees and the monumental heritage of the city. The first victim of the construction of line 1 (Firenze–Scandicci) has been the historic park of Cascine, through which the new urban train will pass. The realisation of an underpass in the esplanade at the entry of the park has interrupted the physical unity of the original layout of the park and impoverished the arboreal heritage. Two tram lines will pass the site of the two side alleys and the first part of the main alley of elms. The winter promenade bordering the river Arno will be interrupted by the metro rails and the ramps of a new bridge, irreparably damaging the park layout and the views of the river and the town in the background, which over time have been preserved almost identical to the well-known 17th-century views by Van Wittel. The remaining evidence of the first industrial settlement of Florence (the Pignone) has been completely destroyed by the edge of the same bridge on the left bank of the river. But, the climax is represented by the other two lines of the open-air metro. Trains are expected to pass a few meters near the Baptistery and beneath the complex of San Giovannino by the architect Ammannati, then past the well-known Palace Medici



Crossover of the park of Cascine with indication of the track (in red) of the open-air train, line 1

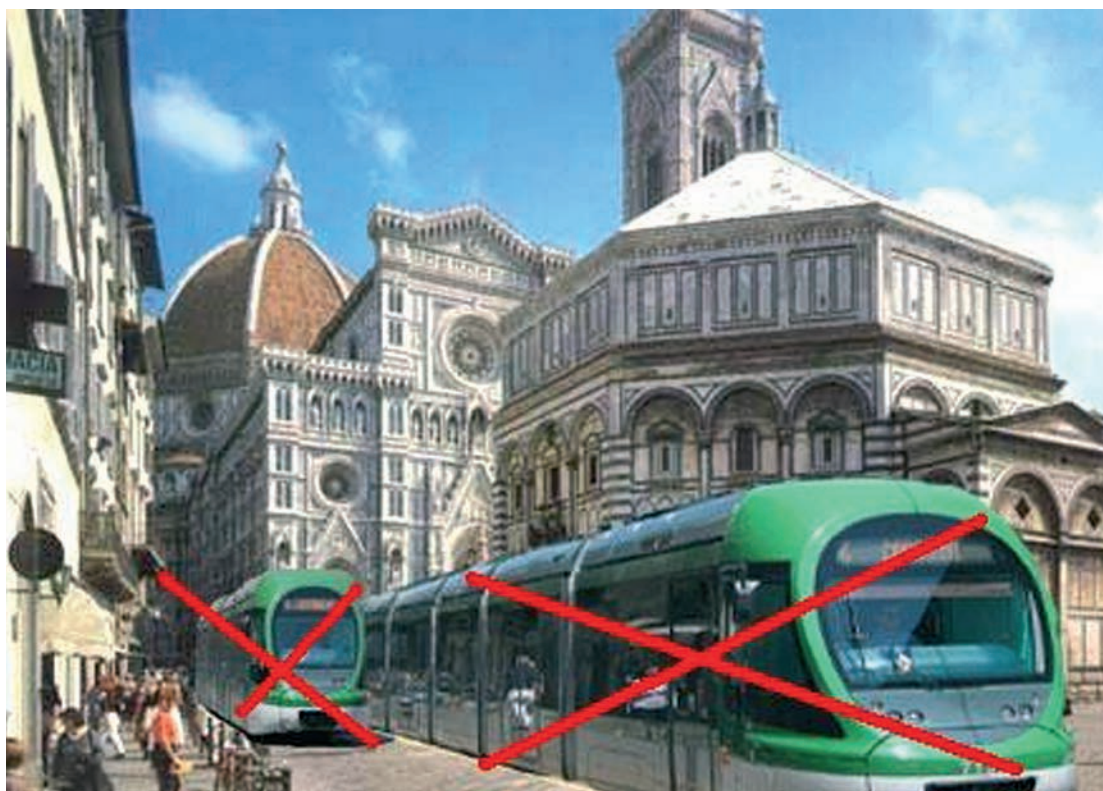
The park of Cascine in a view by G. Van Wittel



The new metro bridge between the river Arno and the Cascine.

The central alley of elms dug up for the instalment of train rails



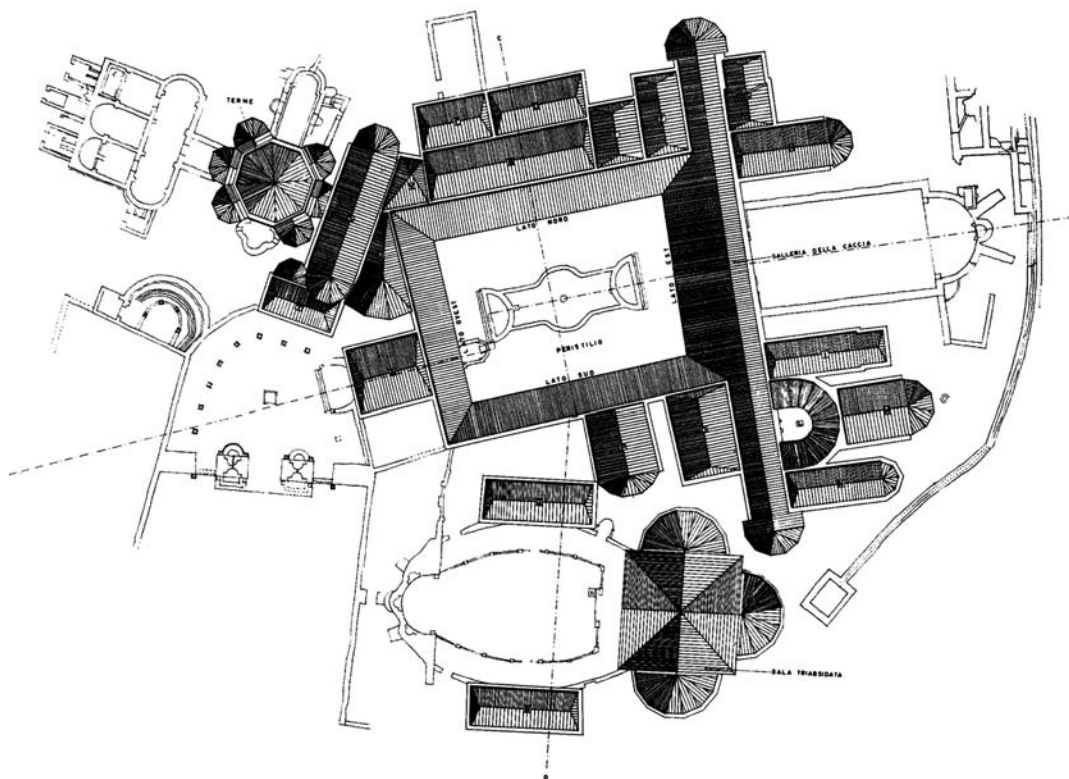


Model of the train passage in
Piazza Duomo

Riccardi, the Biblioteca Marucelliana, crossing piazza San Marco to continue bordering the well-known Florentine botanical gardens (Giardino dei Semplici). Line 3 will destroy all the trees and public green which are part of the layout of the 18th and early 19th centuries and which grow along the new arterial streets connecting the Fortezza da Basso with the new hospital centre of Careggi, at via dello Statuto, piazza Vieusseux, piazza Leopoldo and viale Morgagni: about 400 tall trees will be cut down, of which some (in viale Morgagni) not only have great environmental value but also constitute the historic memory of the dead of the First World War.

The general public considers such projects as devastating, too expensive and unnecessary, particularly as there are possible alternative solutions which are considerably less expensive, have less impact and are more respectful of the delicate urban setting of a city of the arts as important as Florence.

Mario Bencivenni
ICOMOS Italy



Plan of the roofing system
designed by Minissi for Piazza
Armerina (Dossier: Salviamo
Minissi a Piazza Armerina,
ANANKE 44, 2004)

The work of Franco Minissi at the Roman Villa in Piazza Armerina in danger

While the 2006/2007 issue of *Heritage at Risk* is being published, this text will risk sounding like a necrology for one of the first examples of innovative museographical interventions on an archaeological site in Italy, realised as an open-air museum immediately after the Second World War, rather than like an urgent appeal for modern heritage in danger. The warning was already launched in 2004, when – for political reasons – the Communal Administration of the Roman Villa at the World Heritage site of Piazza Armerina (Enna) selected an *aesthete* art critic, Vittorio Sgarbi, as Conservator of the Roman Villa. As is known, Sicily is a region with an autonomous status; cultural properties are not under the responsibility of the Ministry of Cultural Properties and Activities but of the Ministry of Regional Tourism. This Conservator, faced with the serious decay due to a complete lack of maintenance of more than 2000 square metres of the famous polychrome floor mosaics discovered in 1927 by the archaeologist Paolo Orsi, pointed his finger at the roofing system. The latter was designed and realised by architect Franco Minissi in 1957-1963 to protect the mosaics, with the consultation of ICR (Istituto Centrale del Restauro) directed at that time by Cesare Brandi. This intervention, which was immediately met with unanimous consensus from scholars and the public, was then considered an exemplary solution (“esemplare”) for its light structures (“leggerezza delle strutture”), its modernity (design and materials) and its minimum impact (una soluzione “integralmente moderna e integralmente modesta”).

In Italy, the practice of protecting mosaics with temporary shelters or with a layer of sand has been considered a good practice, recommended already in the first Guidelines for conservation of archaeological contexts produced by the young reunited country (i.e. Giuseppe Fiorelli, 1875, art. 95: “nell’autunno di ogni anno dovranno esser coperti di arena i pavimenti di musaico e di marmo”).

In Sicily, architect Franco Minissi (1919-1996) was the author of a comprehensive campaign of protection and valorisation of cultural heritage, with on-site and museum interventions. In the case of Piazza Armerina, the intervention, requested by the *Direzione Generale* of the Ministry (directed by Guglielmo de Angelis d’Ossat), cleverly united the need for protection of the archaeological remains and the educational purpose by reconstructing the lost volumes of the Roman Villa with a light transparent structure – at the time experimental – in iron and perspex. The ancient walls of the perimeter were used to host foot-paths for visitors in order to offer them the best point of view of the precious floor mosaics and to avoid that visitors walk on them. For the innovative museography of the post-Second World War period and the presentation of archaeological contexts *en plein air* this intervention immediately constituted one of the first celebrated examples, its historic value still enduring in manuals to this day (e.g. Voce ‘Conservazione’ in *Manuale del Restauro*, Mancosu, Roma 2000).

After the proposal by the Conservator to dismantle the Minissi structure, a vast campaign was launched and is consultable on the website prepared by Prof. Franco Tomaselli from the University of

Palermo (www.unipa.it/monumento-documento). This strong mobilisation, led by researchers and experts, is attempting to modify the selected project by avoiding the unacceptable environmental impact which could occur with the construction of a giant reticular dome of more than 110 m diameter and 30 m height (“cupolone (big dome)? No thanks!”). However, so far it has not succeeded in changing the negative judgement of the Conservator who to this day insists that the Minissi masterpiece is only horrible scrap-iron (“una orribile ferraglia”) which needs to be removed and replaced by new and more traditional structures. These structures, which would be bounded by masonry walls, covered by an opaque new wooden roof and have a ventilated air-chamber covered in pre-oxidised copper lamellae, are justified as a historic evolution of the Minissi project (“un’evoluzione storica del progetto Minissi”). The new works benefit from funds from the European Union. The company has already been contracted (with a 38% reduction by the company, which is a clear sign of the technical approximation of the project) and the fieldwork has started, notwithstanding that the site of Piazza Armerina is inscribed on the World Heritage List as a whole (the appeal: “Salviamo la Villa del Casale dalle cupole”, officially addressed on 6 December 2006 to UNESCO, has received no reply yet). This is therefore an urgent and last collective call to prevent the loss of a significant work of art consisting of its precious floor mosaics and the Minissi masterpiece.

As was claimed many times in vain by Franco Minissi during his lifetime and never envisaged by the site administration, a proper and systematic maintenance of this masterpiece would be the desirable remedy, which at the same time could benefit from today’s technologies for ventilation and micro-climate monitoring. This is an appeal for a wise management of the public budget (30 million euros for the new structure have been allocated) and for the implementation of in-situ conservation works of both the floor mosaics and the Minissi construction as a whole system. This is also an appeal against a parody of a modern structure already rich in historic value which constitutes a highly recognised highlight of Italian innovative museography of the post-Second World War period celebrating its fiftieth anniversary in 2007.

References

For a detailed documentation of this case, see in particular the following reviews:

- ‘L’Architettura, cronache e storia’ (588, October 2004: “Da Agrigento a Piazza Armerina: Franco Minissi o della Modernità a rischio”)
- ‘ANANKE 44 (December 2004: Dossier con inchiesta fotografica “Salviamo Minissi a Piazza Armerina”)
- Architettura informazione della facoltà di Architettura di Napoli (24, May-June 2006: “Piazza Armerina al Salone del restauro di Ferrara”)
- L’Ingegnere, 11, January-February 2007: “Protagonisti della nuova museografia: Franco Minissi a Piazza Armerina”)

Marco Dezzi Bardeschi
ICOMOS Italy



View of the site



View of the site



Rendering of the foreseen project which will replace the Minissi masterpiece (www.unipa.it/monumen-to-documento)

JAPAN

Appeal against the destruction of the fishing port Tomo-no-Ura (Fukuyama City, Hiroshima Prefecture)

The fishing port of Tomo-no-Ura is threatened by the project of a new road bridge which would cut right across the ancient harbour. With the following letter of 30 March 2006 the President of ICOMOS called upon the responsible State authorities and the Mayor of Fukuyama City, Mr Akira Hada, to prevent the destruction of this outstanding ensemble and to rethink the entire project:

As President of the International Council on Monuments and Sites (ICOMOS) I am asking for your kind attention to the preservation of a historic harbour, Tomo-no-Ura, Fukuyama-city, Hiroshima, Japan.

ICOMOS had already expressed its organisational concern with regard to the outstanding historic and cultural value of Tomo-no-Ura as a result of ICOMOS's international conference organised by the Scientific Committee for Vernacular Architecture (CIAV) and held in Matsuyama-city, Ehime in October 2004. Furthermore, the resolution made at the ICOMOS General Assembly in October 2005 in Xi'an again raised public awareness to the state of its cultural value, which is under threat of the proposed development plan.

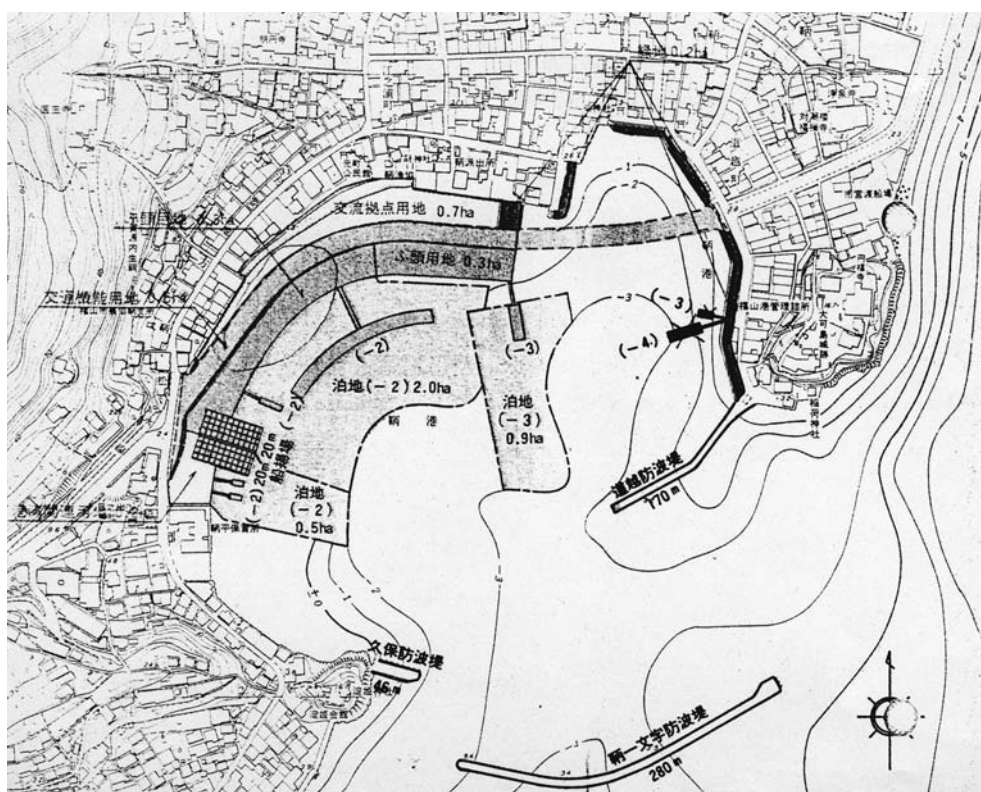
Understanding the above mentioned decisions, three ICOMOS experts from Germany, Australia and Korea paid a visit to Tomo-no-Ura on 27 November 2005. The delegation unanimously reconfirmed the unequivocal value of this historic harbour. On the following day the delegation made a presentation to the mayor of Fukuyama-city and the governor of Hiroshima prefecture, asking for the careful preservation of the harbour/city so that it can remain open to the historic sea route. The mayor of Fukuyama-city, even though being very

appreciative of the high evaluation by ICOMOS, ascertained that the decision to go ahead with the existing road-building plan, including bridging the bay, had already been made without any changes. The delegation was informed at the same time that the mayor had already turned down the petition asking for the consideration of a plan that can coexist with historic preservation and the upgrading of road traffic, including an alternative tunnel route plan near the mountain submitted by the local preservation group.

The professionals for the management of cultural monuments and sites recognise the significance of the Tomo-no-Ura layout in the way it has accumulated historical layers as part of the Seto inland sea route from ancient to modern times. With the surrounding cultural landscape preserved almost unchanged the site whose beauty was already praised by the Korean ambassador in the 18th century, this site is exceptional even from a world-wide perspective. The place shows rare and important historic evidence as part of East Asian history. Thus, this entire area should be viewed and protected in a larger context rather than just as a local historic district.

As described in the UNESCO World Heritage Convention, we understand that the sovereignty of the state party where a historic site is situated must fully be respected. However, the same Convention also states the importance of the protective duty of the international community as a whole to cooperate. I would like to take this opportunity to urge your thoughtful and prompt consideration of this matter. ICOMOS International, together with Japan ICOMOS, will be available for you anytime to provide earnest professional assistance for the preservation of Tomo-no-Ura.

Yours sincerely,
Prof. Dr. Michael Petzet
President of ICOMOS



Map showing the planned road bridge in Tomo-no-Ura



Protest against a high-rise building near Genbaku Dome in Hiroshima

The following letter of 16 May 2006 was sent by ICOMOS Japan to Mr Tadatoshi Akiba, Mayor of Hiroshima, to protest against the construction of a high-rise building ("First Residence Kamiyacho") close to Genbaku Dome. In that context ICOMOS Japan is also referring to the case of Cologne Cathedral (see H@R 2004/2005, p. 73f.):

On 26th March 2006, the Committee received a request for advice from the Association for the Protection of the Landscape of the World Heritage Genbaku Dome and the UNESCO Hiroshima Association, about the construction of a high-rise building within the buffer zone about 100 metres south of the Genbaku Dome. Taking account of this request, delegates of the Japan ICOMOS National Committee made a visit of the site on 9th April and held a meeting on 12th April regarding "the Landscape of the World Heritage Genbaku Dome". The Committee thus would like to report about opinions then expressed as follows.



Views of Tomo-no-Ura (Photos: Christoph Machat)

Evaluation of the Genbaku Dome as World Heritage

On 6th August 1945, the atomic bomb was dropped on Hiroshima. Located very close to the bomb's hypocenter, the former Hiroshima Prefectural Industrial Exhibition Hall (Genbaku Dome) was hit directly and by this became the only built structure in the world to give direct evidence of the disaster which happened then. To avoid such an atomic tragedy to happen ever again and for Hiroshima city to keep telling this story for ever, it was decided on 20th June 1946 that this northern part of former Nakashima area should be conserved as a Peace Memorial Park: this Park was thus completed on 1st April 1954. In 1996, the Genbaku Dome was inscribed on the World Heritage List on the basis of cultural criterion (vi), as "the only structure left standing in the area where the first atomic bomb exploded (... It) has been preserved in the same state as immediately after the bombing. Not only is it a stark and powerful symbol of the most destructive force ever created by humankind; it also expresses the hope for world peace and the ultimate elimination of all nuclear weapons."

Prayers of the world and the Genbaku Dome

The Peace Memorial Park is the very place where people wishing for peace gather from all around the world every year on 6th August. At 8:15 a.m. a silent prayer is offered at the Memorial Monument for Hiroshima City of Peace (Cenotaph for the A-bomb Victims) as a requiem mourning the A-bomb victims and asking for peace by praying towards Genbaku Dome, symbol of the wish for peace. This place, the Genbaku Dome, is thus the place where people from the whole world come to pray for peace. Any high-rise building standing in the line of view of this place of prayer should be visually lower than the Genbaku Dome; the current situation cannot be considered suitable for a place of mourning and peace.

The World Heritage Convention states that "Each state party (...) will do all it can (...) to the utmost of its own resources". Moreover, the General Assembly of ICOMOS held in Xian in 2005 discussed the importance of settings (settings for World Heritage): protecting cultural heritage and together with the "landscape" that contains it as a whole is thus the current trend





Hiroshima, view of the Genbaku Dome and the new apartment building

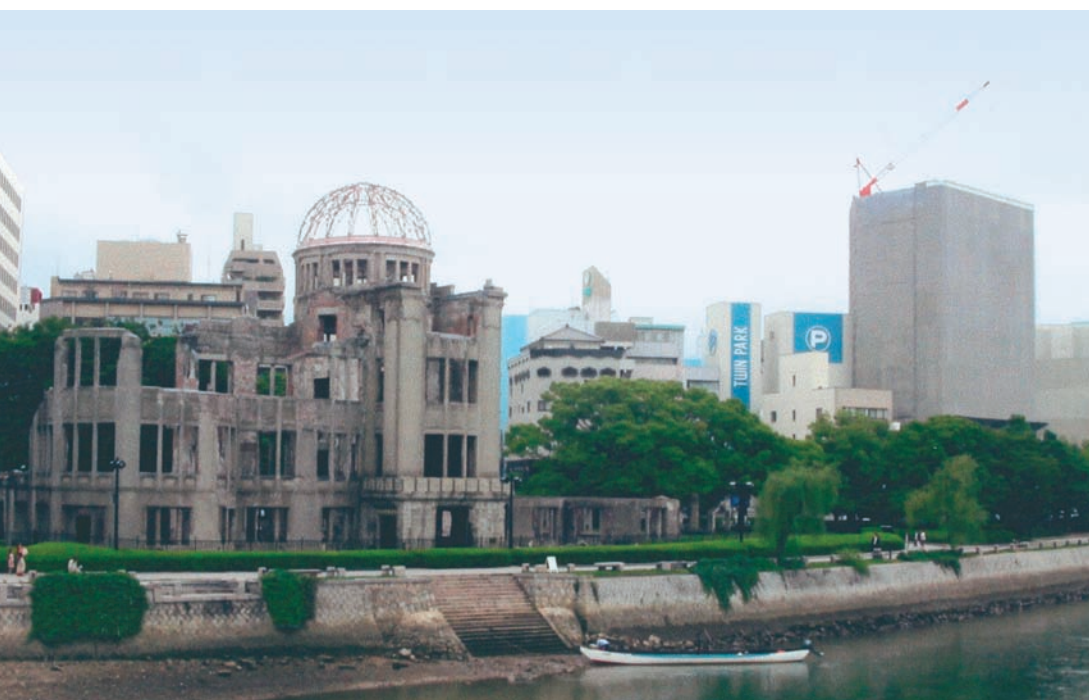
throughout the world. Any responsible institution is therefore requested to take measures that enhance the values of cultural heritage, and if the construction of an unsuitable building is planned, even though it may not be unlawful, it is of great importance that efforts are made to avoid such a construction. The recent example of the Cathedral of Cologne (inscribed on the World Heritage List in 1996) is to be mentioned, as having been inscribed on the List of World Heritage in Danger at the World Heritage Assembly of 2004, for the reason that "the construction of a group of high-rise buildings nearby the Cathedral as a part of town development plans damages the unity of space as World Heritage". It is our wish that through your good direction to the

entrepreneurs, the Genbaku Dome does not fall into a similar situation as the Cathedral.

With the above, the ICOMOS Japan National Committee wishes to express its concern regarding the construction of the "First Residence Kamiyacho" building.

Masaru Maeno
President of Japan ICOMOS National Committee

(Both sites are also discussed in the ICLAFI report, pp. 183-185)



View of the Genbaku Dome from the canal side

KENYA

Kenya is rich in its antiquities, monuments and cultural and natural sites which are spread all over the country. The National Museums of Kenya is the custodian of the country's cultural heritage, its principal mission being to collect, document, preserve and enhance knowledge, appreciation, management and the use of these resources for the benefit of Kenya and the world. Through the National Museums of Kenya many of these sites are protected by law by having them gazetted under the *Antiquities and Monuments Act* Cap. 215. One of the sites under such protection is the Mtwapa Heritage site.

Case Study One – Mtwapa Heritage Site

Mtwapa Heritage Site (MHS) is an archaeological site that was a town during the 14th century AD as were other East African sites on the coast. The site is situated on a piece of land that is owned both privately and publicly (National Museums of Kenya). Mtwapa is located on the north-east of the Kenyan coast 15 km north of Mombasa, one of Kenya's major cities.

The history of Mtwapa as a settlement dates back to the 12th century AD. Archaeological evidence from the site indicates that the site developed prior to contact with the Middle and Far East. This must have been facilitated by the location of the site on the mainland on a relatively navigable creek, a situation which encouraged direct communication with the hinterland on the one hand and contact between coastal societies themselves on the other. Archaeological evidence gathered on Mtwapa indicates that the site was important both for its position facing the sea and as an exit point to the Middle East.

The structures at Mtwapa can be described as falling into the general coastal Swahili architecture – an original, creative synthesis of opportunities of the African climate and the resources and methods developed in the Arabian homelands. Remains at the site consist of the ruins of a town wall which once surrounded the site. The wall may be seen today as a mound of earth extending across roads and through the bush (cross-country). The architectural remains consist of 64 houses, one mosque and a tomb. There are five categories of houses: the single unit, double unit, triple unit and compound house complexes. According to oral tradition the site had three mosques being the Sheik Muhdar, Sheik Zamani, and Sheik Salim (still existing), the presence of which is corroborated by archaeological evidence.

The surviving ruins are built of coral rag and blocks dressed in lime mortar and lime plaster. Coral was mined locally and was used with mud mortar for house construction. The mangrove forests provided timber for building. Whilst there are no surviving structures outside the town wall, evidence of mounds (one of which was identified as a mosque) clearly indicate that some people must have lived outside it. This is further confirmed by the presence of pieces of pottery also found scattered outside the stone wall as far as the beach. This is where large quantities of local pottery, cowrie shells, imported ceramics and human skeletal remains can be seen on an eroded section of modern steps.

It is estimated that two thirds of the site lies outside the town wall. Other structures still surviving include several wells, pit latrines, a tomb, mosque cistern and lower portions of the mosque mihrab.

Mtwapa with all its complex structures and archaeological remains is also renowned for its forest, wildlife sanctuary, beach and its use for religious purposes and remains one of the most significant sites on the Kenyan coast. It is also protected by law as it is gazetted under the *Antiquities and Monuments Act* Cap 215. This act protects those sites that are considered of palaeontological, archaeological and historical interest. Its importance rests on a combination of these factors.

Despite seven centuries of natural degradation, weathering and occasional deliberate destruction of the remains, the structures are still relatively well preserved and continue to provide both aesthetic and romantic values. The location of the site and its outstanding architecture gives the place technical engineering and survey mastery value rendering it an invaluable educational resource. Also, its setting in a natural forest gives it important ecological, recreational and use values. On the eastern front, fishermen continue to use the site as a thoroughfare to the sea which is an important economic resource. The dual ownership of the land and ruins respectively makes the site a test ground for participatory management.

Threats to Mtwapa Heritage Site

The threats to the Mtwapa Heritage Site are natural and man-made. The natural risk factors include rain, erosion, vegetation, micro-organisms and natural aging of the ruins. The man-made risk factors include pollution, population and or development pressure, vandalism and looting, lack of financial resources leading to inadequate maintenance and neglect.

Currently the entire site is an open area as it does not have a protective perimeter fence around the site, making it difficult to control entry and movement within the site. The people living in the neighbourhood are themselves a threat as they vandalise the ruins, collect easily available coral rubble and also destroy the local vegetation for domestic use. Infrastructure such as high-tension electrical power lines diagonally traverse the site. This situation predisposes the monument to imminent future development that may take the form of roads, housing construction etc.

Mtwapa Heritage site, part of the ruins (Photo: National Museums of Kenya)



Emerging solutions to threats

Several issues need to be addressed with regard to a thorough preservation and protection of the Mtwapa Heritage Site. The main concern is the development of a thorough and comprehensive management plan that is proposed to adopt a multidisciplinary approach and involve all the relevant stakeholders. A thorough implementation of this management plan is necessary to realise this positive move towards this site's conservation.

It is then planned to educate the local inhabitants regarding this heritage site being an essential component of their heritage and that of the nation and the world at large. However, the National Museums of Kenya has found it increasingly difficult to implement most of its preservation and conservation programs. This is due to a minimal budgetary allocation from the main government.

However, the intervention of the international community and the inclusion of the site as Heritage at Risk will help in the continued maintenance required for the conservation of the site. The government of Kenya will be encouraged to enforce laws and carry out the implementation of policies that are conservation driven.



Case Study Two – Qorahey Wells

These wells are located in Wajir District in the North Eastern part of Kenya. The word *qorahey* means a place with a lot of sand. The area is generally quite dry. The wells cover a vast area of about one square kilometre which is marked by concrete pillars every two hundred metres. There are eight wells belonging to different clans within the pastoral community. They are round, of different sizes and cemented. They were cemented in the 1940s. These watering wells which have been in existence for the last one hundred years are the lifeline for the livestock which is the backbone for the livelihood of the community. The water level in this area is only about 10 m below ground level.

Threats to Qorahey Wells

The wells are not protected by law. The people using the wells are also a threat to the wells as they pollute them by littering. They are also threatened by encroachment, both developmental and urbanisation. Vegetation growing near the wells is also a threat.

Emerging solutions to the threats

The wells need to be protected by law by having them gazetted under the *Antiquities and Monuments Act* Cap 215. There is also need to educate the local inhabitants of the importance of protecting the wells as an essential component of their heritage.

Report compiled by staff at the National Museums of
Kenya

One of the Qorahey wells (Photo: National Museums of Kenya)

LEBANON

Cultural Heritage Threatened by the War in Lebanon in 2006

During the war in July and August 2006 devastating damages were caused above all to villages in the south of Lebanon. According to estimates made by the UN, at the end of the fights in mid-August 2006 c. 37.5 million square metres of land were contaminated by Israeli cluster bombs. With a statement of 21 July 2006 on the threatened cultural property in the Middle East conflict ICBS, the International Committee of the Blue Shield, which also includes ICOMOS and ICOM, called upon Israel, Lebanon and all parties concerned to respect the provisions of the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict (1954). About damages by rockets that hit sites in Israel see the report on pages 96/97.

The following account which sums up the war damages in Lebanon was published by our partner organisation ICOM in *ICOM News* no. 3 (2006):

In July and August 2006, the war in Lebanon caused tragic human losses, as well as massive damage to its infrastructure, environment, and heritage. While acknowledging that human casualties are more important than heritage, we also appreciate that cultural patrimony is in danger not only in Lebanon, but for the rest of the world. It is our legacy and duty to protect it as the memory of humankind. While there are conventions such as that of Geneva for the protection of human rights, we are also fortunate to have the Hague Convention to help protect cultural property in the event of the armed conflicts.

In Lebanon, villages with traditional homes have been swept away. These are not only part of a tangible heritage, but also an intangible one of artisans passing down traditions of artefact production from one generation to the next. Such knowledge, once lost, is lost forever.

Moreover, Byblos, Baalbek, and Tyre, all three UNESCO World Heritage sites, have been affected by the war. The walls of Byblos'

ancient Phoenician harbour are covered by an oil slick; the Roman Temples of Bacchus and Jupiter in Baalbek have enlarged fissures due to the vibrations caused by bombings. Damage also occurred to the old souk of Baalbek and wrecked ten of its traditional shops. In Tyre some of the painted frescoes found in its Roman tomb came partly unstuck and required urgent restoration. In addition, the Museum of Al-Khiyam in Southern Lebanon was completely destroyed in the first days of the conflict.

Mr Frédéric Husseini, the Director General of Antiquities and President of ICOM-Lebanon, stated during the conflict that "preventive measures have been taken to put the museum collections in safe places and to remain in contact with the guardians of the archaeological sites." UNESCO's Director General issued a warning to Israel and Lebanon to respect the Hague Convention, which both states have ratified.

Heritage in all its forms – natural, cultural, and archaeological – must be saved, cherished, and preserved if the Lebanese, as those elsewhere in the world, wish to preserve the cultural memory forming part of their identity. Once heritage is destroyed, the damage is irreversible. In September 2006, a UNESCO mission headed by Mounir Bouchenaki, new Director of ICCROM, published its report stating that the World Heritage sites were largely intact and that "the most serious damage resulting from the conflict concerns the World Heritage site of Byblos, which was affected by the oil spill from the fuel tanks of the Jiyeh power plant, an ecological problem for a large area of the eastern Mediterranean (...)" The Directorate General of Antiquities faces a great deal of urgent consolidation and restoration work as a result of these tragic events and the museum community is encouraged to follow through with international assistance efforts.

Dr. Lina G. Tahan

ICOM-UK and ICOM Cultural Diversity Taskforce



Baalbek, Roman temple of Bacchus and Jupiter (Photo: Pete Crow)

LITHUANIA

Lithuanian Manor Heritage and Problems of its Protection

A manor (estate) is a tangible expression of land ownership and management arrangements the origin of which dates from before the establishment and prosperity of the Lithuanian State. The historic manor with its multiple functions is the main and most stable land-based institution characteristic of Lithuanian countryside. Formerly, manors were the property of the State (the King, Grand Duke of Lithuania or State institutions), church, noblemen: in the recent ages, they turn to the property of owners with very different background.

Eventually, the size of the Lithuanian manor and its general planned spatial structure as well as the pattern of land-tenure and land-ownership changed. Over various periods of development, manors could include a farmstead (or a few farmsteads), manor land, so-called "palivarkai", villages, boroughs, and could even include towns or parts of towns, rivers, lakes and forests, meadows, industrial complexes, roadhouses, networks of roads and byways, hydraulic engineering facilities and other functional elements. Manors differed from one another both by their infrastructure and cultural environment as well as by economic capacity and social structure.

The manor as a major economic unit and tool of State management was validated by all three Statutes of the Grand Duchy of Lithuania (1529, 1566, 1588), i.e. in a codified legal form. Besides, for many ages, the place of the manor in the Duchy of Lithuania and Grand Duchy of Lithuania was defined by customary law that used to be even more reliable and morally stronger than the written law.

The system of manors can be connected directly with the development of Lithuanian statehood and agriculture as well as with more general European traditions. For a range of ages, it ensured the spread of European household culture across a major part of the Lithuanian territory.

Development of the historic network of Lithuanian manors resulted in a cultural landscape tradition and population structure of the country in the form of the network of Lithuanian countryside settlements, boroughs and towns. Furthermore, the network of manors was able to ensure even spread of material and spiritual culture in the major part of the Lithuanian territory for many years.

In the Soviet period, manors were confiscated and nationalised, and the rural settlements and land-tenure patterns were gradually and methodically destroyed. Manor houses and other buildings were also devastated, mishandled or damaged due to incompatible uses. However, a range of ruined manors, "palivarkai", settlements and boroughs typical of "valakinis" countryside² are still extant. Many manors were adapted for use as offices of State farms (sovkhozes) and collective farms (kolkhozes), household, training and cultural centres as well as outpatient departments. Workers of collective and State farms were also accommodated in so-called "kumetynai"³, and in other buildings associated with the manor.

Lithuanian manor heritage is an essential, particularly significant part of the cultural heritage typical of the Lithuanian countryside, however, no real statistics on the whole manor heritage is yet available. Some 10000 manors, "palivarkai" and manor places are known, however the official statistics on manor heritage contains no such figure. Regarding physical remains of fully or partially intact former manor settlements or the old agrarian systems, neither

heritage protection records nor overall official statistics are kept. According to population census data for Lithuania (without the Klaipėda and Vilnius regions) for the year 1923 there existed 3508 manors and "palivarkai". According to the official Soviet scientific publications of 1964, Lithuania contained over 4000 former manors (approximately 500 large, 1500 medium-sized and 2000 smaller). The Lists of Historic and Cultural Monuments compiled over the Soviet period included only 125 manors, fragments and elements (individual structures) thereof. At the beginning of 1995, the State Register of Cultural Heritage of the Republic of Lithuania listed 823 manors and "palivarkai". However, over the last decade, this figure was reduced considerably: over 230 manors were removed from the State Register of Cultural Heritage and this trend continues. Statistics on the sites of manors and "palivarkai", on former manor settlements, towns, boroughs and other elements are not kept. Records on the remaining manors, "palivarkai" and fragments thereof are not kept either. Monitoring of the manor heritage is also unavailable. Some 1000 places incorporate the settings of former manor houses and some 800 green spaces trace their origin to the manor parks.

Protection of manor heritage needs to be considered as a part of the landscape design process and this presents particular difficulties related to its integration into the State Strategic Planning System. As early as 2002, the State Commission of Monument Preservation developed a concept for dealing with preservation of the manor heritage of the Republic of Lithuania and integration of this heritage into public life. The Commission introduced principles and guidelines for the integration of manor heritage into the legal and State strategic planning system of the Republic of Lithuania. The Manor Heritage Preservation Programme was formulated and approved by the Government of the Republic of Lithuania in 2003.

In general the state of conservation of Lithuanian manors is critical, especially the state of objects without an owner. Legislation requires municipalities to take care of such heritage items but the legislation is not enforced. Other, privately owned, manors (or parts of manors) are in poor condition because their owners are incapable of maintaining or/and managing them appropriately. Legislation is in place to compulsorily acquire poorly maintained cultural heritage properties; however, partly due to lack of funds, the legislation is not used. Under these circumstances, the manor heritage as manor farmsteads and their remains have been decaying rapidly. In the protected territories, the state of manors and "palivarkai", former manor settlements and their landscape setting is also poor in many cases.

The best conserved manors or associated buildings are those managed by Museums (national and municipal). For the time being, some manors or associated buildings are already adapted or being adapted for new purposes. In a number of cases museums are being created to raise awareness of manor culture. Elsewhere, their original purpose is being restored. Some former manors have already started farming or horse breeding; in other cases this involves the restoration of mills, sawmills, dairies and greenhouses as well as plant nurseries. However, the general physical state of manor heritage is poor. Especially rapid decay threatens to destroy the unique wooden heritage of Lithuanian manors, and issues relating to the management and protection of historic plantings remain problematic.

There is still a shortage of principles covering built, movable social and spiritual heritage of the manor culture. In terms of protection, the manor heritage is still being treated as limited to farmstead or "palivarkas". And even protection of the integrity of this part of manor heritage is not sufficiently protected by national legislation, such as laws for the Protection of Immovable Cultural Values, for the Protected Territories, for Territorial Planning, for the Construction and Land Reforms, for the Real Estate Register and Real Estate Cadastre, etc.

Sustainable land management and administration has not yet been established on a strategic level and implementation of the land reform is inconsistent, failing to comply with the main landscaping regulations. The actual area of the manor and integrity thereof are neither protected nor validated by laws. In the planning and approval process, implementation of measures to protect the cultural heritage is not ensured. Many manors have been returned and privatised dissociating them from their traditional lands. These decisions were damaging the cultural heritage, landscape elements and unfavourable to farming.

The accelerating deterioration of Lithuania's manor heritage is due to five main factors:

- Uncertainty about the place of the manor in the emerging national economy;
- Uncertainties of ownership;

- Lack of building maintenance. In particular, the poor condition of roofs causes accelerated deterioration;
- Lack of funding;
- Inappropriate actions by State institutions.

Lithuanian manor heritage has the potential to greatly enrich local communities regions and districts of Lithuania, highlighting their distinct character. Local authorities should radically change their attitude towards these cultural sites. In many European countries, cultural heritage is regarded by the local authorities and local communities as a precious cultural asset and the ownership of these assets is considered as the matter of honour and prestige.

The State of Lithuania should urgently address preservation of its national manor heritage in its widest sense. This is the only way to preserve at least a small part of Lithuanian identity and culture and present Lithuania to Europe and the world as a nation with a deep-rooted cultural identity and representative of pan-European culture.

Algimantas Gražulis, architect

¹ a type of farmstead; known as Folwarks in Polish or Vorwecks in German

² called this way after the Valakas Land Reform

³ special houses for manor farm labourers

A timber manor house in Pavilkijys manor estate requiring urgent maintenance (Photo: Indrė Kačinskaitė, Centre of Cultural Heritage, 2004)





Remains of the famous Pavlovas' Merkinė manor estate in decay (Photo: Indrė Kačinskaitė Centre of Cultural Heritage, 2007)



Remains of the Gothic Revival Svedasai manor palace in northern Lithuania (Photo: Indrė Kačinskaitė, Centre of Cultural Heritage, 2003)



Ruins of a former stylish palace in Vasuokeliai manor estate (Photo: Indrė Kačinskaitė, Centre of Cultural Heritage, 2003)

LUXEMBOURG

Le pont Adolphe

Vers 963 le comte d'Ardenne Sigefroid choisit un éperon rocheux escarpé entouré de profondes vallées pour y édifier un fortin lui permettant d'administrer ses terres. Autour de son château fort se développe une agglomération qui devient la ville de Luxembourg, aux XVII^e et XVIII^e siècles une des plus puissantes forteresses d'Europe qualifiée de « Gibraltar du Nord ». Le site n'est directement et facilement accessible que du côté occidental, ailleurs il est délimité par d'abruptes falaises.

En 1671 le général de Louvignies lance l'idée de la construction d'un pont qui doit relier la ville au plateau situé au sud au-delà de la vallée de la Pétrusse. Le projet, repris quelques années plus tard par Louis XIV, est cependant assez rapidement abandonné. Il faut attendre la seconde moitié du XIX^e siècle et la création du réseau ferroviaire jusqu'à ce qu'un premier ouvrage permette de franchir la vallée. Comme à l'époque la forteresse joue encore un rôle militaire, il n'est pas question de construire une gare à l'intérieur de l'enceinte. Celle-ci est implantée hors les murs et un viaduc élevé de 1859 à 1861 permet aux piétons et aux véhicules d'y accéder depuis la ville. Le quartier qui naît autour de la station prend une importance telle qu'une quinzaine d'années plus tard le gouvernement envisage de créer une liaison supplémentaire pour résoudre les problèmes de circulation. En 1877, l'ingénieur Eugène Ferron (1841-1903) élabore un premier projet : une grande arche en pierre d'une portée de 80m enjambe la vallée. Plusieurs ouvertures pratiquées dans le tympan servent d'arcs de décharge et diminuent le poids de l'ouvrage. Le plan, même s'il n'est pas réalisé, présente déjà les caractéristiques qui marqueront l'aspect définitif du pont. Etant donné qu'il y a des hésitations sur le lieu d'implantation, plusieurs autres projets voient le jour jusqu'à ce qu'en 1898 l'ingénieur en chef des Travaux publics Albert Rodange (1858-1927) soumette au gouvernement un plan définitif : une arche principale d'une portée de 77m complétée de part et d'autre par des arcs plus petits. Rodange propose de construire la grande arche en béton de ciment et de l'habiller de pierre de taille. Afin d'éviter tout risque, le gouvernement luxembourgeois soumet les plans à l'ingénieur français Paul Séjourné (1851-1931), expert reconnu en la matière. Séjourné retient l'idée de base, élimine cependant le béton et opte pour la seule pierre, augmente la portée jusqu'à 84,65m et propose de renoncer à une voûte massive. Afin d'économiser la pierre, il prévoit la construction de deux arches parallèles distantes de 6m et reliées en haut par un tablier en ciment de béton large de 16m. Le pont présente une longueur de 211m, sa hauteur atteint au milieu 45m. Ce plan obtient l'accord du gouvernement qui charge en 1899 la société parisienne Fougerolles Frères de réaliser les travaux.

Le chantier débute par la mise en place d'un pont en bois qui sert d'échafaudage auquel est fixé un cintre de charpente. En 1900 le Grand-Duc Adolphe pose la première pierre « en souhaitant que le pont dure aussi longtemps que l'indépendance du Grand-Duché de Luxembourg... ». Après l'achèvement de la première arche en 1901, l'échafaudage et le cintre sont déplacés moyennant un dispositif hydraulique. Les pierres proviennent en majeure partie d'une carrière située dans les environs immédiats, les parties les plus exposées sont réalisées en grès puisé dans les meilleurs gisements du pays. Le pont doit, en effet, devenir une expression de l'identité luxembourgeoise et traduire la volonté d'indépendance ainsi que la prospérité du Grand-Duché. Les nombreuses cartes postales éditées pendant les travaux montrent l'intérêt de la popu-



Le pont Adolphe

lation pour cette construction extraordinaire. L'ouvrage est ouvert à la circulation le 24 juillet 1903. Pendant quelques mois l'arche principale présente la plus grande portée jamais réalisée.

En 1933, l'ingénieur zurichois Mirko Ros fait des essais de surcharge dont les résultats sont très positifs. Cinquante ans après l'achèvement de la construction, le directeur de l'Administration des Ponts et Chaussées et l'un de ses collaborateurs constatent : « On peut dire que le pont Adolphe est un des plus beaux monuments du XX^e siècle, que c'est le plus beau pont en maçonnerie jamais construit et que l'expression 'ouvrage d'art' prend avec lui son plein sens ».

En 1964 la largeur de la chaussée est légèrement augmentée, le nouveau tablier est posé d'une façon inappropriée. Aujourd'hui le pont présente des fissures, en partie cependant assez anciennes. Son gabarit ne suffit plus à la circulation. Plusieurs solutions reviennent régulièrement à l'ordre du jour : garantir la stabilité de l'ouvrage par l'adjonction de supports métalliques, démolir l'arche principale afin de la reconstruire en béton armé et de l'habiller de pierre de taille. Ce procédé permettrait aussi d'élargir le pont et de créer une chaussée adaptée aux besoins de la circulation. Si cette solution n'est pas retenue, ne faudrait-il pas construire un pont supplémentaire parallèle au pont Adolphe ?

Les inconvénients de ces opérations se résument comme suit : la reconstruction en béton armé détruirait à jamais un ouvrage d'art extraordinaire qui est l'un des derniers ponts entièrement maçonnés en pierre. L'implantation d'une construction parallèle nuirait gravement et à l'aspect du pont Adolphe et à la beauté de la vallée de la Pétrusse aménagée comme le parc de la ville selon les projets d'Edouard André (1840-1911). Du point de vue de la conservation, seule l'implantation de supports supplémentaires paraît admissible. Cette façon de procéder respecterait le monument et ne toucherait pas à la substance historique. Aussi faut-il remarquer que pour l'instant le dossier n'est pas encore assez complet pour prendre une décision. Le 17 mars dernier, le Ministère des Travaux publics et le Ministère de la Culture, de l'Enseignement supérieur et de la Recherche et la Ville de Luxembourg ont organisé un hearing public où la majeure partie des personnes présentes se sont clairement prononcées pour la conservation de l'ouvrage.

Notons pour terminer que le pont n'est pas protégé en tant que monument historique. Il se situe cependant dans la zone tampon de l'UNESCO qui a inscrit « les vieux quartiers et les fortifications de la ville de Luxembourg » sur la liste du patrimoine mondial (17.12.1994).

MEXICO

La pérdida de la arquitectura de adobe en México

Abstract

The component of the built patrimony facing the biggest threat of extinction in Mexico is earthen architecture. This threat is due to the vulnerability of the material and to the lack of interest that people nowadays have in it. Even though this cultural heritage is an architectural typology that has been highly disseminated in this country throughout the centuries, we have witnessed the irreparable loss of hundreds of urban and rural adobe complexes that have been abandoned or intentionally demolished with the excuse that the materials of which they are built are unstable, unsafe and unhealthy.

This problem is very critical in the towns around the sites included in the World Heritage List, like Paquimé or the Monasteries of Popocatepetl. The conservation of earthen architecture must include the preservation of historical vestiges, of traditional constructive culture and the generation of conditions that will allow an improvement of the quality of life for the heirs of this patrimony.

Durante toda la historia de México se ha utilizado a la tierra cruda como material básico de construcción. Esto ha permitido desarrollar respuestas arquitectónicas con gran eficiencia en el manejo de los recursos naturales y con un alto grado de adaptación a las condiciones climáticas existentes en las diversas latitudes del país. (Rodríguez, 2001: 83)

La convergencia de los conocimientos de las civilizaciones prehispánicas, con la tradición constructiva traída de Europa durante la época virreinal, generó una vasta tipología edilicia en la que haciendas, templos, conventos, palacios, edificios de gobierno, presidios y la mayor parte de la arquitectura doméstica, conformaron un valioso patrimonio cultural. Además, debido a la adecuación de estas obras a su medio físico, conservaron su vigencia después de siglos de su edificación, gracias a la pervivencia de la cultura constructiva transmitida a través de la tradición.

Hasta hace una o dos generaciones era frecuente que las comunidades tradicionales habitaran las viviendas de adobe que habían heredado de sus ancestros y que realizaran en ellas las actividades de mantenimiento preventivo que las preservaban estables a lo largo del tiempo.

Sin embargo, a pesar de las evidentes cualidades de los edificios de adobe y del valor que representan debido a su remoto origen y su permanencia dentro del bagaje cultural de nuestra sociedad, están a punto de desaparecer.

A partir del crecimiento explosivo de la oferta de materiales industrializados, la construcción con adobe ha decaído dramáticamente bajo el supuesto de que su uso es poco digno, insalubre y hasta peligroso. Esta cultura edilicia ha sido ignorada por los organismos de apoyo a la vivienda, la mayoría de las facultades de arquitectura e incluso las instituciones encargadas del patrimonio, que hasta hace no más de diez años empezaron a plantear criterios para su protección. Se considera un símbolo de pobreza y retraso a tal grado que los establecimientos financieros, los tasadores y desarrolladores urbanos, no le otorgan ningún valor económico con lo que, además de no ofrecer créditos para su reparación, al momento de venderse se aquilatan sólo por el precio de su terreno.

Lógicamente, esta tendencia ha llevado a un proceso degenerativo que se relaciona en primer lugar, con la pérdida de la tradición constructiva que lleva a la ejecución de reparaciones inadecuadas

por el uso de materiales incompatibles con la tierra; en segundo lugar, con el abandono y degradación progresiva de las estructuras antiguas; y finalmente, con su substitución por nuevas obras totalmente ajenas cultural, económica y ecológicamente a los sitios en que se insertan.

A pesar de que se trata de un fenómeno generalizado en todo el territorio nacional, en el presente texto se hablará solamente de dos casos que resultan significativos por su relación con los procesos de valoración del Patrimonio Cultural de la Humanidad: se trata de Paquimé, en el estado de Chihuahua, al norte de México y de la región vinculada al volcán Popocatepetl, en el centro del país.

Como es sabido, en el año de 1998 la ciudad prehispánica denominada *Zona Arqueológica de Paquimé, Casas Grandes*, fue inscrita en la lista de Patrimonio Mundial debido fundamentalmente a que “jugó un papel primordial en las relaciones comerciales y culturales entre la cultura Pueblo del suroeste de los Estados Unidos y norte de México, y las civilizaciones más avanzadas de Mesoamérica. La gran cantidad de vestigios, de los cuales únicamente ha sido excavada una parte, son testimonios patentes de la vitalidad de una cultura perfectamente adaptada a su ambiente físico y económico, pero que desapareció repentinamente al momento de la conquista española” (<http://www.icomos.org.mx/cultural.php>).

Se trata de un caso sumamente singular por ser una metrópoli con habitaciones de varios niveles —totalmente construidos con tierra— cuyo estado de conservación ha permitido conocer muchos datos acerca de la forma de vida y adaptación de la sociedad que la habitó entre los siglos diez y quince de nuestra era.

Sin embargo, debido a errores de concepción, la definición del sitio dentro de la Lista de UNESCO desafortunadamente no incluyó la periferia urbana de la zona arqueológica. De este modo, además de perderse la oportunidad de proteger una región con diversos valores adicionales al sitio prehispánico, actualmente se presentan importantes presiones socioeconómicas que afectan su manejo y gestión.

La ciudad de Casas Grandes colinda con el sitio arqueológico por lo que en sus cimientos existen valiosos vestigios históricos. Además, posee estructuras patrimoniales que incluso fueron realizadas “reciclando” la tierra de las estructuras prehispánicas. Se trata de una villa de origen rural con evidencias de ocupación ininterrumpida desde la época virreinal y que manifiesta la continuidad en la tradición constructiva con adobe por más de cuatro siglos. A pesar de esto, el conjunto no ha sido adecuadamente valorado, ni se han definido criterios para su salvaguardia.

Parece increíble que mientras se llevan a cabo destacados esfuerzos académicos y económicos por preservar la zona delimitada, a sólo unos metros, la propia comunidad destruye los restos de origen virreinal y decimonónico a una velocidad alarmante. Debido a la pérdida de la tradición constructiva, la comunidad repara y altera sus edificios históricos utilizando materiales y sistemas de edificación ajenos al adobe, como es el caso del cemento y los materiales impermeables. Este hecho les produce mayores deterioros, lo que a su vez provoca la desconfianza de los habitantes hacia la arquitectura térrea que finalmente es demolida para edificar en su lugar viviendas con estilos, materiales y conceptos de diseño totalmente desarticulados del sitio. (Guerrero, 2002a: 8)

Es importante decir además, que desde luego no se trata de un fenómeno aislado. La mayor parte de las poblaciones mexicanas

que por siglos conservaron un tejido urbano con gran armonía gracias al equilibrio de sus edificios civiles y religiosos de adobe, en menos de veinte años han perdido su fisonomía e identidad. En estas ciudades, la especulación territorial ha motivado la destrucción sistemática del patrimonio edificado con adobe, acabando con cientos de inmuebles cuyos terrenos son transformados en lugares de estacionamiento, que a veces conservan tramos de las fachadas históricas, pero, que la mayor parte de las ocasiones son arrasados por completo. En el caso de la ciudad de Chihuahua, capital del estado, al igual que en Monterrey, Nuevo León, esta tendencia se ha visto agravada con el desarrollo de costosos programas de gobierno en los que se ha destruido este patrimonio con el objeto de crear enormes plazas, totalmente ajenas a las necesidades sociales y ecológicas de ciudades con las extremas condiciones climáticas que caracterizan los desiertos del norte de México.

Un problema muy semejante ha tenido lugar en los poblados en los que se emplazan los *Primeros Monasterios del Siglo XVI, sobre las laderas del Popocatepetl*, conjunto inscrito en la lista de Patrimonio de la Humanidad en 1994. Estos destacados monumentos han sido paulatinamente preservados mediante labores de conservación y restauración con diferentes grados de avance, pero con un progreso constante.

Sin embargo, la complicación se presenta por causas similares a Casas Grandes, porque la inscripción ante UNESCO desgraciadamente no tomó en cuenta el emplazamiento urbano de estos monasterios. Se trata de poblados muy singulares de los que el origen de su traza se remonta a épocas prehispánicas y donde la vivienda característica se ha realizado con tierra desde épocas anteriores al establecimiento de los conventos motivo de la declaratoria.

Estos conjuntos tradicionales presentaban estructuras de adobe de uno y dos niveles con fachadas parcialmente abiertas a la calle y articulados al interior de las manzanas mediante pórticos hacia los patios de labor y huertas que caracterizan la trama urbana.

Cada elemento del espacio cubierto y abierto de la vivienda tradicional tenía una función precisa y un fundamento simbólico cuyo origen se podría fechar con más de mil años de antigüedad. Entre estos componentes arquitectónicos destacan los depósitos de grano conocidos como "cuescomates" que además de su singularidad formal y funcional, resultan relevantes por tratarse de una herencia viva de origen prehispánico con evidencias fechadas en algunos casos hasta el año 700 a.C. (Fragoso, 1999:39).

Los *cuexcomatl*, son estructuras construidas con barro crudo y cubiertas con techumbres cónicas de paja, que están destinados a la conservación de granos y semillas obtenidas de las parcelas familiares. Su forma y dimensiones están perfectamente adaptadas para el almacenamiento, ventilación y protección del grano contra la lluvia y los roedores, y con un diseño resistente a los sismos que son frecuentes en la región. (Guerrero, 1994: 32)

Por desgracia, lo que alguna vez fueron conjuntos patrimoniales integrales en los que las capillas de barrio, las viviendas de adobe, los cuescomates y los espacios abiertos, formaban un todo, están siendo transformados y destruidos por sus habitantes que consideran que lo único valioso de sus poblados son los monasterios que han sido declarados Patrimonio de la Humanidad. La estructura urbana de los catorce poblados incluidos en la Lista, están desapareciendo o alterándose de manera irreversible.

Para tratar de frenar esta tendencia sería importante realizar las gestiones necesarias para proponer la ampliación de la definición patrimonial de estos y otros casos parecidos ante UNESCO. Es fundamental que las declaratorias patrimoniales sean lo suficientemente amplias como para incluir tanto a los "monumentos" como a su medio natural y cultural.

Además, es indispensable plantear campañas de sensibilización a fin de que las comunidades locales recuperen la confianza en la edificación tradicional de tierra y se den cuenta de sus cualidades ecológicas y culturales. En este sentido resulta destacable la labor del *Seminario Internacional de Conservación y Restauración de Arquitectura de Tierra* (SICRAT) que por más de diez años ha llevado a cabo análisis de casos y talleres con participación comunitaria en varios poblados tradicionales del norte de México y sur de los Estados Unidos. (Guerrero, 2005: 91)

Las labores que realiza esta organización binacional, por una parte buscan dar a conocer a los constructores contemporáneos los irreparables daños que los materiales rígidos e impermeables como el cemento, el acero y sustancias plásticas, causan a los edificios de tierra, debido a su discontinuidad, falta de adherencia e incompatibilidad térmica e higroscópica. Asimismo, se presentan alternativas para la intervención de estos inmuebles con base en la recuperación de la sabiduría ancestral del uso de materiales y sistemas constructivos tradicionales, y finalmente, se realizan prácticas para que los habitantes "re-aprendan" esta cultura constructiva, la valoren y sean promotores de su defensa y reactivación.

La conservación de la arquitectura de tierra debe perseguir la permanencia de los vestigios históricos, la preservación del patrimonio intangible de su cultura constructiva y la generación de condiciones que permitan elevar su calidad de vida de sus herederos.

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Casas acantilado con más de quinientos años de antigüedad en Sirupa, Chih



Destrucción de estructuras patrimoniales de adobe en Chihuahua, Chih



Estacionamiento dentro de un inmueble de adobe en Chihuahua, Chih



Arquitectura de adobe característica de Tetela del Volcán, Mor

Abandono y alteración de la arquitectura tradicional de Casas Grandes, Chih



Destrucción de una vivienda de adobe en Alpanocan, Pue



MOLDOVA

Chisinau – A Historic City in the Process of Disappearing

Chisinau, the capital of the Republic of Moldova, was formed as an urban entity in the middle of the 17th century. At the beginning of the 19th century it became the biggest urban settlement in the eastern part of the Moldavian Principality. In the 19th century Chisinau was enlarged by a new planned quarter, which was added to the organically developed medieval town. After the Second World War, a new master plan for the city was prepared. It envisaged placing the city's new administrative quarter in the centre of the 19th century city. This, coupled with the construction of a major new road in the city centre, resulted in the destruction of the core of the medieval part of town and in the demolition of a significant number of historic buildings. The policy of not preserving the historic built heritage also dates from that time.

Shortly before the dissolution of the Soviet Union, Chisinau was declared a historic city, a monument of urbanism. However, a special planning system for the implementation of this new status was not created because of the political instability at that time.

From the last years of the 20th century until now, aspects of the country's economic development have determined changes in the city's policies but not, however, in the policy of architectural heritage preservation.

The problems of Chisinau epitomise the problems of the whole country in the field of built heritage protection. In 1993, the historic central part of the city was officially declared an architectural and historic monument of national importance together with a great number of other architectural monuments, which were the most interesting constructions in the architectural and historical sense. Although they were inscribed in the *Register of Monuments of the Republic of Moldova Protected by the State*, to the present day a local service for the protection, conservation and presentation of monuments does not exist, neither in Chisinau nor in other localities. Also, the lack of a municipal archaeological service is one of the reasons why no excavations have been carried out in recent decades in the historic city centre.

There are many other threats to the historic centre of Chisinau in the not-too-distant future:

- 1) The continuous deterioration, day by day, of the historic buildings. It occurs in different ways, including:
 - Leaving the buildings without roofs, floors and inside walls for some years, until the natural destruction of the structure begins;
 - Demolition followed by replacement with new buildings, usually without any linkage to the historic built environment;
 - Keeping only the main façade and including it in the structure of a new building, together with adding new storeys above the historic buildings;
 - Partial or total replacement of the decorative and constructive elements of the historical exterior and interior; and
 - Destruction of their historic-surroundings.

All these ways are usually connected with the replacement of historic sashes and door cases; with the removal of historic plasters and decorations and with covering facades and interiors with a metallic net (armature) and cement plasters; and with the replacement of the historic load-bearing structures.

- 2) The following important aspects also have a negative impact:
 - The absence of necessary maintenance programmes for the historic buildings and corresponding municipal programmes;



Central historic part of Chisinau (with planned enlargement of the streets and the new road through the historic centre)

- The absence in the city of any kind of management of historic buildings which would correspond to their declared status as monuments. This also explains the absence of any restored buildings. Here it should be noted that what in Moldova is accepted as “restoration” does not usually match the internationally accepted meaning of this term. Usually it means an almost total reconstruction with the extensive use of new materials and techniques;
- The absence in the country of an institution in charge of implementing and developing methods and techniques of conservation/restoration which will assure the use of scientific and technological advances for the protection of the architectural heritage. The absence in the country of an educational institution training professionals in restoration and traditional crafts for the needs of heritage preservation also has a negative impact;
- The absence of “passports” containing the principal and detailed historical, architectural and urban data for architectural monuments. In the absence of such documentation the protection is inefficient and only affords a declarative status; and
- The absence of any clear and legally protected boundaries of the historic centre (i.e. a protection and buffer zone).

Today, the newly developed urban plan for Chisinau envisages the construction of a new 70-metre-wide street through the historical centre and the considerable enlargement of several other streets, all involving the very extensive demolition of historic buildings.

These problems are based on a misunderstanding of the value of our built heritage – a constituent part of European and World Heritage – for the culture and history of the country, coupled with



A street which will disappear after the construction of the new 70-metre-wide road



19th century former Hotel Petersburg



19th century synagogue



19th century gymnasium for girls

a misunderstanding of the methods which make the corresponding presentation of this heritage possible.

Changing the rules and practices in the field of architectural heritage in harmony with internationally accepted built heritage protection documents is the only way to create the necessary conditions for our heritage preservation. Otherwise, in a very few years, the historic centre of Chisinau will have disappeared.

Notes:

1. Chisinau population: about 700,000 inhabitants.
2. In 1993, the national *Law for the Protection of the Monuments* was adopted.
3. In 2001, ratification of the *CE Convention for the Protection of the Architectural Heritage of Europe* and *CE Convention on the Protection of the Archaeological Heritage* by Moldova.
4. In 2002, ratification of the *UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage* by Moldova.

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Changing the historic architectural environment



NORWAY

Climate change and the effect on Norwegian World Heritage sites

Norway has seven sites inscribed on UNESCO's World Heritage List. Three cultural sites are located along the coast: the cultural landscape of the Vega Archipelago, the Alta Rock Art, and the Bryggen (Wharf) in Bergen. The sea level rise, increasing numbers of days with rain and heavier rainfall, warmer temperatures and storms in these areas, which already have a high humidity, will expose the cultural sites to more negative conditions than experienced before. The new climate will cause direct damage caused by stronger winds affecting roofing and panels, and an increase in insects and fungi attacking wooden constructions. The foundations of harbour quays, piers and storehouses are not built to resist extreme storms, and will need more intensive maintenance.

The construction of the wharf, Bryggen, in Bergen is one example where this has already become clearly visible. Bryggen is threatened by rising sea levels. Due to heavy rainfall and storms in combination with high tide, a lot of the buildings experience flooding during the winter. Future forecasts predict tide levels that will flood the buildings nearest to the wharf more often. Rising tides could also threaten more of Bergen's old city centre. The winter 2006-2007 resulted in flooding 15 to 20 times, meaning that the constantly wet timber structures are now threatened by rot and fungus from this inundation combined with lengthy rainfall.

Coastal heritage

The Norwegian coastline is extensive, heavily dissected by fjords. Traditional wooden coastal settlements, composed of wharfs, warehouses, dwellings, and farmhouses form a typical Norwegian vernacular architecture.

World Heritage site, Bryggen in Bergen, with Svensgarden flooded 2006 (Photo: Bryggen Foundation)



This vernacular architecture is threatened, as the use of wooden buildings for the fishing industry, trade and farming is no longer viable. Settlements are left empty without any maintenance. It is a challenge to find new adaptive uses, which might guarantee maintenance of this coastal heritage. The Norwegian Government has launched several programmes to safeguard coastal heritage, but the degradation of this unique Norwegian coastal heritage is still of concern. Improved cooperation between local and national authorities is needed by the owners, aiming for an alternative use for Norway's coastal heritage, which might guarantee dependable and consistent preservation and protection.

Churches

In Norway, churches are far more important as cultural heritage than in most other European countries. This is because from the Lutheran Reformation in 1537 until the end of the 18th century, the church was almost the only institution building structures of any size and contracting adornment of importance from artists and craftsmen. Norway was a province under Denmark at this time, and the king, the court, and almost the whole nobility lived outside Norway. After the 1814 constitution, the state of Norway gradually developed its own administrative buildings and a royal palace. The mid-19th century was the most expansive church building period since the Middle Ages. These sacred buildings heralded a new era and united the new nation.

Most of the Norwegian churches are under some kind of statutory protection. 215 churches built before 1650 are protected by the Cultural Heritage Act. Changes undertaken in all the 309 churches built between 1650 and 1850 and in about 40% of the churches built after 1850, are also to be evaluated by the Directorate for Cultural Heritage.

Many of the churches, regardless of heritage importance, suffer

World Heritage site, Vega archipelago, warehouse and eider house, built for eider ducks to nest in (Photo: Kirsti Kovanen, 2002)





Odda Smelteverk (Photo: Harald Hognerud, Norwegian Hydro Power and Industry Museum (NVIM))



The Tyssø hydropower plant (1906-16) is today a national monument and beautifully restored after its closure in 1996 (Photo: Axel Mykleby)

badly from a lack of maintenance over many years. The heart of the problem seems to be that municipalities are required to cover the cost of maintenance. Often the most interesting churches, especially those protected by the Cultural Heritage Act, are situated in remote, small and rather poor municipalities. Other churches were established by a once thriving community, such as the church at the World Heritage site Røros, the mining town. The church at Røros has always been special, even by wider European standards, but the lack of funding by a poor community is now a great threat to this church.

Through the years church buildings have been the losers when local budgets have been presented. The situation for many churches is now dire, due to a long period of financial neglect and increasing deterioration. The cost for repair and restoration of these churches is calculated to be 406 million Euros (3.3 billion Norwegian Kroner).

Due to demographic change and the high cost of maintenance, and because of negligence, church authorities are “open to” the sale and demolition of churches. A new, different use of churches is naturally a threat to their heritage values, and demolition will raze this important heritage, removing it from posterity.

Fire has been a serious threat to Norwegian churches for many years, especially during a period of growing Satanic cults. Many efforts have been made to provide churches with fire protections systems, but still many of these churches lack even an adequate fire warning system.

Hydropower and large-scale industry in Odda

The town Odda is situated in the Hardangerfjord area on the western coast of Norway. The place is surrounded by two national parks; the Hardangervidda plateau and the Folgefonna glacier, which is the third largest glacier in Norway. Odda was one of the major tourist destinations of Norway during the 19th century, known for its beautiful scenery. The high mountains with several waterfalls and the ice free fjord made it ideal to establish large scale industry and to build a hydro-electric power plant in Tyssedal, once one of the largest in the world. The Tyssø hydro-

electric power plant is today a national monument and beautifully restored since its closure in 1996, whereas the factories from the same period in the centre of Odda represent significant industrial heritage sites at risk.

The Odda Smelteverk AS (smelting works) from 1906 is located in the centre of the town of Odda. The works occupy half the town and were built for the production of calcium carbide and calcium cyanamide, and were amongst the largest of their kind in the world until the 1920s. In 1928 the ‘Odda process’ was invented here:

The nitrophosphate process (also known as the Odda process) was a method for the industrial production of nitrogen fertilizers invented by Erling Johnson in the city of Odda, Norway around 1927. ... Although Johnson created the process while working for the Odda smelteverk, his company never employed it. Instead, it licensed the process to Norsk Hydro, BASF, Hoechst, and DSM. Each of these companies used the process, introduced variations, and licensed to other companies. Today only Yara (Norsk Hydro), BASF, AgroLinz and GNFC still use the Odda process.

(From Wikipedia, the free encyclopedia,
http://en.wikipedia.org/wiki/Nitrophosphate_process).

From 1937 until 1998 the factories were owned by The British Oxygen Company and then sold to Philip Brothers Chemicals in New York. Since a bankruptcy in 2003 the works have been neglected and much of the equipment sold as scrap metal. The production line of calcium carbide with the big ovens were interim listed in 2004 as significant industrial heritage, but are now under pressure probably because they are considered too ‘big and ugly’. Many local politicians and the local workers’ union want to demolish the listed items, because they want the land for new buildings.

Industrial heritage is under-represented on the World Heritage List. International experts claim that the Tyssø Hydropower Plant together with parts of the smelting works in Odda and its surrounds with the fjord- and waterfall landscape are unique in the world. The industrial heritage of Odda needs international attention to be saved.

OMAN

Mirbat, Heritage at Risk

Mirbat, like most of the sea towns in the province of Dhofar, South Oman, was involved in the frankincense trade. It took over the port tradition from al-Balid in the 17th-18th centuries and became a well-known port, trading also with Hadramaut. Today, almost the entire historic city has been abandoned in favour of a new centre built in concrete. One of the largest structures, the Bayt al-Siduf, a merchant's house, has almost collapsed, but still shows the former beauty of the traditional architecture. The decay of the abandoned historic buildings illustrated in the first issue of *Heritage at Risk* (see H@R 2000, pp. 146/147) has in the meantime become even worse. A heavy rain storm in 2007 accelerated the decay.

Mirbat, like Taqah and Salalah, are witnesses to Oman's glorious past as a seafaring nation. Therefore, the old quarters of these cities should at least be documented and, if possible, be preserved for the coming generations.



Mirbat, castle with collapsed walls and roof, 2007 (Photo: M.Pz.)



Mirbat, abandoned houses (Photo: M.Pz.)

Mirbat, decaying entrance door (Photo: M.Pz.)





Mirbat, damage caused by a rain storm, 2007 (Photo: M.Pz.)

Mirbat, collapsed house of a rich merchant, Bayt al-Siduf (Photo: M.Pz.)



PERÚ

Patrimonio en Peligro

El Perú es un país megadiverso, donde la presencia humana – que se remonta a varios miles de años atrás – ha dejado diferentes paisajes culturales y monumentos naturales que son permanentemente depredados, y desprovistos de sus contenidos muebles por un mal entendido coleccionismo. El uso turístico irrestricto también es una amenaza para los sitios arqueológicos, como es el caso de Machu Picchu. La invasión española a los Andes significó la construcción de iglesias y conventos recubiertos de altares, lienzos e imágenes, así como dotados de hermosos ornamentos y platería que permanecieron en uso hasta mediados del siglo XX. Entonces comenzaron los movimientos migratorios y – paralelamente – se iniciaron los “robos sacrílegos” en estos recintos católicos y su comercialización ilícita, con el argumento que así se evitaba que se fueran al extranjero. El Instituto Nacional de Cultura (INC) registra tanto los bienes muebles arqueológicos como los históricos – así obtenidos – como de propiedad privada sin verificar su origen ni procedencia. Además, el INC tiene serias dificultades para mantener actualizado el registro de sitios arqueológicos y edificaciones históricas; por eso, aquí no podemos proporcionar estadísticas y/o cifras sobre el patrimonio monumental del Perú.

El INC es la instancia pública encargada de conducir la política cultural del Estado Peruano, como órgano descentralizado del Ministerio de Educación del Perú.

La administración cultural pública en el Perú se inició – formalmente – con la dación de la ley N°6634 y la creación del Patronato de Arqueología en 1929, por gestión del arqueólogo Julio C. Tello. En 1941 se creó la Dirección de Educación Artística y Extensión Cultural dentro del Ministerio de Educación, que de inmediato asumió la responsabilidad de hacer el inventario del patrimonio cultural mueble e inmueble del país, ante la fuerte oposición de las altas esferas de la sociedad peruana que – como ha explicado Jorge Basadre, el historiador de la República – asumían que el inventario era una sutil manera de “estatizar” la propiedad privada del patrimonio cultural. Esta dependencia pública se transformó en 1963 en la Casa de la Cultura del Perú y en 1972, en el Instituto Nacional de Cultura. Es pertinente recordar que actualmente el INC, la Biblioteca Nacional del Perú (BNP) – fundada en 1821, pocos días después de declarada la independencia – y el Archivo General de la Nación (AGN), que data de 1863, no tienen aún resuelto el problema de encontrar una estrategia para inventariar, clasificar, catalogar y registrar el Patrimonio Cultural de la Nación y – por supuesto – supervisar periódicamente los bienes registrados, así como realizar el indispensable seguimiento de los hurtos y desapariciones, ya se trate de bienes culturales muebles e inmuebles, públicos o privados. El principal obstáculo para proceder al registro de los bienes culturales en el INC es que la Ley de Amparo del Patrimonio Cultural del Perú N°28296, del año 2005, y sus antecesoras, no asumen plenamente la diversidad cultural del Perú, someramente esbozada en la Constitución de 1993.

A continuación presentamos algunos casos representativos de las amenazas y peligros que acechan al patrimonio monumental del Perú y sus contenidos muebles.



View of Machu Picchu (Photo: Alonzo Addison)

Patrimonio arqueológico

Machu Picchu es un conjunto de edificios construidos por Pachacutec Inca Yupanqui en el siglo XV, que gradualmente se fue despoblando luego de la invasión española a los Andes, hasta la llegada de Hiram Bingham, profesor de la Universidad de Yale, en 1911; quien lo describió como “el último lugar que quedaba en América para explorar en soledad”. Desde entonces, el Perú ha tenido serias dificultades para equilibrar su conservación cultural con su uso turístico. Machu Picchu, con el transcurso del tiempo, se ha transformado en el icono del país y en uno de los atractivos turísticos más representativos de América del Sur.

Las amenazas que actualmente plantea el turismo irrestricto al Santuario Histórico de Machu Picchu (SHMP) se pueden sintetizar así:

- Una acelerada pérdida de autenticidad en la difusión y comprensión de Machu Picchu, debido al incremento de la demanda turística, la cual no tiene paralelo en la investigación arqueológica, histórica y antropológica. Consecuentemente, los promotores y los guías – incluso los autores de libros de difusión – siguen promoviendo las sesgadas interpretaciones que hiciera Hiram Bingham sobre esta llacta inca hace casi cien años. Esta situación crea las condiciones para la proliferación de interpretaciones esotéricas sobre el origen de las poblaciones andinas e incluso favorecen a quienes sustentan que Machu Picchu fue construida por extraterrestres. La reversión de estas incongruencias es posible si, siguiendo precedentes internacionales, se lleva a cabo un reordenamiento de las relaciones entre el sector cultural-público y el sector privado del turismo.
- El uso irrestricto del cabildeo – o lobbies – de determinados grupos de interés, para acceder a la autoridad central y promover sus intereses económicos por encima de otros grupos de interesados en beneficiarse del uso turístico de Machu Picchu, está profundizando y agrandando las desigualdades étnico-sociales que se remontan a la conquista española del Tawantinsuyu.

- La población local marginada encuentra sus propios caminos para acceder a los beneficios económicos del turismo que Machu Picchu genera en su área de influencia. Por ejemplo, en el año 1998 una avalancha arrasó con la vía férrea entre Machupicchu Pueblo y Quillabamba, vía que principalmente servía a la población local. Los grupos interesados en promover únicamente a visitantes muy prósperos presionaron al Ministerio de Transportes y Comunicaciones para que esta vía férrea quedara limitada a un tren de uso turístico entre el Cuzco y Machu Picchu Pueblo, con el argumento que así disminuía la contaminación en el área del SHMP. Ante esta situación, el gobierno local procedió –desde el 2004– a la construcción del puente de Carrilluchayoc y otras vías terrestres en el área de influencia de esta ciudadela –o llacta– inca, para tener acceso al SHMP y proporcionar servicios turísticos a los visitantes de ingresos medios.

Hiram Bingham – al igual que hicieron los españoles del siglo XVI en otros centros urbanos de los Andes – llevó consigo de Machu Picchu más de 5,000 objetos e ingente información científica a la Universidad de Yale, institución que actualmente se niega a devolver el material al SHMP, a pesar que estos materiales arqueológicos salieron del país, entre 1908 y 1916, con una autorización excepcional del gobierno del Perú para efectuar investigaciones durante dieciocho meses, y luego proceder a su devolución. Esta negativa perjudica la conservación cultural del SHMP y su uso turístico porque refuerza la noción de que Machu Picchu es la "tierra de nadie". Es conveniente que, siguiendo las recomendaciones conservacionistas internacionales de comienzos del siglo XXI, la Universidad de Yale, conjuntamente con el gobierno del Perú, encuentren una fórmula diplomática bilateral para hacer posible la conmemoración bicultural del centenario de la visita de Hiram Bingham a esta llacta inca, en julio del 2011. Paralelamente, hay que tomar en cuenta que ya la *National Geographic Society* ha comenzado a compartir con el gobierno del Perú las fotografías que han ilustrado sus publicaciones sobre Machu Picchu desde abril de 1913. Asimismo, la *National Geographic Society* ha instado a la Universidad de Yale a devolver al SHMP dicho material arqueológico, habida cuenta que financió las expediciones de Hiram Bingham.

El INC todavía no ha definido su política de restitución cultural para el SHMP correspondiente al quinquenio 2006 –2011, año en que se conmemora el centenario de la primera vista de Hiram Bingham a esa llacta inca.

Patrimonio colonial

En el Perú – y específicamente en los Andes Centrales – la Iglesia Católica enfrenta retos aún sin estudiar para su mejor comprensión y, por lo tanto, todavía no se vislumbran formas viables para conservar los templos y otros recintos religiosos; debido a los movimientos migratorios y al descenso de feligreses por diversas razones. Asimismo, el deterioro – y eventualmente la desaparición – de estos espacios religiosos construidos entre los siglos XVII y XIX parece imparable. Las reconstrucciones son ocasiones propicias para que se produzcan los llamados “robos sacrílegos”. Además, hay serias dificultades para encontrar nuevos usos a los recintos religiosos.

Por ejemplo, esta situación se produjo en el año 2002 cuando desaparecieron ocho esculturas, debidamente registradas ante el INC, durante la ejecución de trabajos de restauración en la Catedral de Lima. Hechos de esta magnitud son noticia en los medios de

comunicación para luego ser olvidados por la opinión pública por ausencia de una sociedad civil que haga el necesario seguimiento a estas denuncias de depredación cultural. Las autoridades civiles, policiales y eclesiásticas, consecuentemente, no se sienten obligadas a realizar el seguimiento de los objetos y evitar su comercialización ilícita entre los coleccionistas, tanto de Lima cuanto del extranjero.

El INC no ha tomado la iniciativa para efectuar la restitución cultural tanto de bienes histórico-artísticos cuanto de los arqueológicos. Mientras los “robos sacrílegos” han dejado a los templos y otros recintos católicos desprovistos de las imágenes que son esenciales para la devoción popular; paralelamente, las colecciones privadas han ido en aumento, ya que es prestigioso tener casas, oficinas, clubes, hoteles y restaurantes adornados con obras de arte, por ejemplo, de la Escuela Cuzqueña. Además, las exposiciones de arte colonial o virreinal – con motivo de las festividades católicas como Semana Santa o devociones a la Virgen María o Santa Rosa de Lima – no proporcionan información sobre la procedencia de los lienzos y/o esculturas puestas en exhibición.

Paralelamente, miles de jóvenes de origen hispano andino – ya sea quechua o aimara – siguen bailando, como lo hicieron sus ancestros desde el siglo XVI, en las festividades de sus pueblos de origen. Estas expresiones de la religiosidad católica popular en honor de la Virgen de la Candelaria en Puno, o de la Virgen del Carmen en Paucartambo, Cuzco, constituyen un importante recurso turístico.

En síntesis, hay una nueva generación de católicos y católicas practicantes que, con el debido liderazgo de las autoridades civiles y eclesiásticas – trayendo al país las recomendaciones vaticanas sobre patrimonio cultural de la Iglesia Católica – podrían hacer posible un programa de restitución cultural para los depredados recintos católicos donde todavía quedan algunas imágenes – o sus réplicas – que periódicamente continúan siendo objetos de culto. El comité Peruano de ICOMOS hace esta propuesta porque la Santa Sede es Estado Parte de las Convenciones de UNESCO de los años 1970 y 1972.

El caso del Templo de Santiago en Ollantaytambo, Cuzco, es altamente representativo de esta situación. En agosto del año 2000 los medios de comunicación limeños y cuzqueños difundieron ampliamente la noticia proveniente de la Paz, Bolivia, que señalaba la comercialización ilícita del arte colonial hispano andino realizada por el diplomático peruano Pedro Díaz Vargas. Durante varios meses este hecho delictivo contra el patrimonio histórico artístico del Perú – y también de Bolivia – fue información recurrente en los medios de comunicación limeña, llegando incluso a sostenerse que los lienzos encontrados en su posesión no podían volver a su lugar de origen por falta de inventario. Paralelamente, los ollantinos reconocieron sus lienzos mostrados en las imágenes difundidas por televisión y se hicieron presentes ante el INC, con el respectivo e indispensable inventario para recoger sus cuadros, como también se puede comprobar en la ilustración adjunta. Sin embargo, el INC se negó a dar trámite a su bien sustentado reclamo. En abril del 2002 Pedro Díaz Vargas fue reincorporado al Servicio Diplomático del Perú ante la protesta diplomática de Bolivia.

Otro ejemplo de cómo la restauración de un recinto religioso católico es ocasión propicia para proceder a su depredación cultural es la capilla del Centro Poblado de San Pedro de Challapampa, a orillas del Lago Titicaca. En el año 1974, una vez concluidas las obras de restauración auspiciadas por la UNESCO, desaparecieron sus recién remozados 24 lienzos de arcángeles arcabuceros, que debieron haber sido pintados como defensores celestes del Imperio Español en el hermoso paisaje que ofrece el lago Titicaca a locales

y foráneos. En el 2001 los pobladores – con el apoyo del INC – procedieron a renovar el techo de paja de la capilla y por razones de seguridad física retiraron el “retablo de los ángeles” elaborado por el jesuita italiano Bernardo Bitti en el siglo XVII. En enero del 2002 los pobladores de Challapampa debieron denunciar la desaparición de esta obra maestra del arte manierista, sin que el INC iniciara su indispensable búsqueda ya que estaba debidamente inventariada, como también lo están los arcángeles que les fueron hurtados en el año 1974. En mayo del 2003 desde el portal www.michelvanrijn.com se alertó que el altar estaba en venta en los EEUU, por lo que el Comité Peruano de ICOMOS inició una campaña mediática para que el INC y el Ministerio de Relaciones Exteriores tramitaran su restitución a Challapampa en el marco del Memorando de entendimiento suscrito entre el Perú y los Estados Unidos para contrarrestar el tráfico ilícito de bienes arqueológicos y cierto material etnológico colonial. En julio del 2006 el “retablo de los ángeles” de Bitti regresó a Challapampa, sin mayores explicaciones por parte del INC sobre cómo salió y volvió. De inmediato, los residentes de este Centro Poblado han montado un programa de vigilancia comunal.

Sin embargo, en abril del 2007 el INC ya intentaba autoritariamente trasladar esta obra de arte a la Catedral de Puno. Para asegurar la permanencia y adecuada conservación de estos bienes culturales, el Comité Peruano de ICOMOS viene proponiendo que el Centro Poblado de San Pedro de Challapampa se integre al circuito turístico que recorre las orillas del Lago Titicaca, en concordancia con la Carta del Turismo Cultural de ICOMOS Internacional.

Patrimonio republicano

La casa de la antigua hacienda Sojo, ubicada en Sullana, Piura, en la costa norte del país se encuentra en permanente deterioro. El mal estado de esta edificación – representativa del desenvolvimiento de la agricultura en el paso del siglo XIX al siglo XX – se debe a la ausencia de un programa de conservación tanto de monumentos cuanto de su entorno paisajístico, permanentemente amenazado por la tala indiscriminada de los árboles de algarrobo (especie en extinción).

Esta casa hacienda, edificada en el año 1910, ha sido declarada patrimonio histórico en el año 1974, cuando sus tierras habían sido afectadas por la reforma agraria. Conformaba una unidad tanto con su entorno paisajístico, cuanto con el sitio arqueológico de la cultura tallán, que floreció en ese lugar hasta la invasión española en 1532. Los conquistadores europeos quedaron sorprendidos por el liderazgo de sus mujeres, a quienes llamaron “capullanas”. Este sitio arqueológico también está en peligro.

La casa hacienda fue construida por don Miguel Checa y Checa, pionero de técnicas de regadío que en su momento tuvieron gran impacto en el desarrollo de la agricultura de la región. Carlos Checa Leigh, su descendiente, está firmemente comprometido con su defensa y conservación, actitud y gestiones que respalda permanentemente el Comité Peruano de ICOMOS. La principal y mayor amenaza que enfrenta la casa hacienda Sojo es la tala indiscriminada de los bosques de algarrobo y el movimiento de tierra por parte de la empresa Energoprojekt, encargada del proyecto Chira-Piura para la electrificación del área. La siguiente amenaza que enfrenta este paisaje cultural y monumento natural es que el INC se muestra incapaz de contribuir a la toma de conciencia pública para conseguir financiación para la conservación de este patrimonio regional y así promover nuevos usos para la casa hacienda Sojo. Aparentemente, la desidia del INC – como en otros casos – se debe a la presión de la empresa que desde hace casi cuarenta años efec-

túa las obras de ingeniería civil en la región, para que no interfiera en “su” trabajo.

Otro caso que documenta la problemática del patrimonio cultural es el de la torre de la Iglesia de San Agustín, ubicada en Arequipa. En enero del 2005, de manera subrepticia, se inició la demolición de la torre, que data del año 1868, con la finalidad de reemplazarla por una acorde con la fábrica colonial de dicho templo. La dirección regional del INC – en un gesto sin precedentes – convocó al Comité Peruano de ICOMOS para que hiciera una evaluación técnica de estos hechos. Esta oportuna intervención detuvo la demolición, al argumentar que era un grave error de concepto calificar a la torre como un “agregado”. El Comité Peruano de ICOMOS demostró – con los enunciados de la Carta de Venecia, las normas de Quito y la Carta de Burra – que la torre era ahora un componente del proceso evolutivo de la iglesia de San Agustín de Arequipa, que pudo haber sido reconstruido varias veces obedeciendo a las tendencias de cada época, pero siempre como un elemento inherente al monumento, no como ajeno al mismo.

Patrimonio del siglo XX

En 1987 la casa del sabio Julio César Tello, considerado padre de la arqueología peruana, ubicada en Miraflores, distrito de Lima, fue declarada monumento histórico por el INC. Posteriormente la misma institución le retiró su condición de monumento histórico acuñando así el término y concepto peculiar de “desmonumentación”. Este fue probablemente a pedido de los propietarios, ya que en el país actualmente se considera “una carga negativa” que un inmueble sea declarado monumento histórico por el INC, porque inmoviliza cualquier acción de mantenimiento que el propietario pudiera hacer en dicha edificación.

Esta casa fue adquirida ya construida por Tello en la década de 1930, para su uso como vivienda, y de inmediato le agregó los aditamentos prehispánicos que se pueden observar en la fotografía adjunta, sin modificar el interior, donde se reunía con sus colegas y alumnos. Tello falleció en 1947 y la familia vendió esta propiedad, que no fue modificada por los nuevos propietarios. En el 2005, es decir, ya “desmonumentalizada” la pusieron a la venta, por lo que el Comité Peruano de ICOMOS inició una campaña mediática para evitar que fuera derruida para dar paso a la construcción de un edificio de viviendas, a pesar de las amenazas de proceder a un juicio que esgrimían los propietarios. La población en general apoyó la iniciativa del Comité Peruano de ICOMOS y la casa ya no está en venta; pero como se puede apreciar en la fotografía adjunta, al momento de escribir estas líneas se encuentra en proceso de preparación para un nuevo uso que –se espera– sea respetuoso del exterior de esta casa mirafloresina.

El argumento del INC para proceder a la “desmonumentalización” de las casas y otras edificaciones del siglo XX es el cambio de uso de los barrios residenciales para permitir el funcionamiento de hoteles, restaurantes y otros negocios – así como derruir casas unifamiliares para dar paso a edificios multifamiliares – que la Municipalidad de Lima lleva a cabo desde el 2002, por iniciativa de las empresas constructoras. En el caso de Miraflores se trata de comprar casas construidas en la primera mitad del siglo XX dado que sus propietarios ya han fallecido o son muy ancianos y sus descendientes optan por disponer de dinero en efectivo antes que asumir la tarea de encontrar nuevos usos rentables al patrimonio arquitectónico mirafloresino del siglo XX. Este es un proceso que se acelera ante la actual incapacidad del INC para elaborar argumentos de por qué se justifica “salvar de la demolición” a determinadas edificaciones que así incrementarán su valor monetario y su prestigio.

En busca de una gestión cultural pública balanceada

En general el patrimonio cultural inmueble así como mueble e inmaterial del Perú está en peligro -entre otras razones- a comienzos del siglo XIX por las profundas dificultades que tiene el país para reconocerse como una nación multi y pluricultural. Este reconocimiento ha tenido a lo largo del siglo XX avances y retrocesos como fue la dación de la Ley N° 6634 de 1929 que es un primer esfuerzo por asumir esta diversidad cultural; sin embargo, luego ha venido una regresión ya que las Leyes N° 24047 de 1985 como N°28296 del 2005 asumen que la legalidad en el Perú comienza con la invasión española a los Andes; es decir con las llamadas Leyes Nuevas de 1542, que emite la Corona para regir sus recientes posesiones de ultramar.

Habida cuenta que a pesar que el Perú tiene puestas altas expectativas económicas en el turismo cultural, el gobierno central designa muy limitados recursos para revertir esta degradante situación, por lo que el Comité Peruano del ICOMOS despliega una estrategia de incorporar a la realidad nacional la normatividad conservacionista internacional que emana de las Convenciones de UNESCO de 1970 y 1972.

ICOMOS Perú

Para mayor información y descargar documentos periodísticos relacionados con la problemática del patrimonio cultural peruano, visite la página web de ICOMOS PERU <http://peru.icomos.org/>



The altar of the church of San Pedro in Coayllo, after the earthquake of August 2007 (Photo: Rommel Angeles Falcon)

Peruvian earthquake damages

On 15 August 2007, an earthquake of magnitude 7.9 struck the coast of Peru at Pisco, 250 kilometres to the south of Lima. As a result of this tragedy, thousands of families were affected when their adobe houses collapsed. Amid the grief and destruction, the valuable and varied cultural heritage of the region, including archaeological sites, colonial churches, and 18th and 19th century houses, also felt the effects of the earthquake.

The most badly affected areas were to the south of Lima and around Ica, a region that is home to the Nasca lines and the fine woven textiles of the Paracas culture, and that has more than 1200 archaeological sites of diverse ages.

The great monumental sites of the Late Intermediate and Inca periods (1100-1532 AD), with their characteristic architecture of mud brick, mud and stone or adobe, underwent the greatest damage; earlier, pyramid-shaped structures were less badly affected. The sites of El Salitre in Mala, Uquira in Asia, Tambo and Huacónes, Ungará, Huarco, Imperial and Canchari in Cañete have suffered collapsed and cracked walls, as has the important Inca site of Tambo Colorado in Pisco. In some cases, the humidity and salinity of the ground accelerated the deterioration caused by the earthquake. However, the worst damage occurred to the sites in the lower Chincha valley. At La Centinela, one of the biggest archaeological sites on the south coast, a great number of mud walls collapsed, especially in the largest pyramid. Other sites in the valley, such as Tambo de Moro, also experienced cracked and falling walls.

16th and 17th century churches were also damaged, the most serious case being the Church of the Company in Pisco, which was completely destroyed. The Hacienda San José and the churches of Chincha Baja and San Pedro de Coayllo in the valley of Asia have also suffered enormous damage.

This is a tragedy for Peru's cultural heritage. We hope to obtain materials for conserving damaged artefacts, and support and advice for the restoration of important monuments like the Church of the Company in Pisco, the historic Church of Coayllo, and sites like La Centinela, Tambo Colorado and Uquira. The Huaca Malena museum has been gathering local support and has begun a rescue operation involving 120 young people from the community.

The Peruvian National Institute of Culture has initiated an effective plan for the systematic recording of damage, as well as considering different options for the conservation of the principal sites described above and others identified as needing preservation.

*Rommel Angeles Falcón
Director of the Huaca Malena Museum*

(taken from IIC – News in Conservation, No. 2, September 2007)

Reactions to the earthquake of 15 August 2007

Given the immense damages to monuments and sites in Peru caused by the earthquake of 15 August 2007, ICOMOS International together with ICOMOS Peru offered their support to Alan García Pérez, President of the Republic of Peru, in a letter of 18 October 2007:

Señor Presidente:

En nombre del Bureau y Comité Ejecutivo del Consejo Internacional de Monumentos y Sitios (ICOMOS) le expresamos a Usted y a todos los peruanos nuestro pesar por el terremoto que los ha afectado.

Frente a hechos de esta naturaleza, y conocedores de los efectos que han tenido los movimientos tectónicos sobre los valiosos sitios y monumentos que su país posee, las instituciones internacionales, entre las cuales se encuentra ICOMOS y sus Comités nacionales en 150 países del mundo, nos ponemos a su disposición para la ejecución de las acciones necesarias que permitan garantizar la preservación del patrimonio cultural del Perú.

Los monumentos son las obras arquitectónicas elaboradas por una sociedad en determinado tiempo. Ellos representan la historia viva de un grupo social en un período histórico. Pero el monumento no estuvo aislado, formó parte de un ambiente cultural con otras obras y estuvo enmarcado en un paisaje natural. La integración de todos estos componentes les dan sus valores sociales y culturales; la pérdida de algunos los disminuye o altera. Estos valores son transmitidos de una generación a la otra, le dan continuidad y le sirven a la nueva para su identificación. Son símbolos de identidad, pues transmiten un contenido social e histórico, que es colectivo y, por tanto, lo comparten todos sus miembros. Por todos estos valores, indispensables para la integración de una nación, los monumentos deben ser protegidos y conservados.

ICOMOS sugiere que el Perú acuda a los profesionales especializados en el campo de la conservación de los monumentos, en coordinación con el Comité peruano de ICOMOS, y que se hagan esfuerzos para preservarlos mediante adecuadas intervenciones que eviten la pérdida irreparable del contenido histórico que ellos transmiten.

Asimismo, sugerimos:

- 1. La declaración del estado de emergencia para los monumentos ubicados en las zonas afectadas por los movimientos tectónicos, con el fin que se les brinde la atención técnica apropiada que garanticen su conservación.*
- 2. Que el gobierno peruano solicite al director de UNESCO, Francisco Bandarin, el apoyo económico a través del "Fondo de emergencia", que dispone para estos casos.*
- 3. La implementación de un Proyecto Especial para la rehabilitación de los monumentos, con autonomía de gestión y manejo de recursos.*
- 4. El otorgamiento de incentivos tributarios con el fin de promover la inversión privada en la recuperación de los monumentos afectados.*

Le saluda muy atentamente.

*Prof. Dr. Michael Petzet
Presidente de ICOMOS*

The consequences of the earthquake in Peru also have had an impact on the historic building fabric, especially on the rural archi-



The ruined Church of the Company in Pisco (Photo: Rommel Angeles Falcon)

texture and the very important tradition of building with adobe. It is a common reaction after earthquakes of this type to discourage the use of adobe in reconstruction, which however is a fundamental precondition for the preservation of vernacular settlement patterns that have developed over centuries. Therefore, the following statement by Julio Vargas Neumann (English version by US/ICOMOS) is very helpful:

Ante la controversia suscitada en el país sobre la pertinencia de la construcción de adobe, material de uso ancestral y vigente, y al hecho de que cerca del 50% de las familias peruanas no tienen la posibilidad de usar materiales industriales, los miembros del Comité Especializado de la Norma Técnica de Edificación E.080 Adobe, hacen de conocimiento a la comunidad:

Collapsed mud walls at the pre-Inca site of La Centinela (Photo: Rommel Angeles Falcon)



El sismo del 15 de agosto del presente año ha confirmado que las construcciones de adobe, ladrillo y concreto sin refuerzo adecuado, por falta de asistencia técnica, han colapsado y originado pérdida de vidas, aunque esto ocurrió mayormente en las construcciones de adobe, solución mas asequible para la población de menores recursos.

Las construcciones que han cumplido las especificaciones de la Norma Técnica de Edificación E.080 Adobe, no han sufrido daños estructurales, a pesar de la intensidad de éste y otros sismos, como lo demuestran las experiencias en Lunahuana, Pacarán, Zuñiga y Huangáscar (Cañete y Yauyos), Ica y Guadalupe (Ica), en el sismo del 15 de agosto del presente año y, Yacango y Estuquiña (Moquegua), Caplina (Tacna) y Azapa (Arica) en el sismo 23 de junio del 2001.

Luego de más 35 años de experiencia de investigación en el Perú, definiendo refuerzos que eviten el colapso, la Norma Técnica de Edificación E.080 Adobe ha sido inspiradora de las normas existentes o en proceso de otros países como: India, Nepal, El Salvador, Nicaragua, Marruecos, Brasil, Argentina y otros que comprenden la utilidad de transferir asistencia técnica a sus pobladores que autoconstruyen sus viviendas.

Invocamos a las autoridades del Gobierno Central, Regionales y Locales a difundir el uso correcto de las especificaciones de la Norma Técnica de Edificación E.080 Adobe incluida en el Reglamento Nacional de Edificaciones.

Existe la tecnología para reforzar este tipo de edificaciones nuevas o existentes y, la gran tarea es su difusión y capacitación, asumiendo la responsabilidad de atender la inevitable utilización del adobe como material de construcción.

*Ing. Julio Vargas Neumann
Presidente del Comité Especializado
NTE 080 Adobe*

In view of the controversy that has risen in Peru on the pertinence of building in adobe, an ancestral and still valid material, and of the fact that close to 50% of all Peruvian families do not have the means to use industrially produced materials, the members of the Specialized Committee on the Technical Building Code E.080 Adobe, make this announcement to the general public:

The earthquake of 15 August of this year has confirmed that adobe, brick and concrete constructions without adequate reinforcement due to lack of technical assistance, have collapsed and caused losses of life; and that the great majority among those were adobe because this is the most accessible and common construction solution among the poorer population.

In spite of the intensity of this last earthquake and of others in the past, constructions meeting the specifications in Technical Building Code E.080 Adobe, did not suffer structural damages, as demonstrated during the 15 August earthquake in Lunahuana, Pacarán, Zuñiga and Huangáscar (Cañete and Yauyos), Ica and Guadalupe (Ica), and in Yacango and Estuquiña (Moquegua), Caplina (Tacna) and Azapa (Arica) during the earthquake of 23 June 2001.

Resulting from more than 35 years of research experience in Perú to define reinforcements that will resist collapse, Technical

Building Code E.080 Adobe has inspired existing and still under development codes in other countries such as India, Nepal, El Salvador, Nicaragua, Morocco, Brazil, Argentina and others, where there is recognition of the need for technical assistance to convey such information to those who build their own houses.

We call upon the Central, Regional and Local Governments to disseminate the correct use of the specifications contained in Technical Building Code E.080 Adobe, as included in the National Building Regulation (Reglamento Nacional de Edificaciones).

The technology exists to reinforce this type of building, both new and existing ones, and the great task at hand is to assume our responsibility of looking after adobe as a viable construction material by making the specifications broadly known and providing training on the Code's application and use.

*Ing. Julio Vargas Neumann
President, Comité Especializado
NTE 080 Adobe*

ROMANIA Hope for Roșia Montana?

For many years ICOMOS has protested time and again against the plans of the Roșia Montana Gold Corporation (RMGC) (see *Heritage at Risk* 2002/2003, pp. 175/176 and *Heritage at Risk* 2004/2005, pp. 201-203). The project, which in spite of worldwide protests has been pushed on, is threatening the Roman and medieval mines and the small mining town in a scenic cultural landscape. A huge artificial lake filled with cyanides would endanger the entire region. After a visit to Roșia Montana, the President of ICOMOS once more spoke out against the project of the RMGC in a letter of 15 June 2007 to Călin Popescu-Tăriceanu, Prime Minister of Romania, also forwarded to representatives of the European Union:

Dear Prime Minister,

It was a great pleasure for me to visit Romania recently, particularly the well restored city of Sibiu, the 2007 European Capital of Culture, and Sighisoara, an outstanding World Heritage Site. I also visited Roșia Montana, the ancient Alburnus Maior, where a gigantic mining project is in its preparation phase. Through my contacts with Romanian specialists, I heard again about the plans of the Roșia Montana Gold Corporation which are threatening to destroy the environmental, historical, archaeological and architectural values of the site, one of the oldest and most valuable mining ensembles in Europe and around the world.

As you probably know ICOMOS (the International Council on Monuments and Sites), the organization I have the honor to preside, has already officially raised its concerns about the preservation of the natural and cultural assets of the Roșia Montana area several times: two resolutions at its General Assemblies in Madrid 2002 and Victoria Falls 2003 emphasized the responsibility of the decision makers with regards to this dangerous situation and an ICOMOS congress in Pecs in 2005 reiterated our organization's concerns about this matter and called upon all relevant authorities to take further steps in order to save both the cultural and the natural heritage in Roșia Montana: "ICOMOS rejects the project of the new gold mine of Roșia Montana. This dangerous technology threatens the natural heritage of the site and the fauna and flora of the rivers Maros and Tisza, as well as the cultural heritage of the old mines used from Prehistoric through Roman and Middle Ages, endangers equipment of the old mining technology as well as 18th-century architectural heritage of the small mining town. ICOMOS demands to stop the project immediately."

At the same time, specialists worldwide as well as prestigious scientific bodies such as the Romanian Academy have emphasized the risks the mining development would inflict. Apparently the damages to the natural and man-made heritage would be irreversible. In this light, we would be very interested to learn about the current status of the mining project, in particular the prospects of it receiving or not the required government approvals and permits. On the other hand, ICOMOS would gladly support any initiative for the preservation and enhancement of the historic monuments and sites of the area.

As the natural and the cultural heritage of Roșia Montana constitute a common asset of the Romanian as well as European citizens, we consider that the responsibility for their care and preservation are subject to both Romanian and European authorities. This is



One house after the other is bought by the Roșia Montana Gold Corporation (Photo: M.Pz.)

even more relevant since 1 January 2007 when Romania became a member of the European Union.

Under these circumstances, I can therefore only hope that you will be able to prevent the impending disaster in Roșia Montana.

Yours sincerely

*Michael Petzet
President of ICOMOS*

Shortly before this publication went to press we received the following press release on a decision by the Brasov Court of Appeal, which gives reason to hope that the fight against the disastrous project is not yet lost:

Roșia Montana/Romania; 27 November 2007 – The Brasov Court of Appeal yesterday annulled archaeological discharge certificate No. 4/2004 issued by the Ministry of Culture and Cults in order for Roșia Montana Gold Corporation (RMGC) to exploit the so-called Carnic Massif. The court's decision is definitive and means that Carnic's unique Roman and pre-Roman mine galleries as well as the entire Massif remain protected. Yesterday's ruling rejected RMGC's request to intervene but admitted intervention requests formulated by several Romanian NGOs; including the Pro Europe League.

Roșia Montana Gold Corporation (RMGC) is 80% owned by Gabriel Resources (TSX:GBU), a small, under-resourced and inexperienced Canadian mining company which plans to uproot the people of Roșia Montana to realize Europe's largest open-cast gold mine. The remaining 20% are owned by Minvest, a state-owned mining company as well as three minor shareholders. Archaeologists and expert institutions from Romania and all over the world have repeatedly protested over the destruction of Roșia Montana's archaeological

treasures that would be caused by RMGC's development.

According to the French mining archaeologists responsible for the excavations at Roşia Montana "in Carnic, antic mining networks (from Dacian times, identified as such for the first time, and from Roman times as well) remain of a striking coherence and in a remarkable state of conservation...." Carnic is protected under Romanian legislation (Law 5/2000) as cultural patrimony of national interest. However, in January 2004 Romania's Ministry for Culture and the Cults (MCC) issued archaeological discharge certificate Nr. 4 (DC No.4/2004), which effectively removed Carnic's protected status. The decision was provoked by RMGC's intention to exploit the massif's rich gold reserves.

In February 2004 Alburnus Maior initiated legal proceedings against MCC to prove that there exists no scientific and legal basis for discharge certificate No.4/2004. In a first ruling the Alba-Iulia Court of Appeal accepted on 21 June 2005 Alburnus Maior's case and annulled the discharge certificate. However, due to procedural technicalities Romania's Supreme Court accepted on 11th July 2006 RMGC's and MCC's appeal against the annulment, and sent the case for re-trial to the Brasov Court of Appeal.

During the debates that led to yesterday's ruling, Alburnus Maior¹ and the Pro Europe League² successfully proved, amongst other: a) that the Carnic Massif hosts archaeological vestiges protected as a monument of national interest and b) that the Romanian State has the obligation to employ administrative, technical and legal measures to protect this patrimony. Evidence submitted showed that the existence of archaeological vestiges is incompatible with open cast mining. During the case the NGO's also showed that in 2003 when a French archaeological team researched the massif they recommended that Carnic's archaeological vestiges should be restored and that their conclusions had been intentionally distorted by the Director of Romania's National History Museum, who turned them into a recommendation for discharge. Last but not least, when DC

No. 4/2004 was issued, the research of the area was far from being finalized and, according to Romania's mining law, MCC is not the competent authority to allow mining activities to take place on archeologically protected areas. Better still, an expert topographical assessment ordered by the court proved that the stereographical coordinates contained within the administrative act under discussion in fact corresponded to a territory in the county of Buzau, some 460 km away from Roşia Montana!

Yesterday's victory is the result of a legal process which lasted for almost four years and included numerous testimonies by archaeologists and expert institutions such as the Romanian Academy. According to Andreea Szabo, Alburnus Maior's lawyer, "This precedent setting case which has already paved the way for additional court victories reconfirms the authenticity of the arguments advanced by Alburnus Maior as well as the Alba-Iulia Court of Appeal and sanctions a certain attitude from the part of the Romanian authorities."

"Laws on the protection of our cultural patrimony are vital, and yesterday's ruling shows that they must take precedence over short-term economic interests. It's unfortunate that civil society groups have to resort to taking the Government to court in order to stop it giving the country's patrimony away to foreign mining companies. We are happy that this ruling shows that it is possible for citizens to hold the Government to account. This is a major set-back for Gabriel and the only thing they can do now is to yet again spend more of their investor's money by trying to challenge the decision", says Dumitru Dobrev, Pro Europe League's lawyer.

¹ The full written conclusions submitted by Alburnus Maior can be accessed on http://www.rosiamontana.ro/brasov/concluzii_serise_AM_19noi.doc

² The full written conclusions submitted by Pro Europe League can be accessed on http://www.rosiamontana.ro/brasov/Concluzii_CA_Bv_LPA.doc



View of Roşia Montana with three churches (Photo: M.Pz.)



Dilapidated façade in the centre of Roșia Montana (Photo: M.Pz.)



Farmhouse in Roșia Montana with entrances to medieval mines in the background (Photo: M.Pz.)



View of the valley that would be replaced by a cyanide reservoir (Photo: M.Pz.)

RUSSIA

20th-Century Heritage at Risk in Moscow and the former Soviet Union

A first approach to the topic of 20th-century heritage at risk in Moscow and the former Soviet Union was the case study "Russia – 20th-Century Heritage" in *Heritage at Risk 2002/2003*, presented by Natalia Dushkina on behalf of the Russian ICOMOS Committee (*H@R 2002/2003*, pp. 177-181). The contributions to the international conference *Heritage at Risk – Preservation of 20th-Century Architecture and World Heritage*, organised by public and scientific institutions in Russia and by international partner organisations in cooperation with ICOMOS on the occasion of the International Day for Monuments and Sites (Moscow, 17-20 April 2006) were already published in the Special Edition 2006 of *Heritage at Risk*. The conference passed the general *Moscow Declaration on the Preservation of 20th-Century Cultural Heritage* as well as a special *Resolution on Konstantin Melnikov's House and Collection*, thus highlighting the international significance of many famous monuments of Soviet avant-garde architecture and its architectural counterparts from the Stalinist years, but at the same time pointing at the huge dangers threatening the heritage of the 20th century in eastern Europe.

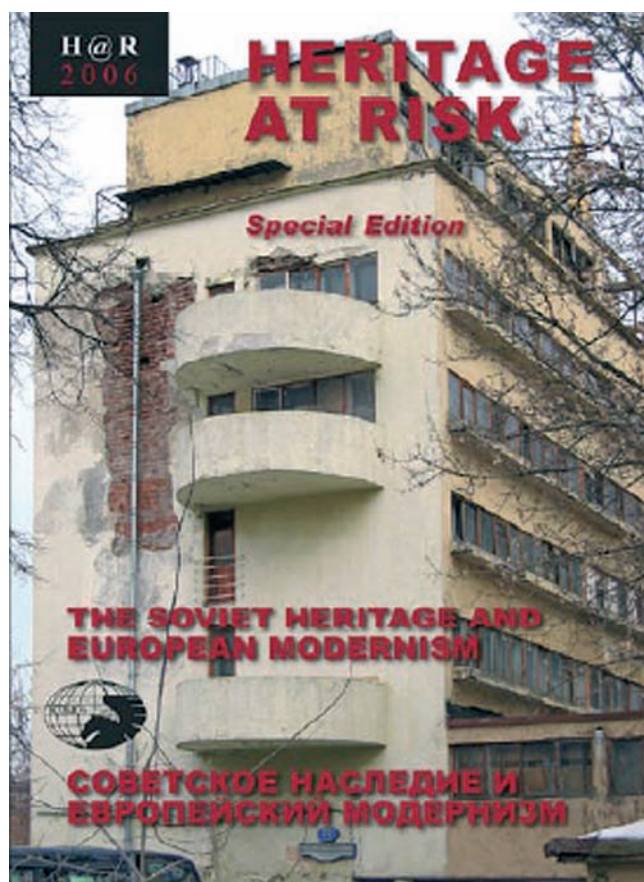
An important result of the conference in Moscow was also that during talks held with the Mayor of Moscow an extended co-operation with the City of Moscow was initiated. See also the following letter of 15 August 2006 to Mr Yuri Luzhkov, Mayor of Moscow:

Mr. Mayor,

Further to the very fruitful meeting we had with you on 19th April at your office, we would like to report that your proposal of establishing a formal co-operation protocol and work programme between ICOMOS and the City of Moscow has been given due consideration and is very well received. We now look forward to more direct discussions with your representatives to finalise a draft text that can be presented to the ICOMOS Executive Committee at its January 2007 meeting in Paris.

Last June in Rome, the Officers of ICOMOS received with great interest the report our President Michael Petzet and I gave on the Heritage at Risk conference held in Moscow on the occasion of the International Monuments Day, 18th April. We reported on the working meeting we had the privilege of holding with you, and on your innovative proposal of formal co-operation between the City of Moscow and ICOMOS. This collaboration would enable sharing experiences to enhance the protection and condition your city's remarkable heritage sites like the Kremlin or the world famous monuments of the 20th Century (e.g. Narkomfin Housing Complex; Melnikov House; Russakov and Kauchuk Club Houses; Shukhov Radio Tower or the outstanding Moscow Metro.) in a dynamic urban context which can be very challenging to their integrity, setting and use.

Next month in Edinburgh, we will expose your proposal to the whole Executive Committee of ICOMOS. We hope to be able to then work with your representatives on the detailed draft agreement which we will discuss with our International Committee on 20th Century Heritage, ICOMOS Russia, the Moscow Architectural Institute, and our international partners Docomomo and the International Union of Architects who attended our April meeting with you and your senior staff. We trust the co-operation agreement



Cover of the H@R Special "The Soviet Heritage and European Modernism"

can be finalised this autumn and submitted at the following meeting of the Executive Committee, next January in Paris. We look forward to meeting with you again and to work with your staff and representatives in the course of this process.

With best regards,

Dinu Bumbaru
Secretary General of ICOMOS

Visual Integrity of St Petersburg threatened by Gazprom Project

In a letter of 10 January 2007 to Ms Valentina Ivanovna Matvienko, Governor of St Petersburg, ICOMOS protested against the project of a 300-metre skyscraper designed by RMJM, winner of an international architectural competition for "Gazprom City" in which architects such as Daniel Libeskind, Herzog & De Meuron and Jean Nouvel had also taken part:

Dear Governor,

Gazprom is planning to erect an administration centre on the bank of the Neva river and at the mouth of the Ohta river, located exactly opposite the famous Smolny monastery. After the competition advertised by Gazprom the design by the British architecture firm RMJM, a pointed skyscraper of 300 metres, was declared the win-



Planned Gazprom skyscraper in St Petersburg (Photo: Gazprom)

ner on 1 December 2006. By 2016 the complex of buildings (office centre “Gazprom City”) is meant to be complete.

The “Gazprom” project in St. Petersburg is another example which shows that on the whole high-rise buildings are not acceptable in areas inside the historic urban landscape. The planned skyscraper would be situated inside the protection zones of the World Heritage site of St. Petersburg, for which the Government has already proposed its own parameters of protection concerning an area for which “the limiting height for buildings and facilities for intrablock development shall be equal to 48 m, if the expert examination comes to a positive result.”

ICOMOS endorses the already existing protests against this project. It will examine in detail the devastating consequences for the visual integrity of the Historic City of St. Petersburg (inscribed in the UNESCO List of World Heritage in 1990) and will inform the public about the dangers for the world-famous ensemble in its next *Heritage at Risk* publication.

I would like to ask you to take care of this matter and remain

Yours sincerely,

Prof. Dr. Michael Petzet
President of ICOMOS

Paintings of the Dwelling Houses in the Russian North (Archangel Region)

Paintings on wooden surfaces and interiors are one of the most important forms of folk art in Russia. In the Urals region, in Siberia and in the Russian north paintings on the façades and interiors of peasant houses were widespread. The question of when those paintings first appeared on the external walls of the peasant log houses is still open. In the 19th century only batten walls were decorated with paintings, but the use of battens in peasant constructions did not occur before the 19th century. That means decorating peasant log houses with drawings was apparently a novel phenomenon. The earliest paintings of peasant houses in the Archangel Region date from the 1840s, although painted buildings are mentioned in

sources from the 17th century. The façades and interiors of church buildings were also decorated with drawings.

Colourful paintings decorated the front gables of the houses, the so-called battened ‘hemming’ of pendent roofing and the balcony base, shutters and external architraves. Interiors were decorated with drawings on partitions, especially those forming the stove nook, movable pieces of furniture, cupboards, or in some cases doors and walls. Peasant artists decorated distaffs, birch-bark boxes, shaft-bows, sledges, and even cemetery crosses. Sometimes they produced utensils and tools and then covered them with paintings. That is why paintings in peasant homes in different parts of the northern regions form interrelated style complexes. The same artists often decorated interior elements of local wooden churches, such as the beams for the ceiling panels or the ‘heaven’, the iconostasis, lecterns and carved images, doors and portals. Paintings were done by professional or peasant artists. Sometimes they organised cooperatives of ‘dyers’, others worked as a family or did seasonal work far from home.

There are apparent parallels between peasant paintings from Russia and from Northern Europe, i.e. Sweden, Norway, Finland and Denmark. Similar geographical conditions, the history of cultural and trading contacts with the Archangel and Vologda regions produced common traits in that form of peasant art. Those interrelations could be proposed as the subject for an international research project, which could result in finding new data and comparisons.

From the artistic point of view, those paintings represent an independent and well elaborated part of folk art. One can discover

View of the chapel in the village of Glazovo in the Russian North (Kenozero)



several historic territories in the Archangel and the neighbouring Vologda regions where different types of painting existed in former times and are still observable. Those territories are the Poonezhye and Kargopolye, the area called Povazhye and the basins of the North Dvina, Pinega and Mezen' rivers.

Paintings of Kargopolye and Poonezhye (western parts of Archangel and Vologda regions)

The names of Poonezhye and Kargopolye have historically been used for the lands on the Onega river and around the Onega lake. They also border Karelia and in former times they were culturally and economically influenced by the town of Kargopol'. That town was first mentioned in chronicles from the 12th century and for a long period it was an important economic, political and trading centre in northwest Russia. Many interesting elements of construction techniques applied to wooden religious buildings and to dwelling houses are still applied together with particular customs and rituals that are practiced. They all bear witness to a distinctive folk culture preserved in the area.

Almost every village had its own chapel. The latter could be located in a place that seemed perfectly unusual – in woods, on riverbanks or lakeshores, in fields or at the village ends. The great number of chapels can be explained by the predominance of the old religious population from the 17th to the 19th centuries. The 'pogost' or a big churchyard including summer and winter churches, a bell tower and a graveyard put up in a village or a hamlet or nearby was also typical of the area.

From the architectural point of view, dwelling houses were very diverse in that territory. This can be explained by the variety of ethnic groups who lived there, namely Karels, Vepses, and Russians, all of whom had their own traditions and culture. Home paintings were very popular there, and a good number of buildings decorated both with façade and interior paintings are still preserved.

In northwest Russia a certain manner of folk painting emerged in the 18th century. Technically, it was based on a free brush touch and the application of white contour lines. Free and easy style of painting, bright colouring combined with technical virtuosity are



Painted gable on a dwelling house in Kargopolye and Poonezhye

the most distinctive features of that form of folk art. In addition, artistic workshops in the region producing illuminated manuscripts, icons, pictures, painted furniture and utensils influenced that manner a lot.

Some of those items preserved until today prove that the folk painting of houses of the later period followed in style this artistic school of the 18th and first half of the 19th centuries in many areas of the Russian north. In particular, that influence is apparent in floral patterns with rose motifs widely spread in the North. The bright polychrome palette of the Novgorod artists, the adherence to pure local tones, and the free manner of paintbrush movement developed in herbal patterns also deriving from Novgorod made up the source of that later artistic tradition.

That influence was often an immediate one. For instance, there is evidence that Mikhei Abramov dwelling in the Zaonezhye area acquired his skill in painting in the monastery and later taught his son Ivan Abramov who began to work with his father when he was 12 years old. Father and son painted churches, chapels and icons.

Peasant artists also decorated distaffs, birch bark articles, shaft-



Paintings on the balcony and gable of the house of Bechin in North Dvina; painter: Timofei Makarov

bows, sledges, as well as houses. Almost everywhere they worked not only at home but took to the road looking for commissions. For example, the Tarakanov brothers or artists of the Semyin family from the village of Maloye Konevo painted houses in the Kenozero villages and in other places.

The bush-shaped bouquet, the stretched or curved branch and complex floral compositions often in vases were the favourite pattern motifs of paintings. Bouquets were composed of lily-tulips, frontally-painted rosette-like flowers, apple-balls and roses. In between flowers and long, curved leaves, white, red, black and blue birds were painted. Rose-apples, rosettes and dog-rose flowers were veiled with pleached thin shoots, tendrils and curves. Frequently that type of composition included a picture of a lion. In gables of several preserved houses one can see the motifs of lion and grapevine side by side with rich floral patterns decorating a balcony. The vine symbolised prosperity and wealth of the house and a lion had protective functions.

However, it is important to underline that traditions of different ethnic groups are sometimes seen in peasant paintings. The interacting cultural and artistic traditions could serve as an explanation for the nearness in style and even the commonness of Russian, Karelian and Finnish peasant paintings on wood. From the 11th century the populations and folk art in these regions developed under similar historic and cultural circumstances and were under the influence of the same factors, traditions and phenomena.

Many houses (e.g. in Zadnyaya Dubrova village) are four-wall *izbas* and as a rule have four windows on their façades. The decorative paintings of those houses are combined with carved battens. The colour scheme of the gables harmonises with the ornamental paintings on the external architraves. The simplest type of decoration was colouring battens in stripes. The most widespread composition included a triple partition of the pendent roofing with flowers in the centre of each and blue gables with stars imitating a 'starry sky'.

The façade paintings of the house from Iglin Ruchei village show that the folk artist was influenced by the Art Nouveau style. The figures of the master and mistress were painted on the sides of the central gable window and the pendent roofing was decorated with pictures of 'exotic' fruits – pineapples, peaches, pears, and bunches of grapes painted on the white background. The floral pattern consists of roses amidst cornflowers, bluebells and other field flowers. Those paintings highlight the decorative character of the gable of that two-storey house.

There were also several pieces of painted furniture in the interior of the houses. Panelled partitions were often ornamented both with paintings and carving; a radiant rosette was the basic motif of the latter. The cupboard and drawer panels were decorated with paintings in dark blue and brown colours with white shades. Stylised flowers were symmetrically arranged and painted in rather a dry manner.

Paintings of North Dvina

In that territory, one can find several types of paintings related to three historic cultural areas. The first and most acknowledged artistic centre bears the name of the town of Verkhnyaya Tot'ma. Many famous artists worked there, but the most renowned and outstanding was Timofei Makarov. He was lame and received the related nickname Kalets. His father was also a painter who decorated distaffs, wickerwork boxes, shaft-bows, chests, etc, but also ful-

filled church commissions. Timofei worked with his father and most of the façades painted by him are still preserved in many villages. One of the most interesting examples is the house in the Keras village. Its colouring and picture of the 'paradise garden' perform wonders not only with floral patterns but also with pictures of animals, namely of an ox and a horse presented in heraldic manner.

The Chistyakov sisters, whose father was also a painter or '*malyar*', worked in that region, too. They acquired their mastery from him and decorated house interiors, cupboards, doors, partitions and façades. Their bright and colourful painting evenly covers the surface with a vivid and supple ornament. Their herbal and floral patterns are in an ornate style but composed harmoniously and symmetrically. In some cases, bushes symbolising 'a tree of life' and crowned with tulips are put into vases while hens walk about. There are also pictures of tulips found in ancient Russian books and northern manuscripts, on traditional Russian enamels of the 17th century and on the wall frescoes of Moscow stone churches, etc.

Paradise birds or the Sirin bird are depicted in those paintings in rather an ordinary manner, though the latter was a favourite figure always placed in the centre of the composition. The bird symbolised the joy of life and the idea of growing life force. Sirin was also a symbol of heaven and water and its cult survived the Christian epoch when it was linked to earthly happiness.

In the Upper North Dvina *izbas* interiors were decorated with another type of painting. For instance, paintings by the artists Yurkin, Orlov or the Zakochurin brothers dating from the end of the 19th century covered the fielded panels which partitioned off the stove. Interesting examples of doors leading to the cellar, of those closing the stove stairs and of others closing a wash-stand exist. All these were unique elements of fitted furniture in a peasant house. Paintings were in oils, their bright red or blue or rose background was covered with bunches of flowers of the most diverse and exotic types and shapes. The petals were outlined with white in a style which was not as graphic as in the previous area but very picturesque. Paintings were brightly spotted with roses and the entire living space of a house formed an ensemble, including the building elements and the furniture.

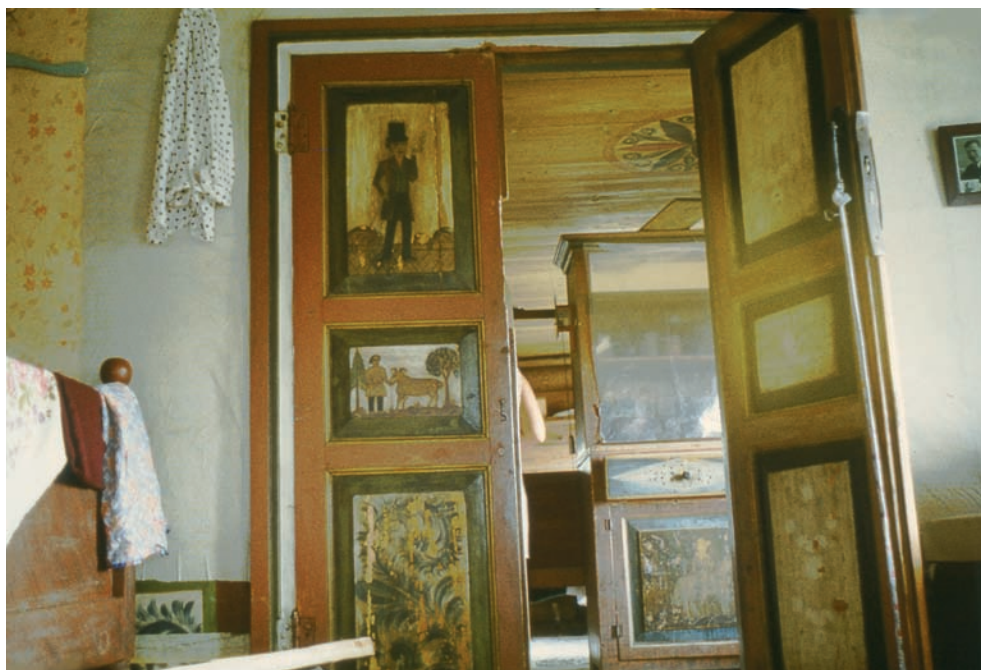
Paintings of the Lower North Dvina do not show birds or animals and are rather monotonous. The main ornament consists of floral rhombus patterns painted in bright sunny colours and on a light background.

Unfortunately all the houses mentioned above have not been put on the heritage preservation list at the federal or local level. They have not been studied yet by specialists from local or state museums, including the open-air museums.

Paintings of Povazhye

In some sense these monuments of folk art were luckier. Here peasant paintings resemble those of the Verkhnyaya Tot'ma area. The artists used the symmetrical composition of three flowers in the centre of a surface with stems and leaves stretching from it and with a white outline. Those paintings were made by foreign artists from the southern Kostroma region.

But that was the area where the Petrovsky family of artists, the most famous artistic family in the Archangel and Vologda regions, lived in the middle of the 19th century. Many houses here were painted by those artists who often showed the lion and



Painted door in the house of the Petrovsky family in Povazhye

unicorn motif, or a lion and a horse on the sides of a blossoming tree, or the pair of lions motif. A picture of a lion was typical for local monuments as the icon painters also used that exotic image. On an icon from the 17th century derived from the Vologda region in its composition and devoted to the Last Judgment the apocalyptic beast was presented as a lion with protruding tongue.

That heraldic type of composition was already used in ancient Russian art from the 16th century onwards. It is probable that an important role in the penetration of that motif into folk art was played by the emblem of the Moscow Printing Yard. Besides, a number of European utensils acquired at fairs, including crockery and dishes with pictures of heraldic character, were imitated.

The house of the Petrovsky family called 'Aleshkin' after the name of its master and the head of the family provides the most interesting examples of those paintings. The façade decorations were typical of those artists, but the interior ones were unique. Here the painted door panels showed particular pictures of peasant family life, e.g. a portrait of a master, a hunting scene, a peasant and a cow in the meadow, etc. The panels of the stove partition were also very picturesque and presented portraits of members of the tsar family and its retinue. Those paintings demonstrate both an urban and a European influence. It is known that artists from that family worked in St. Petersburg and theoretically could have had contact there with some foreigners from the Nordic countries.

Unfortunately that house is already demolished. At the beginning of the 1970s it was discovered by specialists, its paintings were renovated and after that it was put on the list of protected local heritage. It accommodated a branch of the local lore museum but neighbours in the village of Churkovskaya where the house was located gradually left it and the settlement was deserted. The threat that the house could be demolished emerged. In that situation workers from the Archangel open-air museum moved the main painted interior items to the museum. At the moment those paintings are included in the museum collection and presented on travelling exhibitions, but the museum has not succeeded in moving the house.

Another example of façade paintings by the Petrovskys used to be found in the village of Pakshen'ga. On the house gable portraits of its master smoking a pipe and his young mistress apparently dressed in urban vogue were painted. Under the balcony on the battened surface one could see protective pictures of lion and unicorn, flower bunches symbolising a tree of life and picturesque floral ornaments.

The fate of that house had much in common with that of the house mentioned above. The difference is that the deserted house was bought by an architect from Moscow in order to prevent its demolition and to renovate its paintings. Later on, the house was pulled down and the paintings were given to the Archangel Museum of Fine Arts where they were included in its collections. Peasant portrait paintings by the Petrovskys obviously belong to a rare phenomenon in the folk art of the Russian North and need further investigation. They demonstrate the mastery and individual artistic manner of the painter who may have been acquainted with European principles of interior decoration.

Paintings of the Mezen' and Pinega rivers region

In the 1880s a painter called Ivan Orlov worked in the Mezen' area. It seems that it was he who decorated the house of Vasily Klokotov which was one of the unique monuments of local wooden architecture. The house and farmstead, the social and cultural context of their formation and the history deserve particular investigation (this was undertaken by the author about 20 years ago and was linked to the project of moving the house to the open-air museum in Malye Korely). In practice the house was transferred only a year ago and recently its restoration began. Meanwhile it is still unclear whether the original façade paintings will be restored or if they will be replaced by a copy of the original preserved in the museum depository.

The battened pendent roof of the house was covered with a pattern consisting of flowers and grape bunches. The gable painting showed heraldic figures of lions with ducks and geese above them. In the same part of the gable one could see a picture of a man cross-



Semi-destroyed historic wooden house in Tomsk, Siberia (Photo: Jean-Luc Bruandet)

ing the river from one bank to another in the manner of a rope-walker (symbolising the transition to the other world). The external architraves, elements of the porch, the doors and other decorative details were painted red because that colour also has a protective function.

The interior of the dwelling space was quite traditional for that territory. It included the very interesting panelled partition separating the main room from the female space near the stove. Partition paintings represented flowers in vases which were executed in a graphic manner with white outlines together with sketches of diverse fenced foot-bridges.

Coloured paintings of the dwelling houses in sites near the Pinega' river are very simple and look like drawings of chess patterns with different colours of black, white and orange or others on the facades of the houses. Sometimes the red colour could also be found in the decoration of the windows.

On the whole the experience gained is explicit about all the difficulties of preserving peasant paintings and drawings in dwelling houses that are more than 150 years old and survive in a living rural environment. Modern constructions in the settlements on the one hand and the depopulation on the other result in losses to that very important and fascinating form of folk art. Of course, some of those painting can be preserved and shown in regional museums; some can be moved to open-air museums. However, local museums *in situ* could also be established on the base of such small architectural complexes in historical villages and hamlets, though that would need special decisions and organisational effort. The latter could only be successful with support from local and regional authorities, private business and the population.

Dr. Olga Sevan
Russian Institute for Cultural Research
Russian ICOMOS, ECOVAST

Wooden Historic Houses in Tomsk, Siberia

The pictures of decaying houses in Tomsk, provided to ICOMOS by the French documentary film maker Jean-Luc Bruandet, are just some examples of countless historic wooden buildings in Russian towns and villages threatened by decay. In 1980, there were about 2800 wooden houses in Tomsk which could be considered as monuments; by 2003, only about 1400 were left, 70 percent of which were in a very critical condition.

SERBIA

Protest against the Demolition of the National Theatre in Subotica

The theatre in Subotica (Province of Vojvodina), which also includes a hotel and ballroom, was erected in 1854 after designs by János Scultety. After 1900 it was altered and renovated several times. In a letter of 6 June 2007 to Mr Voja Brajovic, Minister of Culture of the Republic of Serbia, ICOMOS protested against the imminent demolition of this historic building:

Dear Minister,

ICOMOS (the International Council on Monuments and Sites) has been alerted through professional channels on the decision taken to demolish the National Theatre in Subotica – a cultural property with a 150-year-old history. We have further been advised that demolition of the annexes has already commenced.

This building is the sixth oldest masonry theatre built in the Carpathian Basin. Beside its historical value, it constitutes a significant component in the townscape of Subotica itself.

Considering the above, ICOMOS appeals to you in your capacity as Minister of Culture, and to the competent authorities in Serbia,

to call for an immediate halt to the demolition works. This is in order to reconsider the planned interventions and to protect the outstanding significance of this historic property, in particular the authenticity of both its exterior and its interior.

We hope that you will find a solution to preserve all the values of this historic building whilst still achieving your aims for the sustainable future of this cultural property.

Such a solution would demonstrate your government's commitment and support for cultural heritage, within the recognized dynamism of your emerging region, which currently attracts much interest in Europe and worldwide.

ICOMOS, as the international expert body in this field, would be happy to assist Serbia in any way in resolving this issue.

Yours sincerely

*Michael Petzet
President of ICOMOS*



The National Theatre in Subotica before its demolition (www.intbau.org)



The theatre during the demolition in November 2007 (www.kakanien.ac.at)

SLOVAKIA

Bratislava – Protected Area of Central Urban District at Risk

The last decade of the Communist regime was characterised by large scale demolitions of historic urban structures and traditional compact blocks were replaced by architecturally inadequate buildings. While most of these territories do not have very high concentrations of cultural and historic values they are representative of many Slovak historic settlements. The best examples of these historic areas were declared “protected areas” by the monument law at the end of the 20th century, with the aim of preventing further uncontrolled decrease of their cultural and historic values.

The central urban district of Bratislava, the capital of Slovakia, has been protected by law since 1992. In spite of this protection the district has continually been losing its historic and cultural values. The high numbers of already degraded original structures as

well as the fact that the protected area was too large were the reasons for reducing this area by half in 2005.

The decrease of cultural and historic values has been intensive and partly caused by the backwash of globalisation trends which have changed the originally provincial town of Bratislava into a European metropolis. The pressure from developers has been understood as part of the globalisation process. The loss of an emotional tie to the heritage of their forefathers is another problem. The absence of traditional continuity is reflected in the quality of contemporary architecture and the preference for modern rebuilding.

Despite these problems a fundamental part of the central urban district has been preserved by virtue of the compactness of the original urban fabric and its visual attractiveness.

In this context we would like to define the actual risk to the integrity and authenticity of the inner and outer zones of the historic town.

Inner zone of the town at risk:



Panorama of Bratislava's eastern territory



Square of St. Florian – loss of 19th-century character caused by inadequate new constructions

Inadequate modern buildings in the protected area of the central urban district



Large-scale demolition and erection of tall buildings on the site of an original compact settlement



- large-scale demolition of historic buildings, substituted by inappropriate new construction;
- out-of-scale new construction damaging the historic character of the original environment;
- loss of authenticity to buildings on the monument list.

Outer zone of the town at risk (eastern part of the territory):

- ad hoc construction of tower-blocks visible from the town's historic centre;
- increasing number of floors in original historic blocks.

In fact, these measures are referred to as “the principles of preservation, restoration and presentation of cultural-historic values” of this territory, and are carried out in collaboration with the chief architect of the city, the architects who elaborated the master plan and other specialists in the field of monument preservation.

As the prepared master plan has not been approved, it is very hard to control the developer's plans and intentions and the loss of historic and cultural values is continuing. The vague attitude of the municipality opens up possibilities for the realisation of unacceptable interventions into what remains of the historic urban structure.

Most other territories protected since the 1990s have had a similar destiny. If the long-prepared master plans are not approved soon and if adequate tools for monument preservation are not created, it is likely that this protected district, just as similar districts elsewhere in Slovakia, will definitely lose its authenticity and integrity.

Jana Gregorová
Pavel Gregor
ICOMOS Slovakia

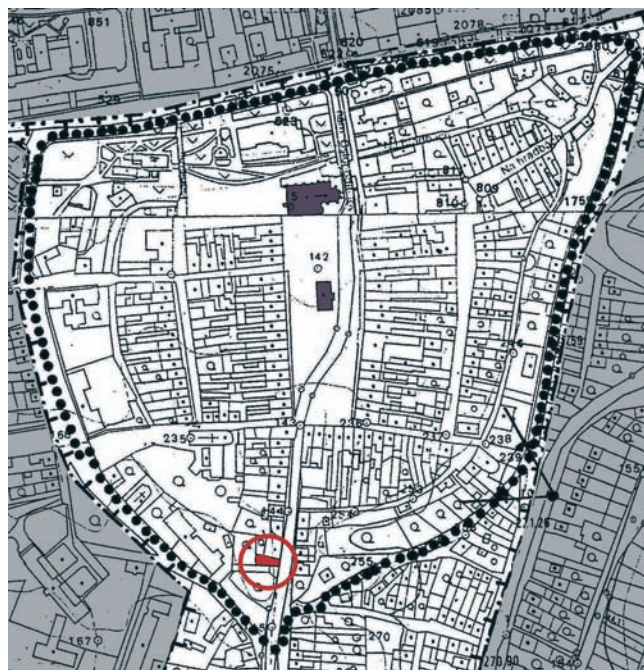
Risk from Development: Threats to monuments caused by ignoring valid legislation

While the previous part was devoted to the topic of threats to Slovakian protected areas in general, in this part we will focus on the threats to the cultural heritage by disrespect for the actual legislation. In our urban protected areas the key issue is not the inadequate legislation, but the ineffectual application of statutory regulations and the great pressure exerted by profit-oriented property developers. Disregarding the law is not unusual. There are many examples of illegal additions, extensions, rebuilding, etc. We will focus our attention on examples of conscious disregard of the law and the intention to legalise this activity after the fact.

Accompanying factors include the following:

- economic pressure to capitalise on valuable land;
- possibilities to realize large investments;
- desire to increase the social status;
- architects and investors who regard themselves as beyond the law;
- pressure to change the place's use and character; and
- changes of life style and production technologies leading to loss of details.

Many different reasons exist why monuments and their curtilage are threatened. Some of them were discussed in our previous reports. Here we are presenting two examples of monuments whose authenticity and integrity are currently under threat. We concentrate on these examples because they have been the subject of repeated efforts to avert the threats without success.



Map of Bardejov

1. House in Rhody Street 14, Bardejov

The first place is within a World Heritage site: the Bardejov Town Conservation Reserve. Originally a one-storey building, during the registration process the house was evaluated as a contributing element of the World Heritage site and was identified for retention. Only its maintenance was allowed. In spite of opposition from the Slovak Monument Office and the lack of building permission, an investor restored the ground floor three years ago and later added two floors. This illegal construction is situated near the castle moat and the arch bridge which are close to the southern gate and damages the authenticity of the fortified castle and of the town silhouette with its dominant landmark, the St. Giles Church, as viewed from the south? These building activities are incompatible both with the legislation and the conditions of protection of World Heritage sites. Other institutions as well drew attention to this incident, but without any positive result so far.

Bardejov, house in Rhody Street 14



2. House in Hlavna Street 107B and 109, Prešov

The problem concerns the re-building and vertical additions to remains of buildings in the designated ensemble of Prešov. In harmony with international principles of protection and re-vitalisation of historic towns (*The Washington Charter*) new housing has been allowed in this area from the beginning. A number of policies have been established to guide the construction of new buildings within the protected area. It has been determined that the form and scale of new buildings should be accommodated to older buildings within the same area. The latter usually have two floors, topped by cornice moulding ledges with pitched roofs. It is necessary to follow the height of the surrounding buildings and the measures of these houses. The original medieval parcelling of land should also be respected.

Although the originally approved project documentation contains these conditions, a house has been built which does not respect them. Its main facade has been extended by one floor, the ground plan measure of the third floor was changed, no indication whatsoever of a roof plane was realised and a project documentation was not approved. This illegal building is in use today. The owner applied for retrospective approval, but the Slovak Monuments Office did not authorise it. A solution still has to be found.

In summary we can state that this house:

- is not in harmony with the approved project documentation;
- exceeds the bulk and scale of housing in the area;
- does not respect the accepted territorial plan;
- is not adapted to the historic environment; and
- disturbs the panorama of the west side of the dominant square inside the ensemble.

Map of Prešov



Prešov, house in Hlavna Street 107B and 109

There are other equally negative examples of illegal building and/or restoration activities. In our country there is no institution that conducts building inspections. Sometimes illegal houses can also be legalised subsequently. An owner can obtain a building approval belatedly either by “an amendment to the project documentation before the end of building works” or by the “subsequent legalisation of a building”. Fines today are rather low so that they can be allowed for in the project budget. Unfortunately, the demolition of such buildings after they have been completed is almost impossible.

No doubt, similar examples of illegal buildings can be found in many countries of the world. Maybe in comparison to the realisation of huge investments in skyscrapers, large shopping centres and technological parks, etc, our examples are negligible, but they illustrate the enormous threat to the monument values of historic territories. The first example, above, is part of a World Heritage site. If we accept such activities in an important protected area like this, then any protected building and/or monument in a historic context is threatened.

Lubica Pičíková
ICOMOS Slovakia

SPAIN

Toledo and its Setting: World Heritage in Danger

The New Municipal Development Plan for the City of Toledo (POM), which was provisionally approved on 2 June 2006, seems to unhinge some of the points relevant for the protection of the World Cultural Heritage at the time of the nomination of Toledo for inscription on the World Heritage List. Independently of further developing of the existing planning on a municipal or regional level the commitments acquired by the State party when Toledo was submitted for inscription on the World Heritage List in 1985 in accordance with the World Heritage Convention remain binding for evaluating the present situation. In order to investigate whether these obligations have been met, in the case of Toledo – contrary to some other cases of earlier inscriptions in the World Heritage List – there are very detailed and precise instructions in the nomination dossier with information on the core zone, special planning zones and a “zone of respect and protection of the landscape and urban silhouette.” As the town of Toledo has decided to create new facts by following the New Municipal Development Plan and to start building developments which can hardly be reversed, it is ICOMOS’ view that the World Heritage Committee should at least be given the opportunity to reflect on time on the consequences for the World



El Greco, View of Toledo (Metropolitan Museum, New York)

Details of the Visigothic archaeological site and its destruction



Toledo, billboard for the development area “Vega Baja 1” on the grounds of the Visigothic archaeological site (Photo: M.Pz.)

Visigothic archaeological site with view of Toledo (Photo: M.Pz.)



Heritage status of Toledo.

Apart from the still respected planning zone of Los Cigarrales and the “special planning zone of the entrance of Toledo by the Madrid Highway” the only purpose of the new Municipal Development Plan seems to be – to put it simply – to prepare the last remaining plots of land in the surroundings of the core zone of the World Heritage for the construction of new buildings. Quite obviously there is a strong development pressure in the area of Toledo, so that under these circumstances it is difficult to make objections against additional extensions of the modern quarter in the east and southern side of the Tajo River, especially since this quarter was planned to be at a considerable distance from the historic city. Nonetheless, the development on both sides of the – so far unobstructed – view axis of the highway to Madrid would have devastating consequences for the familiar view of Toledo as an elevated and fortified city dominating its surroundings. From various important positions the planned housing developments on the hills belonging to the buffer zone would considerably harm the famous silhouette of the town and thus the visual integrity and authentic character of the World Heritage site.

By all means the historic city and the surrounding landscape must be seen as an inseparable unit, while the extensive development of large areas of the buffer zone is going to violate the integrity and authenticity of this outstanding ensemble. This concerns particularly the banks of the Tajo River (las Vegas) and the corresponding view axes towards and from the old part of the town. In this context the proposed development of the area of Vega Alta and Vega Baja (respectively located on the East and West sides of the old historic centre) must be seen as particularly critical; here the new Municipal Development Plan provisionally approved in June 2006 recognises as “developable” the land classified as “protected” by the General Municipal Plan for Urban Planning (PGMOU) provisionally approved on 28 November 1985 according to the documentation presented by Spain in December 1985 for inscription of Toledo on the World Heritage List, which led to the positive reso-

lution of the World Heritage Committee in November 1986. Only after the nomination had been submitted a great part of the Vega Baja was reclassified as “developable” land and its possible uses were also changed, without having previously informed nor consulted the World Heritage Committee. If the new Municipal Development Plan is definitely approved in the next months, one of the consequences will be that important areas of Vega Alta and Baja will be built up, causing the loss of the morphology, the distinctive character and the surrounding landscape of the town, which were considered as outstanding values for its inscription on the World Heritage List.

In this context, it is convenient to draw our attention to the famous paintings by El Greco where the entire cultural landscape around Toledo with the hillsides in the background and the river-side are depicted such as “*View of Toledo*” (Metropolitan Museum of Art, New York), “*Laocoön*” (National Gallery of Art, Washington, D.C.), which complements this view; furthermore the most famous “*View and Plan of Toledo*” (Greco House and Museum, Toledo) or “*View of Toledo*” in the background of the painting of *San José* (Chapel of San José, now in the Sacristy of the Cathedral, Toledo). It is evident that many people visit the wonderful town of Toledo attracted by the outstanding paintings of El Greco and will not tolerate if the “setting” of this town, painted by this artist in such a special way, is lost in an ever-increasing urban sprawl.

One of the ICOMOS’ most serious concerns, given the imminent risks observed through the excavation works already undertaken, is the area of Vega Baja because of the Visigoth remains preserved in the ground and representing an important epoch in the history of Toledo and Spain. The foundations and other remains of Visigoth buildings – probably unique in Spain and also substantial for knowledge of urbanism of the Visigoth culture – are presently being almost completely exposed in the course of a large-scale excavation and apparently there are no plans to preserve these important historic traces in their integrity. It seems necessary to remain that even

Old town of Toledo and Tajo river (Photo: M.Pz.)



the best documentations as results of excavations cannot replace the underground archive of an archaeological site. Excavations should therefore be better restricted to partial areas, unless emergency excavations are necessary (compare the recommendations of 1956 in the Charter of New Delhi: "Each Member State should consider maintaining untouched, partially or totally, a certain number of archaeological sites..."). Consequently, it is quite surprising to see the extensive use of bulldozers for an archaeological excavation, even if presumably the archaeologists working in Toledo are trying under enormous time pressure to save at least what can be saved. Nonetheless, when visiting the place it is reasonable to think: What will remain of the Visigoth's traces apart from the planned modern town quarter – which according to illustrations on the construction site signs looks comparatively banal? What will there be in the future as a reminder of the Visigothic tradition of Toledo? Moreover, faced with the building-up of these important open spaces we should be worried about certain view axes towards the historic city like the still existing possibility of contemplating the ensemble from a panoramic viewpoint, and also about the connection with the former Roman area and the Roman circus. Sadly enough, the circus is already being cut in two by a road, which presumably is going to be upgraded as an access road to the new town quarter?

The town of Toledo blends harmoniously into the surrounding landscape which is intimately linked to its characteristic physiognomy. Both the natural and cultural values of this particular setting are a substantial part of the ensemble which cannot be understood without the adjacent valley of the Tajo River and its Vegas Alta and Baja.

If the new Municipal Development Plan (POM) is definitely approved, this will result in an irreparable loss of the above cultural and natural values, the urban model, the morphology, the authenticity and the integrity of the World Heritage of Toledo. This will also mean the loss of its character, its identity, its panoramic views and its landscapes, which have been – and still are – protected in a considerable extent by the Spanish regulations and by the UNESCO Convention for the Protection of the World Cultural and Natural Heritage.

Surely, it still must be possible to avert the dangers to the World Heritage site of Toledo in connection with the new Municipal Development Plan. That is why ICOMOS invites the responsible authorities and institutions to make an effort for preserving the integrity and authenticity of Toledo, which should be used and transmitted to future generations in the best possible conditions.

Michael Petzet
President of ICOMOS
July 2006

Possible Impact of the Spanish High-Speed Train (AVE) on the Church of the *Sagrada Familia* in Barcelona

In Barcelona the proposed construction of an underground tunnel for passage of the Madrid-Zaragoza-Barcelona-French border line of the Spanish high speed train (AVE) has generated public alarm as a result of cracks already appearing in buildings in the city of El Prat de Llobregat where the tunnel is presently under construction. There is serious concern about a possible repetition of this phenomenon in the city of Barcelona. At the same time, a heated public debate has arisen about the suitability of the route chosen for the

underground passage of the train through the center of Barcelona, because of the possibility that the construction of the new tunnel might damage nearby buildings. This has also caused concern among members of the construction committee of the Church of the *Sagrada Familia*, i.e. specialists and cultural heritage associations and other concerned groups, because of the potential negative impact of the AVE on the integrity of the monument, mainly owing to the close proximity of the church and the new train line.

In view of this situation, the Spanish Committee of ICOMOS, after examining the assessment made by the construction committee (CC) of the Church of the *Sagrada Familia* as well as the geological and chemical reports provided by the CC on the potential impact of the high speed train on the church; and after consulting other specialists and analyzing the case in the light of the provisions of the World Heritage Convention, submits the present report to the competent authorities in World Heritage and the institutions involved in its defense for all pertinent purposes:

Preliminary considerations

The projected route of the AVE line Madrid-Zaragoza-Barcelona-French border includes the construction of an underground tunnel for passage of the train at the point where it crosses Mallorca Street in Barcelona. This tunnel will be approximately 12 m in diameter and will be located at a depth of 30 m and at a distance of 3-4 m from the Glory façade (main façade) of the Church of the *Sagrada Familia*. To prevent potential damage from the tunnel construction and the passage of the high-speed train, the tunnel construction team has proposed to build a reinforced concrete slurry wall 240 m long and 42 m deep, composed of 1.5 m piles separated by 2 m. The distance from this wall to the foundations of the church will be 1.75 m and 0.75 m to the tunnel.

The church is a unique and structurally complex monument of large proportions, volume and weight, and when it is finished it will reach a maximum height of 170 m and have towers 120 m high (Glory façade). The already built central nave reaches a height of 45 m and its roof, now under construction, will rise to 70 m. The columns of the central nave branch at a certain height, forming a light tree-like structure, which, according to the temple construction committee, "is vulnerable due to its fragility to possible differential movements greater than those foreseen in the construction project for the church." The towers of the Nativity façade, declared World Heritage, reach a height of 110 m and belong to an earlier period of construction. Because of this, they rise on foundations that are shallower and less rigid than the rest of the church.

The Nativity façade and crypt of the *Sagrada Familia*, direct work by the architect Antoni Gaudí and located in this church, were recognized by UNESCO as works of outstanding universal value and were included on the World Heritage List on July 15, 2005. Although the rest of the church is not included in the work of outstanding universal value, it forms a "whole" with the declared property, i.e. a single architectural unit (from a conceptual, functional, spatial, structural, volumetric viewpoint), and is therefore also subject to protection. The legal figure for its protection is that of a "buffer zone" (or setting) of a World Heritage property.

In the dossier for declaring the Nativity façade and crypt of the *Sagrada Familia* World Heritage, which was evaluated by the UNESCO World Heritage Committee at the initiative of the Kingdom of Spain, their inclusion on the World Heritage List is justified on the basis of complying with criteria I, II, III and VI

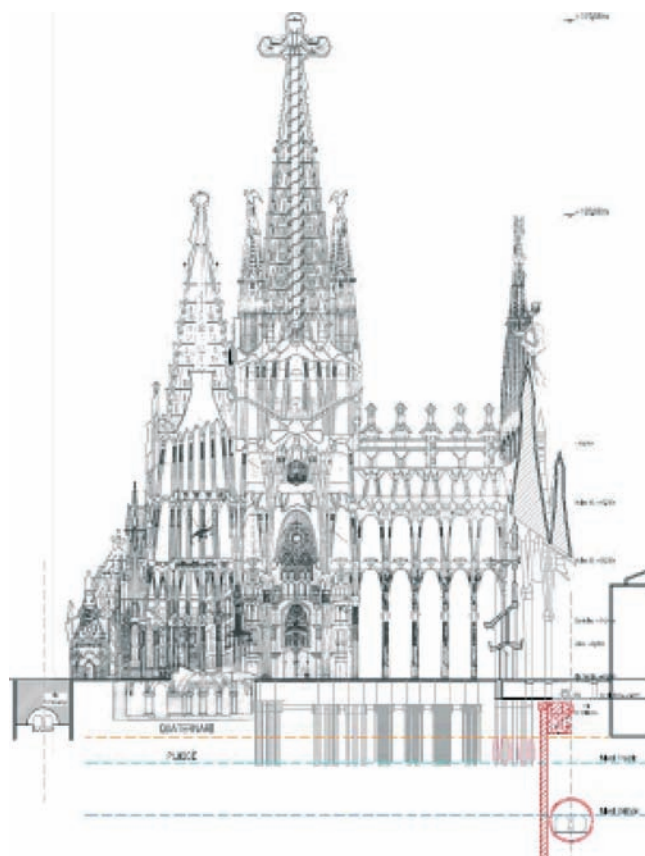
The Spanish State, as a signatory of the World Cultural and

Natural Heritage Convention, has the responsibility and the obligation, among others, to ensure the conservation and transmission of the cultural heritage included on the World Heritage List for future generations (Art. 4), because they are unique and irreplaceable properties of exceptional universal value. It also has the obligation (Art. 6) not to take any deliberate measures that directly or indirectly damage this cultural heritage.

Reports consulted

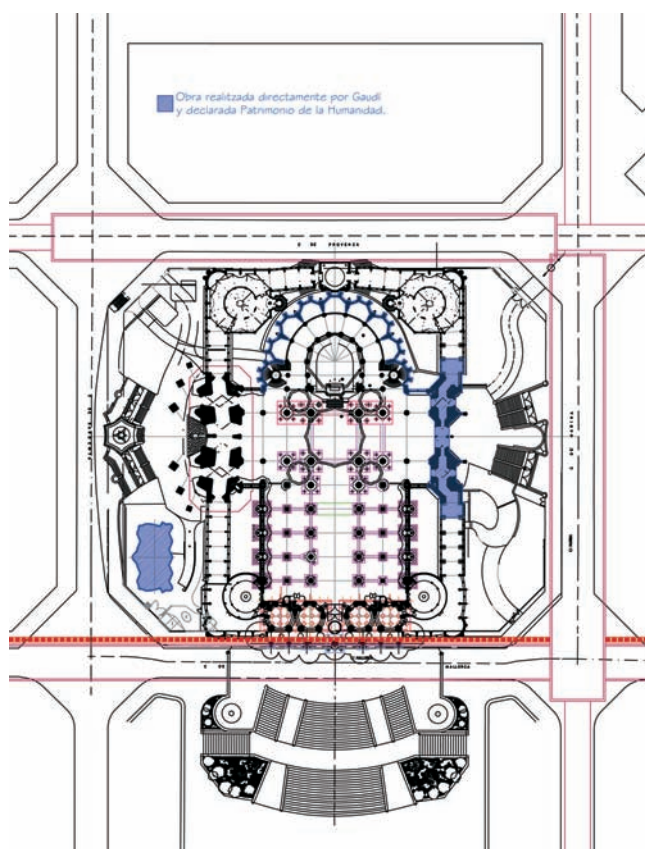
With regard to the potential impact of the proposed tunnel on the building elements of the church, the reports consulted underline the following:

- The monumental nature of the church.
- For the above reason the need for more careful precautions to be taken than usual in project design and execution of the works.
- Concern that the works for construction of the tunnel and protective wall do not adversely affect the integrity of the church.
- Consideration of the structural complexity and unity of the church complex.
- Concern about “the fragility and structural vulnerability of the church to differential movements greater than those foreseen in the construction project for the church”. These movements could be caused “by possible differential settling of the foundations of its supporting elements caused by probable incidents during tunnel construction or use or during construction of the pile wall for protection of the church”. They could also be caused by “future geological movements, such as washout of sands from increased water flow caused by reduced water passage due to the barrier of the pile wall barrier, or as an effect of the final weight of the building on the Pliocene ground underneath that could damage the structure of the tunnel.”
- It is also noted as a building experience that “during their construction the Nativity towers experienced a settling of a few centimeters due to their weight and the characteristics of their stone and lime mortar foundations, which caused cracks in the façade and adjacent windows”. It can be inferred from the above that as a consequence of the new shallower and less rigid foundations any damage occurring to the church would be greater than on the previous occasion.
- The consideration that the predicted maximum movements or displacements cannot be guaranteed, but only estimated, because their calculation is based on the assessment of a very complex and heterogeneous medium such as the subsoil, which may contain hidden features. As a consequence of this and due to the fragility and massiveness of the church, “the damages that may be caused will probably be irreparable”.
- The consideration that in addition to potential irreparable damage to the structure of the church, there is a risk of physical injuries to persons from possible falling objects.
- The projected tunnel “must be excavated in Tertiary soil (Pliocene) formed by decarbonated sands and layers of clay and marls below the water table level”. This soil is classified by Dr. Riba as “poorly cohesive and soft”.
- The consideration that the pile wall does not totally guarantee the protection of the church.
- The negative impact that could be caused to the church by “possible deterioration over the years in the reinforced concrete structure proposed by ADIF, since it is located partially and permanently below the water table level and very close to the



Barcelona, project for a high-speed train (AVE) underneath the main façade of the Church of the Sagrada Família

Church of the Sagrada Família, general plan



church foundations, which remain above the water table level.”

- The lack of consideration in the informative study of “possible natural or intentional accidents that could affect the work of the brilliant architect Gaudí”.
- Concern about the “impact of the vibrations on the fragile structures of the church caused by the passage of the train”. Once the tunnel has been built, high-speed passage of the trains consisting of several 80-ton cars will produce waves of vibration that will be transmitted to the ground both through the air and directly through the rails. The vibrations will propagate through the ground to the foundations and from there to the building structure. This concern is based, among other reasons, on the fact that in the informative study an evaluation is missing of the dynamic impact that will be caused by the vibrations produced on the fragile structure and foundations of the church and on the pile wall. In addition, there is no study on how these vibrations may affect the durability of the church, the vaults and the rest of the building structures. The pile wall as currently proposed is not considered to be a sufficient protective measure against this type of impacts.
- Therefore, the proposal to avoid potential damage to the monument by moving the tunnel away from it.

Conclusions

Due to the high cultural value of the Church of the *Sagrada Família* in Barcelona the conservation of its integrity is imperative, especially if one considers that the UNESCO included the Nativity façade and crypt on the World Heritage List for their outstanding universal value. For this reason, in accordance with the World Cultural and Natural Heritage Convention, the responsible bodies must use all the means and measures at their disposal to guarantee the monument's integrity and avoid any possible damage.

It is noted that the current project for the tunnel and protective wall for the church calls for their construction within a few centimeters of the monument, which, due to its structural fragility and the nature of the underlying ground, could affect the foundations and cause differential settling, which might damage the structure of the church. The predicted maximum displacement cannot be guaranteed, but only estimated, because its calculation is based on an assessment of a very complex and heterogeneous medium such as the subsoil. High-speed passage of the train may also produce vibrations that could affect the foundations and structure of the church. To our knowledge, no study on the dynamic impact on the foundations and structure has been made, and we consider that a pile wall is not an effective protective measure against this type of impact. In summary, the project submitted does not offer sufficient guarantees for a conservation of the integrity of the built work or the work pending construction, and may cause irreparable damage to the monument and possible accidents.

A new project needs to be developed in which extraordinarily complex and detailed tests, analyses and studies are performed in an attempt to minimize the risk, which would then be used as the basis for designing new protective and safety measures if they are feasible. Even so, and in spite of the quality of the possible studies and projects, there would be no absolute guarantee, given the complexity of the ground and the monument.

In view of this, it would be recommendable to choose another route further away from the monument so that the high-speed train will not pose any risk to the integrity of such an irreplaceable heritage property as this work by Gaudí. At the same time, the compe-

tent State authorities in World Heritage protection are reminded that under the World Heritage Convention they have the obligation to take appropriate measures to prevent possible irreparable damage to the monument and the loss of its integrity.

ICOMOS Spain
Madrid, 1 February 2007

Sobre la Incidencia del Proyecto del Nuevo Teatro, Auditorio y Centro Cultural de Lugo en la Muralla Romana de la Ciudad y su Entorno, Bien del Patrimonio Mundial

El proyecto de Nuevo Teatro, Auditorio y Centro Cultural de la Ciudad de Lugo, de los arquitectos Marcos Parga e Idoia Otegui, se ubica en el histórico edificio del antiguo Hospital de Inválidos, también conocido como Cuartel de San Fernando.

El antiguo Hospital-Cuartel se halla situado en el casco histórico de la ciudad, en el entorno inmediato, a menos cincuenta metros, de la Muralla Romana de Lugo que rodea el núcleo histórico de la población.

En el año 2000 la Muralla Romana fue incluida por la UNESCO en la Lista de Bienes Culturales Patrimonio Mundial, como monumento.

El edificio del Hospital de Inválidos- Cuartel de San Fernando

Se trata de una construcción barroca-neoclásica para la que, según las últimas investigaciones históricas, el Arquitecto Mayor de las Obras Reales, Francisco Sabatini, ordenó formar plano, perfiles y cálculo de la obra, a cuyo fin comisionó al ingeniero militar Bartolomé de Amphoux. Este último, en 1779, se encargó de las trazas y la dirección de obra, aunque el proyecto sería revisado y corregido por el mencionado Francisco Sabatini, que ostentaba el cargo de Director y Comandante del ramo de Caminos, Puentes, Edificios de Arquitectura Civil y Canales de Riego y Navegación. Se conservan documentos y planimetría en los archivos General de Simancas y Militar de Madrid.

Las obras se concluyeron en 1790. La planta del inmueble es rectangular y dispone de patio porticado de dos alturas y cubierta regular a dos aguas. El edificio resulta equilibrado, de sobrias y austeras líneas; su construcción obedece a los parámetros técnicos, funcionales y estilísticos de la arquitectura militar de la Ilustración. Su importancia, independientemente de su valor histórico, le viene dada por su tipología, ya que en ella se combinan, por un lado, los avances de la Ilustración en materia sanitaria y hospitalaria (adaptada a los inválidos militares) y, por otro, su función militar como cuartel. La escasez de arquitectura militar hospitalaria de esta época confiere al edificio una singularidad y un gran valor cultural y arquitectónico. Singularidad y valores que no se han sabido, o no se han querido, reconocer.

Su presencia urbana, arquitectónica y social en la ciudad es notable. La proximidad del cuartel a la muralla, su importancia y la fuerte impronta militar del mismo hicieron que el nombre del santo rey que ostentaba el cuartel fuese, también, el de una de las puertas de acceso a la ciudad de la muralla, la más cercana al establecimiento militar.

La función militar del cuartel es innegable. Al tiempo de resolver el acuartelamiento de la tropa en la ciudad y de atender a los inválidos militares el cuartel se concibe como elemento de defensa estratégica de uno de los accesos más importantes a la misma. Por esta razón se puede decir que, *en el momento de la construcción del cuartel, éste, forma con la muralla una unidad*. Su realización será el fruto de la aplicación de los últimos conocimientos y estrategias militares de la época.

Permitirá, además, el control de la población civil lucense. La muralla, perdida en gran parte su capacidad defensiva a mediados del siglo XVIII debido a las nuevas técnicas militares, verá incrementarse su potencial de defensa y control con la construcción del inmediato cuartel. En consecuencia, entendemos que puede considerarse el cuartel como parte de la función defensiva de la muralla y parte funcional e histórica de la misma.

Protección de los valores culturales del Patrimonio Mundial de la muralla y su entorno

De acuerdo con la Convención del Patrimonio Mundial (1972), España, como Estado parte reconoce la obligación de identificar, proteger, conservar, rehabilitar (poner en valor) y transmitir a las generaciones futuras el patrimonio cultural inscrito en la Lista de Bienes Patrimonio Mundial, mediante la actuación de las Administraciones competentes en materia de Patrimonio Cultural.

Todos los bienes inscritos en la lista del Patrimonio Mundial deben conservar al máximo la integridad y la autenticidad de los valores que dieron lugar a su inscripción. Según disponen las vigentes "Directrices Prácticas para la Aplicación de la Convención del Patrimonio Mundial", en su apartado 96: *«La protección y gestión de los bienes declarados patrimonio de la humanidad deben garantizar que el valor universal excepcional, las condiciones de integridad y/o autenticidad en el momento de la inscripción en la lista se mantengan o mejoren en el futuro.»*

En referencia a la zona de amortiguamiento (entorno de protección) las mismas Directrices disponen en su párrafo 103: *«Cuando la conservación adecuada del bien lo requiera, deberá establecerse alrededor del bien una zona de amortiguamiento»*.

El párrafo 104 de las mencionadas Directrices precisa que: *«A los efectos de la protección del bien propuesto, una zona de amortiguamiento es un área alrededor del bien cuyo uso y desarrollo están restringidos jurídica y/o consuetudinariamente a fin de reforzar su protección. Para ello se tendrá en cuenta el entorno inmediato del bien propuesto, perspectivas y otras áreas o atributos que son funcionalmente importantes como apoyo al bien y a su protección. La zona de amortiguamiento deberá determinarse en cada caso mediante los mecanismos adecuados. La propuesta de*

inscripción deberá contener detalles sobre la extensión, las características y usos autorizados en la zona de amortiguamiento, así como un mapa donde se indiquen los límites exactos tanto del bien como de su zona de amortiguamiento.»

En el caso de la Muralla Romana de Lugo, la Documentación Técnica incorporada al Expediente de Inscripción como Bien Patrimonio de la Humanidad considera al recinto intramuros de la ciudad como Zona de Amortiguamiento. Esta zona viene definida por los límites de aplicación del PEPRI (Plan Especial de Protección y Reforma Interior) vigente en el momento de la inclusión de la muralla en la Lista del Patrimonio Mundial. En consecuencia, la normativa de aplicación urbanística será la del PEPRI y los parámetros de conservación, como mínimo, los existentes en ese momento. En el expediente se señala también que el recinto intramuros está declarado Conjunto Histórico artístico por Decreto nº 443/1973 de 22 de febrero y, por esa razón, desde el punto de vista cultural será de aplicación la Ley 16/1985 del Patrimonio Histórico Español.

La importancia de la zona de amortiguamiento en la conservación del bien se subraya en el párrafo 107 de las Directrices. Dice así: *«Aunque las zonas de amortiguamiento no suelen formar parte del bien propuesto, cualquier modificación de la zona de amortiguamiento realizada con posterioridad a la inscripción del bien en la Lista del Patrimonio Mundial tendrá que obtener la aprobación del Comité del Patrimonio Mundial.»*

En la misma documentación del Expediente de Inscripción se hace constar como edificio de interés el "Hospital de Inválidos o Cuartel de San Fernando", pues por los dos nombres es conocido.

Por otra parte, de acuerdo con la Legislación Española, no puede negarse que el Hospital de Inválidos-Cuartel de San Fernando, por su carácter militar y defensivo vinculado estrechamente a la muralla, tiene la consideración de Bien de Interés Cultural en la categoría de monumento. En efecto, la Ley 16/1985 de 25 de junio de 1985, del Patrimonio Histórico Español, en su Disposición Adicional segunda, dice que *"se consideran de Interés Cultural y quedan sometidos al régimen previsto en la presente Ley los bienes a que se contrae el Decreto de 22 de abril de 1949"*. Este Decreto determina que *"todos los Castillos de España quedan bajo la protección del Estado, que impedirá toda intervención que altere su carácter o pueda provocar su derrumbamiento"* y ordena, al mismo tiempo, la redacción de un Inventario "lo mas detallado posible" de castillos existentes en España. Este inventario, aparecerá publicado, por la Dirección General de Bellas Artes, en 1968, bajo el título de "Inventario de los Monumentos Militares españoles"² y será un intento no perfecto ni definitivo (según se reconoce en la misma publicación) de sistematizar la protección de los monumentos militares españoles al amparo del Decreto de 1949. Posteriormente, y en la misma línea que el

Lugo, vista panorámica del cuartel en la actualidad



Lugo, proyección del resultado del proyecto (PO2 arquitectos)



Inventario, sobre este mismo Decreto y con la misión también de clarificar conceptos, se emitió una Circular por la Dirección General de Bellas Artes del Ministerio de Cultura, el 1 de junio de 1981, en la que, a tenor de la misma, se desprende que a efectos de protección este Decreto protege como monumentos genéricos todos los restos de construcciones militares históricas existentes en España. Amplía, al igual que sucede con el Inventario, el concepto de “castillo” y lo extiende a toda la arquitectura militar quedando ésta, en consecuencia, bajo la protección del Estado.

Ignorada esta circunstancia por las autoridades competentes en materia de patrimonio cultural, se da la circunstancia inversa de que el edificio en cuestión, que sí había sido catalogado por el ayuntamiento, fue posteriormente descatalogado en 1997.

La disposición adicional primera de la Ley 8/1995 de 30 de octubre de 1995, del Patrimonio Cultural de Galicia, considera bienes de interés cultural los declarados con anterioridad a su aplicación.

El hecho de que el Cuartel de San Fernando no esté incluido en el Registro General de BIC, por las razones que sean, no excluye que no deba ser reconocido como tal y, en consecuencia, protegido y conservado por las autoridades competentes en la materia, de acuerdo con su consideración de BIC. Así mismo se considera que esta irregularidad jurídica debe subsanarse a la mayor brevedad.

Nuevo uso y adaptación del antiguo edificio al mismo

El proyecto prevé un nuevo uso para el edificio, proponiendo destinar el antiguo cuartel-hospital a Nuevo Teatro, Auditorio y Centro Cultural de la Ciudad de Lugo. El nuevo uso, totalmente distinto de la función primitiva, precisa para integrarse en el viejo edificio de una operación traumática. Operación mediante la que se transformaría profundamente su tipología de planta rectangular con patio central (así señalada en el Expediente de declaración) para convertirla en una U resultante de la destrucción del ala correspondiente a la fachada posterior del edificio histórico. La U se cierra en el proyecto con una nueva construcción, de estética contemporánea, que alberga la sala del auditorio, la caja escénica y otras dependencias. Con la intervención propuesta, el antiguo patio o claustro pierde un ala y sufre una alteración drástica de sus dimensiones y su función, quedando convertido en un gran “foyer” cubierto. Las tres alas restantes se ven notoriamente modificadas en su estructura al ser rehabilitadas con la finalidad de ubicar en ellas los nuevos espacios destinados a usos culturales (escuela de música, mediateca, salas de exposiciones y polivalente, área administrativa, cafetería-restaurante, etc.). Por otra parte, debido a exigencias técnicas, la caja escénica proyectada sobrepasa volumétricamente en exceso el nivel de cubierta original. Cubierta

que, a su vez, ve transformada su imagen de elemento unitario que engloba las cuatro alas del cuartel por otro de cierre, a tres aguas, de las alas de la U. El patio que resta, después de incluir en él la sala y ser destinado una parte a “foyer” se cubre con una nueva cubierta-visera que permite la entrada de luz cenital. Esta nueva cubierta-visera enlaza con la de la caja escénica y estará construida con materiales totalmente ajenos a los tradicionales del monumento. La caja escénica sobresale de la fachada y cubierta original y por su volumen, dinamismo de la forma, materiales, color y textura rompe de manera violenta el carácter equilibrado y sereno del hospital-cuartel, el carácter del conjunto histórico y, al mismo tiempo, las visuales protegidas de la muralla. El ala derribada será substituida por una nueva construcción que originará una nueva fachada, de estética y materiales nuevos que enlazan con los de la caja escénica desnaturalizando al edificio histórico y su unidad compositiva.

De todo lo dicho anteriormente se deduce que el nuevo uso propuesto, de realizarse, destruiría los valores culturales protegidos por los que la muralla de Lugo fue incluida en la Lista del Patrimonio, motivo por el cual resulta totalmente desaconsejable su realización.

Lugo, proyección del resultado del proyecto (PO2 arquitectos)



Consideraciones generales

De los apartados anteriores se deduce que, de acuerdo con los criterios de la Convención del Patrimonio Mundial, los valores culturales por los que fue declarada la Muralla de Lugo deben ser conservados al máximo en su autenticidad e integridad. Los elementos a proteger son los definidos en el momento de su inclusión en la Lista del Patrimonio Mundial y la normativa legal de aplicación debe garantizar, como mínimo, los parámetros de protección existentes en el momento de su inclusión en dicha Lista. La conservación se refiere no solo al monumento propiamente dicho, sino también a su Zona de Amortiguamiento (entorno de Protección).

La Muralla de Lugo se ve afectada por la propuesta de nuevo Teatro, Auditorio y Centro Cultural en su entorno de protección en los siguientes aspectos:

- **Visuales:** Debido al nuevo volumen y a la forma, materiales, color y texturas propuestas, las visuales se ven alteradas negativamente al romper el equilibrio existente en el momento de la antedicha inscripción. La obra, de realizarse, afectará de forma notable y negativa al entorno visual de la muralla, así como a la armonía espacial y ambiental existente entre el edificio y el resto del conjunto histórico. Al mismo tiempo, se cambiaría la volumetría original del histórico Hospital-Cuartel perdiéndose con ello sus serenas y equilibradas formas y proporciones. La nueva fisonomía del edificio y los nuevos materiales crearían también un contraste con las formas y con los materiales, colores y texturas existentes. Esta reforma supondría, en consecuencia, un cambio muy importante en la configuración espacial y visual del Hospital-Cuartel y, por ende, de su imagen propia y de relación con la muralla y edificios circundantes. La nueva imagen resultaría, sin lugar a dudas, muy alejada de la existente en el momento de la inclusión de las murallas en la Lista del Patrimonio Mundial y, por tanto, protegida.

- **Hospital de Inválidos-Cuartel de San Fernando:** De realizarse el proyecto presentado supondría la pérdida por destrucción de los valores patrimoniales (tipología, volumen, estructura, concepto arquitectónico, carácter, espacialidad, significación histórica, ciudadana y militar, etc.), en su autenticidad e integridad, del antiguo edificio señalado de interés en el Expediente de Inscripción en la Lista del Patrimonio Mundial y considerado BCIN de acuerdo con el Decreto de 22 de abril de 1949 y la Circular de la Dirección General de Bellas Artes, del Ministerio de Cultura, de 1 de junio de 1981.

El proyecto de Auditorio, de construirse en el antiguo Hospital-Cuartel, causaría un grave e irreparable daño al edificio al desvirtuar y destruir su singularidad, su significado histórico y sus valores culturales y arquitectónicos fundamentales. Cualidades por las que merece ser respetado y conservado sin alteraciones, ya que se conservan muy pocos ejemplares de este tipo y en su estado de autenticidad e integridad.

- **Entorno urbano:** La construcción del nuevo auditorio significaría la pérdida de los valores urbanos, espaciales, formales, ambientales y referenciales de este sector del centro histórico lucense que da soporte y forma parte inseparable del entorno protegido de la muralla.

El problema, como puede apreciarse, no es únicamente de mantenimiento de las visuales existentes en el momento de la inscripción

en la Lista del Patrimonio Mundial, lo que ya de por sí es suficientemente importante, sino, también, de conservación de un edificio histórico de interés y del carácter y ambiente urbano de la zona que, obviamente, el nuevo proyecto alteraría de forma muy sustancial con la introducción de unos volúmenes, unos materiales y un diseño totalmente ajenos a los existentes. El nuevo edificio, de realizarse, adquiriría una dimensión espacial y una singularidad que desequilibraría el conjunto protegido.

Existe un defecto grave inicial, de planteamiento, al proponer un cambio de uso tan radical en el antiguo edificio sin tener en cuenta la obligación, por Ley, de conservar los valores culturales preexistentes. Si se quiere realizar el nuevo Auditorio en el Cuartel de San Fernando, los condicionantes espaciales, funcionales y técnicos son tan fuertes y tan grandes que no existe otra alternativa que no conlleve la destrucción previa del monumento para así poder ubicar los nuevos espacios. Pero esta solución, como se puede deducir de lo expresado en los apartados anteriores, es totalmente incompatible con la obligación de conservar los valores patrimoniales culturales, tangibles e intangibles, derivada de la inclusión de la muralla de Lugo y su entorno en la Lista del Patrimonio Mundial. Por esta razón, se considera conveniente la realización del proyecto del nuevo Teatro, Auditorio y Centro Cultural de Lugo en otro lugar que no reúna los condicionantes del Hospital-Cuartel y que no afecte negativamente al entorno de la Muralla según se ha explicado.

Recomendaciones finales

Se recomienda muy especialmente a las autoridades responsables de la Xunta de Galicia y del Ayuntamiento de Lugo que cumplan escrupulosamente las normas de actuación y los criterios de intervención inherentes a la aplicación de la Convención del Patrimonio Mundial para, en primer lugar, poder permitir la mejor conservación de la muralla de Lugo y del carácter de su entorno, evitando con ello las posibles afectaciones visuales negativas derivadas del proyecto en cuestión y, en segundo lugar, para poder conseguir en toda su integridad la conservación del antiguo Hospital de Inválidos-Cuartel de San Fernando. Edificio éste, de carácter monumental, protegido por la inscripción de la muralla en la Lista del Patrimonio Mundial al formar parte de la zona de amortiguamiento y considerado, de acuerdo con la Ley del Patrimonio Histórico Español, BIC en la categoría de monumento. Por estos motivos se solicita que dichas autoridades no autoricen la construcción del proyecto de auditorio en el antiguo Hospital-Cuartel.

Se recomienda también que las autoridades competentes realicen las gestiones necesarias para dar a conocer pública y formalmente la protección legal conferida al Hospital de Inválidos-Cuartel de San Fernando, como monumento que es, en virtud de la Ley del Patrimonio Histórico Español.

Finalmente, se recomienda que el Cuartel-Hospital de San Fernando se destine a otro uso compatible con su categoría, que no afecte a sus valores, a su autenticidad y a su integridad y que sea igualmente respetuoso con los valores espaciales, formales y ambientales de este sector del centro histórico lucense.

Madrid, 2 de mayo de 2007.

Vº Bº

La Presidenta del Comité Español de ICOMOS
Fdo: María Rosa Suárez-Inclán Ducassi

Seville: Comments on the Planned Construction of a Skyscraper by Cesar Pelli

The announcement of the construction of a 178-meter high building in Seville, to be erected very close to the boundary of the historic city center and the Monastery of the Cartuja and in clear competition with the landscape of the Giralda – one of the city's three properties inscribed on the World Heritage List – has caused deep concern in the Spanish National Committee of ICOMOS. The construction of this skyscraper would not only have a large impact itself, and but would set a precedent for the construction of new skyscrapers. It would also be a shift in the urban scenery from the landmarks, which from the perspectives of history, heritage and identity are of true value, towards an approach undertaken in cities which due to a lack of other urban landmarks resort to skyscrapers as a symbol of their identity. Seville can do without this type of elevated structure without losing any of its identity, and without becoming a victim of this false nostalgia for presumed modernity. Modernity is achieved in another way in European cities. Rather than being determined by the height of the new buildings, modernity can be shown through other aspects, also quantitative, but especially cultural and qualitative. This seems more suitable to express the open spirit, the creative capacity for new ways to make the city habitable, and the openness to other more sensible, just and balanced territorial and urban models.

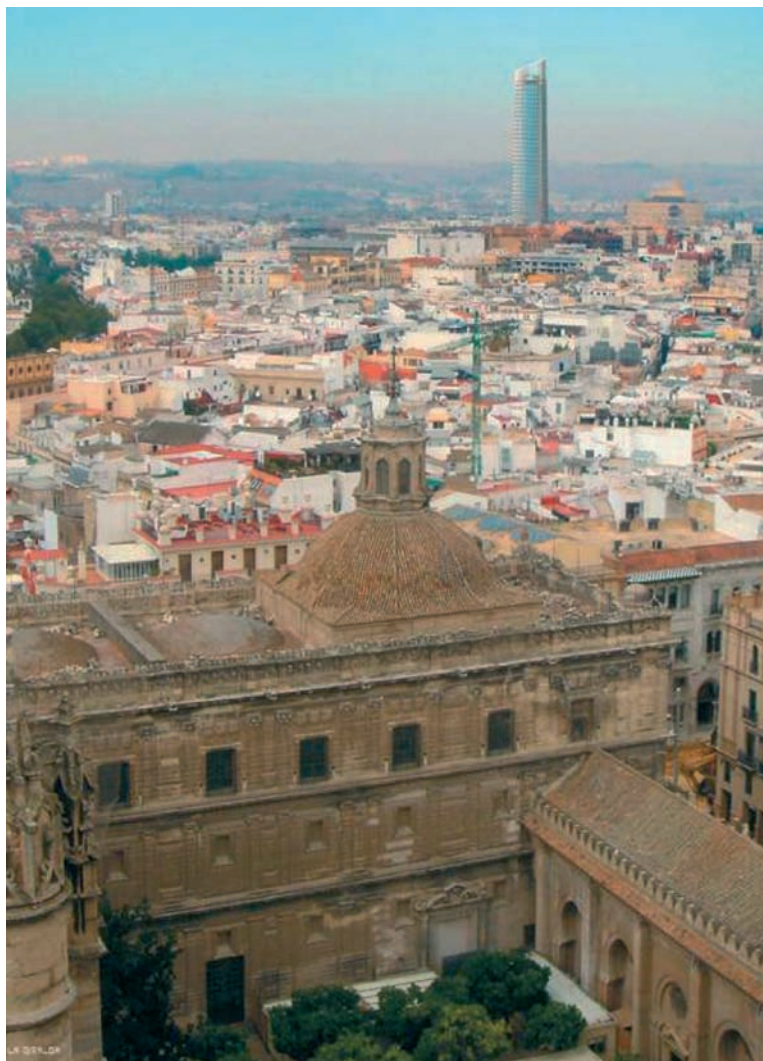
In view of the serious threat posed by this operation already approved both by the municipal and regional authorities, we recommend that the international ICOMOS team in charge of World Heritage affairs cause the creation of a board of experts in cultural heritage to assess the impact of this intervention. If an international contest of ideas was chosen to select the building, which included, in addition to the owners of the land, a group of experts on architecture, a report is now needed from experts of the same standing on cultural heritage conservation, especially on properties declared World Heritage, and experts on heritage landscape to assess the landscape impact of the planned building. It should not be forgotten that, according to the World Heritage Convention, the inclusion of three of Seville's monuments on the World Heritage List carries the obligation to ensure the conservation of their authenticity and integrity, and this does not only concern the buildings themselves, but also the implicit intangible cultural values (the harmonious relation with the immediate and distant environment, views, the preservation of the atmosphere, urban and landscape skylines, etc.). The city as a whole and the landscape of Seville are ultimately much more important than the quality of design of a single building, especially if this building will alter the visual appearance of the city.

Madrid, 7 May 2007

María Rosa Suárez-Inclán Ducassi
President, ICOMOS Spain

¹ (Textos Básicos de la CPM de 1972, Edición de 2006, UNESCO WHC, sufragada por el MCU de España con cargo a los FEP del Convenio suscrito con el Centro del Patrimonio Mundial)

² Inventario de Protección del Patrimonio Cultural Europeo IPCE. España-2. Monumentos de Arquitectura Militar. Inventario resumido. Florentino PEREZ EMBID. MADRID 27 DE JULIO DE 1968. (En esta obra se justifican los conceptos que dan pie a la circular de la Dirección General de Bellas Artes del Ministerio de Cultura, de 1 de junio de 1981 relacionando los castillos con la arquitectura militar y de defensa a nivel de protección).



View of Seville with planned skyscraper



Another view of the skyscraper project in Seville

THAILAND

Cooperation on Cultural Heritage Conservation

Since the beginning of 2006, newspapers, magazines and other media have published frequent news items on threats to our nation's cultural heritage. These have given perceptions on conditions of cultural heritage at risk to a certain extent. The media reported not only several cases of theft, illegal diggings and smuggling of ancient objects which are high in historical and aesthetic values; but also demolition and plans of demolition of many "at risk" buildings and communities. These demolitions are profit-driven and completely ignore the social and cultural dimensions of a place. These incidents, which are probably the fastest-paced catastrophe and most difficult to cure threats, have occurred frequently both in urban and rural areas.

One of such cases involves the shophouses (Charoenkrung 52, Bangkok) built circa 1926 to the designs of a French architect. The buildings are home to the Wang Li community which takes its name from the family who built the houses and later donated the land to the Wat Yannawa temple. The proposed development of the area as a shopping centre has been prominent in the news since the end of 2006. The community members, tenants of Wat Yannawa, were unaware of their houses' architectural and historical values and the rich history of their area prior to the incident. They pleaded with the Fine Arts Department to register their community as a National Monument in order to protect their community but the 81-year-old buildings fail to meet the Department's criteria (minimum age 100 years).

In 2004, the landowner, the Wat Yannawa temple, filed a law suit to evict the tenants. The court required that the tenants move from the land by 4th January, 2007 but found that the temple had to pay compensation. However, many tenants have refused compensation and have refused to move. Nevertheless, the law enables the temple to evict the tenants and demolish the shophouses. In this case, conservation and development appear to be resolutely at odds.

Nevertheless, not all "at risk" buildings and communities are facing a dead-end. The Mahakan Fortress and its community are an example of a successful resolution of the issues. The Mahakan fortress is part of the remains of Bangkok's fortifications built by King Rama I (reigned 1782 – 1809). The area beside the Mahakan Fort, between the old city wall and the canal, is occupied by a community living in a group of wooden houses described as "a rare complex of vernacular architecture". After a long period of struggle, a solution has been reached by collaboration from several parties, both public and private, including wholehearted cooperation among community members, that the community will be developed into a centre for learning and exchange of knowledge on historical and cultural issues, as well as being a leisure area and tourist attraction. Thus the community, whose members also act as property



House in Wang Li community

Half-demolished house in Wang Li community



Wang Li community (Charoenkrung 52)



caretakers, is ensured its stay on the land. This scheme also conforms to the Rattanakosin Island Development Plan by emphasizing on integration of historical, cultural, and living dimensions as the core of development.

Natural threats to cultural heritage are also critical. Last year's heavy rainfall and flooding damaged a great number of monuments, for instance, the collapse of the pagoda at Wat Phan On and Chang Phueak Gate in Chiang Mai; and the disintegration of bricks, the main construction material of Wiang Kum Kam ancient town which had been submerged under water for months. The overflow of northern rivers also caused flood in the Central region which affected both local dwellings and temples on the river banks. A number of monuments in several provinces, especially Phra Nakahon Si Ayutthaya, Ang Thong and Sing Buri were damaged. Monuments on the northern side of Ayutthaya City Island were greatly affected, as well as those on the river banks i.e. Wat Chai Wattanaram. The Fine Arts Department has initially estimated that the number of damaged monuments represents approximately 10 percent of the total number of monuments in Thailand (approximately 4,000 – 5,000). Natural threats such as the above-mentioned flood, however, are in large part due to human-induced environmental changes.

Amidst the crises which threaten valuable monuments, buildings, communities and relevant arts, organizations which are responsible for protection, conservation, and information distribution both directly and indirectly, i.e. the Fine Arts Department, public and private academic institutions, associations (e.g. Association of Siamese Architects), foundations (e.g. Lek – Praphai Wiriaphan Foundation), and published media etc. are doing their best to help preserve the nation's heritage in a sustainable way.

With awareness in the values of buildings and communities at risk which still exist in every part of the country, the Association of Siamese Architects, in cooperation with the Nippon Paint Co. Ltd., Stonehenge Co. Ltd, Discovery Museum Institute, and ICOMOS Thailand, has organized an "On-line Inventory of Heritage@Risk Projects"; a competition programme aimed to encourage students, professors, and architects to participate in searching, surveying, and collecting data on buildings, communities, and monuments which are valuable in historic, archaeological, social, cultural, and artistic terms. Several groups joined the competition and all the collected information will form the basis of a cultural heritage at risk inventory that will continue to be built on.

Although news-reports on the conditions of cultural heritage and its conservation are disseminated only by small and medium-sized organizations and are of interest to only a limited number of people at present, cooperation and wide distribution of information concerning cultural heritage to the society is certain to catch a wider circle of interested groups and people in the long run. Such information will also raise awareness and recognition of values in monuments, ancient objects, buildings and communities in historic, archaeological, social and cultural terms. Conservation would then



Wooden house, Mahakan Fortress community

cease to be an isolated issue that relies on only one organization; instead it would be a mission of cooperation and participation of several parties. Such participative planning has been demonstrated in a number of successful recent projects.

Case Studies reported by Cultural Heritage Conservation at Heart Network Group

Timber Bridge with Tiered Roofs, Wat Som Kliang, Nonthaburi

It is recorded that Wat Som Kliang was once a (probably) deserted temple called "Wat Sangkhadet". An evidence of its old age is a Vihara (shrine) which is contemporary with the bridge.

The historical site layout is that the original entry to the temple was from Khlong Khue Khwang canal. (Other parts of this canal are known as Khlong Bang Sano, Khlong Hua Khu and Khlong Wat Phai which connect Khlong Bang Yai at Wat Tha Banthoengtham to Khlong Mahasawat around the Wat Si Rueang Bun area). Such approach is in the opposite direction to the present one. The new approach has separated the community along the canals from the temple, which has turned to face the road rather than the waterway. Due to the impact of modern transportation the Bridge, the old entrance to the temple and linkage between the temple and the community, has gradually lost its use and meaning.

Wooden houses, Mahakan Fortress community





▲ Wooden structured bridge with tiered roofs, Wat Som Kiang, Nonthaburi ▼



▲ Ho Trai (Scriptures Hall), Wat Chang Khong, Chiang Mai ▼



The Bridge is testimony to the flourishing history of orchard communities, whose settlement is at least 450 years old, along the banks of the old Chao Phraya river which has now been channeled into the Khlong Bangkok Noi and Khlong Maenam Om Non.

In terms of cultural landscape and the Central region way of life, it indicates a connection between three mysterious words that lead to a realization of self: community, temple, and Khlong (waterway).

In terms of architecture, it shows a clear wooden structure, a good example of its type and an valuable source of instruction for architectural students as long as it survives intact.

In terms of connection and transition, it is a meeting place between

Land and land	Sky and water
Sunlight and waves	Religious establishment and daily living
Past and future	Present life and next life
Merit-making	Knowledge and virtue
intention and superb craftsmanship	
Truth and beauty	Poem and space

If we allow ourselves time to be quiet and listen...

Ho Trai (Scriptures Hall), Wat Chang Khong, Chiang Mai

This Ho Trai, or Buddhist Scriptures Hall, was built in 1903 as recorded in a document dating from 104 years ago. The hall is a 2-storeyed plastered brick building with Chinese style structure. Decoration consists of stucco and carved wood of local craftsmanship. The upper floor is decorated with mural paintings. The architecture is a mixture of Lanna and Burmese styles.

- This building is a highly valuable cultural heritage due to its:
- Being a representative of the history of Chinese community in Chiang Mai that indicates the role of the Chinese in Buddhism. That is, a new group of influential people who came to replace the noblemen.
 - Being valuable in terms of its architectural style. The building is the only example in Chiang Mai of a Scriptures Hall with Chinese structure in the Lanna-Burmese style.
 - Containing evidence of mural paintings in gouache technique. The paintings depict a tale "Prince Suwat and Nang Buakham" from Pannas Jataka. It is important evidence of the development of Lanna mural paintings.

At present, the hall is under threat due to negligence. Moreover, a new building adjacent to the back of the hall has caused rainwater entry



Ho Trai (Scriptures Hall), Wat Chang Khong, Chiang Mai, detail

and moisture in the scriptures hall. Apart from this, the setting of the hall has been compromised by inappropriate landscape management. This may also lead to further problems for the building in the future.

Two Ancient Chinese Shophouses with 5 Units, Pattani

Although both buildings are only shophouses of commoners, they possess high historic value for their part in the administration and settlement of Chinese immigrants in Thailand. They also provide valuable evidence for comparative studies of the architecture of the Chinese diaspora.

Value of the Buildings

Architectural value

The buildings are among the earliest groups of Chinese architecture in Thailand, which are evidences of architectural evolution in terms of structure and the use of materials that had developed from Chinese style buildings of the earliest date.

Social value

The buildings are evidence of the Chinese immigrants who played highly significant roles in the structure and development of Thai society.

Historical value

Both Chinese style shophouses, built more than a century ago, as well as other Chinese-style buildings in the area, are evidence of the role of Pattani as a port city and trade centre where people of a diversity of nationalities, races and religions have come to live, work, and settle in past centuries.

Scientific value

The buildings are highly valuable in architectural studies, i.e. space planning, design of shape and form, materials, construction techniques, colouring and decoration, and especially useful for comparative studies of urban dwellings of overseas Chinese in Southeast Asian towns.

Present Conditions and Threats

These shophouses are still in use, but a point of worry is that No. 220, which is used as an electrical appliances repair shop on the ground floor, is rather untidy. That may lead to deterioration due to lack of maintenance. Besides, the building is not used as dwelling, thus it is not occupied full-time.

Another point of concern is the deterioration of decorative elements, especially those on the gable tops and the top parts of the walls where the stucco and paintings are suffering decay caused by weathering and aging.

Threats to the buildings have been caused by nature, animals, and the dwellers themselves; however, another external factor which seriously threatens the existence of these two shophouses and other old buildings in the area, including all the old Chinese communities in Pattani, is terrorism. Pattani separatists seeking independence as a new Islamic State have caused many non-Muslim dwellers to migrate to safer places. Many ancient Chinese shophouses are now deserted and are rapidly deteriorating due to lack of maintenance. Swiftlets have come to build their nests in those shut-down buildings, which is welcomed by the owners who can gain quite a satisfactory income from the collecting of edible bird's nests instead of leaving the buildings unused.

ICOMOS Thailand



▲
Two Chinese shop-houses with five units, Pattani
▼



TURKEY

The effects of rehabilitation projects on historic districts in Istanbul

The law and regulation on “The Preservation of Deteriorated Historic and Cultural Immovable Properties by Rehabilitation and Renovation” were officially effectuated in 2005. The objective of this new law was – as defined – to reconstruct and restore areas that were registered as conservation sites by the Monuments Councils, by constituting new residential, commercial, cultural, tourist and social areas and by taking preventive measures against natural disasters. Very large areas on the Historic Peninsula and in the Galata-Beyoğlu region were determined as rehabilitation areas within this context and studies were implemented by local authorities. Newly established committees (“Rehabilitation Committees”) will commence to operate soon. However, these areas either overlap or are very close to the historic areas of Istanbul that are on the World Heritage List and this generates serious debates. Süleymaniye, Fener, Ayvansaray, Sulukule, Kapa! İçarşı Hanlar Region and many other areas will be designated within this context. Unfortunately, most of the people that are appointed for the “Rehabilitation Committees” are not specialists; then again, restoration projects concerning the monuments within these areas will also be evaluated and approved by these new committees. Besides, because these committees’ priorities are urban rehabilitation and gentrification, it is obvious that their studies will not be focused on the preservation of historic fabric. After all, it can easily be figured out that the Historic Peninsula will be even more pressurized through speculations. Rehabilitation and gentrification will, on the other hand, cause the poor people who live in those areas to move away.

Modern architectural heritage at risk

Since 20th-century heritage is partially under legislative protection, the main risk threatening modern architectural heritage is the lack of recognition. Not only in big cities like Istanbul and Ankara, but also in other Anatolian cities the city centres, including public spaces and buildings mainly developed after the 1950s, are suffering from planning decisions. Metropolitan municipalities are developing so-called urban conservation/renovation plans for areas subject to economic pressure.

Istanbul, historic district, one of the rehabilitation areas



Ankara,
Grand Ankara Hotel



Istanbul, Drapers' Bazaar

Some buildings that have architectural significance, such as the Atatürk Cultural Centre facing Taksim Square, are under threat of being demolished. Earthquake damages and insufficient technical equipment are the main excuses for the demolition of buildings.

Restorations ignoring the architectural character of the buildings are another threat to the conservation of modern heritage. In recent years some unacceptable renovations and reconstructions were carried out. One of these examples is the Grand Ankara Hotel in Ankara, designed by architects Marc J. Sauge (Switzerland) and Yüksel Okan (Turkey) in the 1960s. The new ‘style’ adapted to the building after the renovation is garish neo-classical. All in all, it does not take much to foresee that the so-called refurbishment project will convert a genuinely modernist landmark into an ersatz building. Beyond question, the refurbishment of a building of such historic and architectural significance requires strict abidance to principles set out for the preservation of modern buildings, and all required renovations should be carried out under the supervision of experts qualified in the field.

Due to a lack of recognition and control and due to the absence of general criteria for the protection immediate action is necessary to prepare an inventory list for modern architectural heritage.

Construction of dams

The construction of dams continues to affect the natural and cultural heritage of the country. In spite of opposition from local people, professionals and international NGOs, the construction of the much-debated Ilisu and Yortanlı dams has come to the final stage. Allianoi is a unique and significant health resort in western Turkey, dating from antiquity. Recent excavations have revealed exquisite ancient baths with pools and interesting surgeons' utensils from ancient times. The department for dams has developed some proposals in order to save the site from total extinction, but the solutions are far from saving the integrity of the site.

Hasankeyf, which is an important medieval site in southeast Turkey, is at risk of being flooded by Ilisu dam. Three European countries are supporting the project with credits. The risks to the environment, the lack of extensive documentation and archaeological research and problems of resettlement are still being discussed by the local public and international NGOs. The construction of the dam will result in the loss of important natural elements like the Tigris river and 75 percent of the historic city of Hasankeyf, which is cut into the soft rock cliffs surrounding the river.

The remains at Ani

The quarries operated by Armenia, close to the remains at Ani that are situated near the Turkish-Armenian border, have negative effects on the monuments. Although the use of dynamite is abolished, quarrying by mechanical methods is still in progress and vibrations created by machines continue to damage the monuments. These stone quarries not only constitute a serious threat to the monuments that already have structural problems, but also destroy the natural landscape by tearing up the topography. The Advisory Committee established by the Turkish Ministry of Culture and Tourism initiated certain studies for the protection and restoration of the monuments, such as developing proposals for the preservation, interpretation and improvement of the site. However, for an integrated preservation strategy all quarrying activities outside the Turkish territory directly destroying the remains should be halted as well. Armenia's sensitivity and responsibility to the subject will be appreciated.



Adobe architecture

Adobe architecture

Adobe is a common construction material in the traditional architecture of Turkey, especially in the highlands of Anatolia and Thrace. As people prefer to use materials easily obtainable from the local environs in rural zones, adobe buildings became a basic feature of the cultural landscape where the soil was suitable for its production. However, the architectural characteristics of how adobe is used, including the choices of structural system, architectural elements and finishes show great diversity, depending on physical conditions, including geography, climate and proneness to earthquakes as well as other social, cultural and economic determinants.

Recent socio-economic changes in Turkey in the last thirty years have made adobe buildings less and less desirable, leaving most of these structures in a neglected, dilapidated and even partially destroyed and ruined condition. Meanwhile the few architectural documentation projects carried out in rural zones in Turkey are not adequate to determine the diversity or the state of conservation of this traditional type of architecture. The number of building masters specialising in this tradition is also diminishing quite rapidly.

Drawing attention to the necessity of the conservation of traditional adobe architecture in Turkey, its documentation as a manifestation of its value as part of the national cultural heritage and the detailed study of its production and construction systems to form a basis for conservation and restoration work are becoming an especially important and urgent issue, considering the fact that adobe architecture is being destroyed at great speed.

ICOMOS Turkey

View of the historic site of Ani and the quarries nearby



Hasankeyf, a site threatened by the Ilisu Dam Project

Hasankeyf, which is one of the medieval sites in Turkey, is faced with the danger of being inundated by Ilisu Dam. The Turkish Prime Minister T. Erdogan earlier promised to stop the project, but now informs the public that the dam construction will start in March 2006. The unfortunate project was designed many years ago, without giving due attention to the presence of the unique architectural heritage at Hasankeyf. In spite of objections from archaeologists, art historians, architects, environmentalists and writers, the project has not been changed or cancelled. The authorities provide only eight-ten more years for further research in the region which will be flooded by the dam reservoir. This very short time is not enough to complete archaeological research; several cultural layers and artifacts will not be able to receive proper attention during the haste or will be flooded before they are systematically studied. The same was also tragically true for several other prehistoric, ancient and urban sites in the GAP region; Zeugma, a Roman garrison city and Halfeti, a beautiful town in the stone tradition are among significant ones which were recently sentenced to death by dam constructions.

In Hasankeyf, the possibility of salvaging some of the monuments by transferring them to another site needs to be considered seriously. Modern technology offers several methods for transferring masonry buildings. The most favorable from the point of conservation is the technique in which the monument is cut off from its foundations and mounted on a wheeled trolley. This sophisticated technique has been used in Europe to move cathedrals and palaces. It would be the right one for Zeynel Bey Tomb, which is a significant monument from late 15th century. The structure has a cylindrical shaft, the exterior of which is decorated with glazed bricks, laid in geometric patterns, featuring Timurid tradition and marking the strong artistic link between Anatolia and Central Asia in the fifteenth century.

Another technique which is widely adopted for moving is by the dismantling of the historic building and its reassembly at the new site. After careful photographic documentation and survey, each stone block in the structure is numbered. This technique is generally applied to monuments with ashlar construction. In Hasankeyf, it can be used to transfer architectural elements like minarets and the gates of the citadel. The criticism to this technique is that during the dismantling

and the re-erection process, monuments lose some of their original details; some blocks break down or crumble. Binding elements like mortar and clamps need to be changed or replaced. The workmanship is not the same. The mounting has to be done very carefully to assure proper alignment of the members.

Moving monuments is a hard task. It requires a good budget, technical means and planning. One of the most important objections to the Ilisu Dam is that there is no proper planning for the re-location of Hasankeyf's architectural heritage. Siting and topography are very important in moving monuments or parts thereof. A relocated building seldom has the same topographic relationship to its new site. When monuments are cut off from their foundations and erected on a completely different site, they look very different. They are alienated/isolated and lose much of their dignity and integrity. Their aesthetic value is diminished. A similar landscape and context has to be created in order to make them impressive and meaningful again. There are no studies or preparations to provide a similar landscape for the monuments; if the projected plan is put into execution, the new open air museum of "Hasankeyf" will be just a small park in which small fragments of great monuments will be exhibited like museum pieces.

One has to consider the fact that it is impossible to create the landscape of Hasankeyf with the Tigris river in the middle and cliffs shaped by action of the water in the past millions of years. The context for the transferred monuments will be totally foreign; since the new site is a land with a small inclination. The landscape at Hasankeyf comprises gigantic natural elements and complex relations among its architectural members. It is impossible to re-create the picturesqueness of the background for monuments like the Koç and Sultan Süleyman Mosques. Furthermore, who will compensate for the loss of the prestigious position of the medieval Castle and the Palace which are perched on a high cliff?

There are also technical problems: the rubble construction does not lend itself easily to being dismantled. Therefore monuments having rubble masonry (like the Koç and Sultan Süleyman mosques) and most of the other smaller structures, can not be transferred successfully. The relieving system in the vaulting of Sultan Süleyman mosque is very interesting. Yet, if this structure is forced to be transferred, most of the historic substance will be lost during the dismantling. Almost ninety-five percent of the masonry will have to be renewed after the operation. This means that authenticity of the cultural heritage will be lost. Authenticity is an important element of preservation. The site,



View of Hasankeyf (Photo: www.wikipedia.org)

form, substance /material of a monument are essential components of its significance as a cultural object. In the attempt to transfer the historic buildings in Hasankeyf, the original site will be changed, the original material will be lost in great scale.

International charters and conventions concerning protection of the cultural heritage recommend that at the preliminary survey stage of engineering projects, sites of historic and archaeological importance be marked and measures taken to preserve them in-situ. UNESCO's Recommendation concerning the Preservation of Cultural Property Endangered by Public or Private Works (1968) points out the fact that *"It is the duty of governments to ensure the protection and the preservation of cultural heritage of mankind as much as to promote social and economic development. (...) Preventive and corrective measures should be aimed at protecting or saving cultural property from public or private works likely to damage and destroy it..."*

UNESCO's recommendations have been ratified by Turkey and several of the European countries who are planning to support the consortium. We believe that it is essential to insist on the revision of the dam project in the light of this fact. Hasankeyf is a Grade I archaeological site with significant monuments. No permission is yet granted from the Monuments Council of the region for the construction of the Ilisu Dam. Ministry of Culture should try to solve this problem for the benefit of Hasankeyf.

Another critical point about Ilisu Dam is its life span. Experts foresee 30-50 years of functional life for this dam. It is predicted that in a very short period of time it will be filled with rubble and not be as useful. Experts claim that, in the long run, the dam will be a social, cultural and environmental disaster. When the very short useful life of the dam is set against the long history of Hasankeyf and its potential to live, one is compelled to ask the authorities: "Why build Ilisu dam?"

No material gain or money can bring back or reproduce a cultural treasure and impressive landscape like Hasankeyf. We have a great deal to learn from this site. People living there and others, who have visited it, have memories and very close ties with the site, all of which are worth more than the benefits the dam will provide.

The GAP region (Southeast Anatolia) hopes to have more and more tourists interested in visiting the cities and archaeological areas of the area. Hasankeyf offers memorable vistas and moments for spectators. From its acropolis, it is wonderful to watch Zeynel Bey tomb and the river Tigris flowing peacefully under the ruins of the medieval bridge. It seems absurd to bury a site which has a great potential for tourism.

When one compares the short-term economic prosperity the dam will generate with the long-term survival of a significant site which encompasses treasures from early human settlements up to late medieval period, one without doubt makes the preference for the survival of Hasankeyf. Public opinion and scholarly concerns back up the view that short-lived dams should not be permitted to devastate culturally abundant lands. Hasankeyf should not be "Doomed by the Dam".

Zeynep Ahunbay
ICOMOS Turkey
8 March 2006

ICOMOS Austria, ICOMOS Germany and ICOMOS Switzerland pointed out the devastating consequences for the cultural heritage to the government authorities responsible for the export credit guarantees for the Ilisu consortium – a group of Austrian, German and Swiss companies, which were also informed by means of the following and additional letters:

Dear Sir,

ICOMOS has learned that you are planning to support the Ilisu Dam Project in southeast Turkey. As you may possibly know, Hasankeyf and several archaeological sites in Turkey are threatened by the Ilisu Dam Project. Hasankeyf has been researched for about twenty years now, but its archaeological potential is still not fully exploited. Many of the other sites in the region which will be inundated are not excavated and researched yet.

ICOMOS Turkey and several other NGO's, as well as the local people are concerned about the environmental and archaeological losses the dam construction will cause. Hasankeyf is a medieval settlement which due to being deserted has preserved many of its buildings and archaeological treasures. The site is spectacular, being located on the river Tigris, one of the two big rivers which have given life to the ancient civilizations in Mesopotamia. The rock-cut civil and religious buildings, the citadel and several medieval monuments make Hasankeyf one of the major tourist attractions of southeast Turkey. The local people are closely attached to their heritage and are very worried about being transferred from their villages and detached from their cultural heritage. The Ministry of Culture intends to transfer some of the monuments to a location which will be above the dam lake, but the transfer project is far from salvaging the extensive urban structure and falls short of recreating the atmosphere of the historic site.

ICOMOS would like to draw your attention to the fact that by supporting the dam construction, you will help destroy cultural heritage which is registered as a Grade I archaeological site. The international charters like the Valletta Convention encourage the state parties to protect and preserve archaeological heritage. The local people, archaeologists and architects in Turkey are against the project and run campaigns to stop the construction.

I hope that this information will help you to revise your intention to realise a project which will result in the destruction of cultural heritage, damage the ecosystem in the region and will dislocate the local inhabitants, detaching them from their cultural heritage and homeland.

Yours sincerely

Michael Petzet
President of ICOMOS
7 April 2006

After Berlin and Vienna gave export guarantees to the Ilisu consortium in March 2007, according to press reports Turkey then signed the contracts with the construction companies in August 2007. It seems that the destructions which the first large dam of the river Tigris with its wall measuring 135 metres will cause to the largely inundated site of Hasankeyf and other historic sites can no longer be prevented.

The flooding of Allianoi, a Roman bath complex

Allianoi, an archaeological site near Bergama (ancient Pergamon) with a Roman bath complex which is not only important because of its mosaics, is soon to be flooded by the Yortanlı Dam. Already in a letter of 2 September 2005 ICOMOS appealed to the Turkish Prime Minister Recep Tayyip Erdoğan to stop the project and seek for a better solution:

Dear Prime Minister,

ICOMOS, the International Council on Monuments and Sites, advises UNESCO regarding the World Cultural Heritage and publishes a World Report on Heritage at Risk every year (also to be found on the internet under <http://www.international.icomos.org/risk/index.html>). Whilst in our report 2001/2002 we already protested against a dam project destroying the archaeological site of Zeugma with its famous mosaics, I am sending you an urgent request today on behalf of ICOMOS to prevent the destruction of the archaeological site of Allianoi in the vicinity of Bergama (Pergamon) by another fill dam project. Allianoi is a unique Roman recreation site with thermal baths, an archaeological site of more than 10,000 square metres – so far only 20 percent have been excavated, nonetheless important finds have already been made. According to a recent documentary on the television channel 3 SAT („Kulturreport“ of 19 August 2005) construction work on this dam is soon to begin, while our archaeological colleagues are still busy making emergency excavations.

A comparatively minor modification of these ruthless plans, i.e. erecting the dam wall at a different position, could prevent one more devastating loss of archaeological heritage in Turkey.

I am therefore urging you to take care of this matter and remain
Yours sincerely

Prof. Dr. Michael Petzet
President

Unfortunately, a joint appeal by ICOMOS, Europa Nostra and EAA (The European Association of Archaeologists) of 16 September 2005 and further international protests did not change the plans. Therefore, the subsequent joint appeal of 20 March 2007 could only ask to at least postpone the flooding so that the work of the archaeologists could continue and the necessary protective measures could be carried out:

Stop the flooding of Allianoi! Save Allianoi for the present and future generations!

Joint International Appeal to the Turkish Government

20 March 2007

We, the undersigned, European and global organisations concerned with cultural heritage conservation, education and interpretation – which together reflect the opinion of millions of citizens and of the professional world – express our deep concern at the alarming and imminent threat to Allianoi, an outstanding archaeological Roman Bath complex situated near Bergama in Turkey. We support the widespread opposition – already expressed by many Turkish experts and citizens' associations and also by high representatives of the EU Institutions – to the announced flooding of Allianoi, to follow the finalisation of the Yortanlı Dam.

We deplore the fact that in November 2006, the Regional Commission for the Protection of Cultural and Natural Heritage in Izmir accepted the proposal made by the Turkish State Water Works to halt further excavations at the site and to proceed with the flooding of the area. In deciding so, the above regional body did not give due consideration to the recommendations made by the Special Scientific Committee, set up last year by the Turkish Minister of Culture. These recommendations included a series of alternative conservation measures which could be undertaken before the possible flooding of the area, such as the protection of the site by the construction of an earth wall or by the relocation of some of the most important structures of this archaeological site. We believe that there still is time to implement these protective measures.

Allianoi is a site of extraordinary cultural and historic significance, a cultural heritage shared by the local communities, the Turkish people, the European citizens and the world as a whole. The responsibility to preserve this site for the present and future generations should therefore also be shared.

In the light of the above, we jointly urge the Turkish Government



Detail of the archaeological site of Allianoi (Photo: Massavetas)

to postpone the flooding of Alliano, pending the completion of the excavation, data-collection and documentation of the site. We also suggest that during this period, the Turkish Government commission an in-depth study of the social, cultural and economic benefits which could be generated for the wider region by a possible development of Alliano into a cultural and health tourism centre. We believe that this should be considered as a serious sustainable development alternative to the foreseen local economic benefits associated with the creation of an irrigation reservoir whose effective life-span is not expected to exceed 50 years. We encourage the Turkish Government to explore the possibility of obtaining European or international support for the financing of such a feasibility study and are prepared to endorse any possible application for such funds.

Dr Andrea H. Schuler
Executive President
Europa Nostra

Dr Predrag Novakovic
Secretary General
European Association of
Archaeologists

Prof. Michael Petzet
President
ICOMOS

Istanbul – Risks in the Historic Urban Topography? **Visual Impact Assessment Study of Istanbul**

The intention is to present some observations, documentation material (mostly of 2006) and principal arguments to evaluate the visual impact of high-rise building developments in Istanbul UNESCO World Heritage site. Traditional sights, landmarks and monuments as well as the protected urban silhouette are in dan-

ger. Serious consequences are to be expected due to global investment dominance in public space and skyline.

The Visual Impact Study of Istanbul with two maps concerning the metropolitan area (see also the Metropolitan Area Visual Impact Assessment Study map) and the historic town centre (see also the Historic Centre Visual Impact Assessment Study map) is intended to give an impression of the prospective unprecedented scale of global building development within the urban topography (see also the photographic presentation) and to support a discussion and moderation of conflicts in favour of Istanbul's traditional public space, the unique topography, and the prospects and panoramas.

The starting point of this pilot study is Melling's topographical survey "Voyage pittoresque de Constantinople et des rives du Bosphore" (Paris 1819). Some of his viewpoints as Eyüp, Çamlıca and Galata Tower are still very popular as publicly accessible viewpoints in the metropolitan area of Istanbul. They form characteristic prospects, panoramas and visual axes in the historic urban landscape of today's metropolitan area (see also the photographic presentation).

The World Heritage site Istanbul was adopted in 1985 in the boundaries of the Peninsula, not including Galata and without a buffer zone to protect the surroundings. This research and photo presentation intends to direct one's eyes to the recent building development of the Istanbul metropolitan area. It wishes to call the attention to current disturbances and destructions as well as to conceivable dangers which the colossal new development projects would entail (see also the two maps of the Visual Impact Assessment Study of the Metropolitan Area and the Historic Centre). The evaluation should stimulate a discussion concerning the necessity to define a buffer zone and its boundaries in order to protect the effective range and authentic visibility of the WH Site within the metropolitan urban landscape.

A further aspect of this presentation could be a critical review of the existing high-scale buildings as to whether they should be considered as characteristic landmarks and appreciated icons in

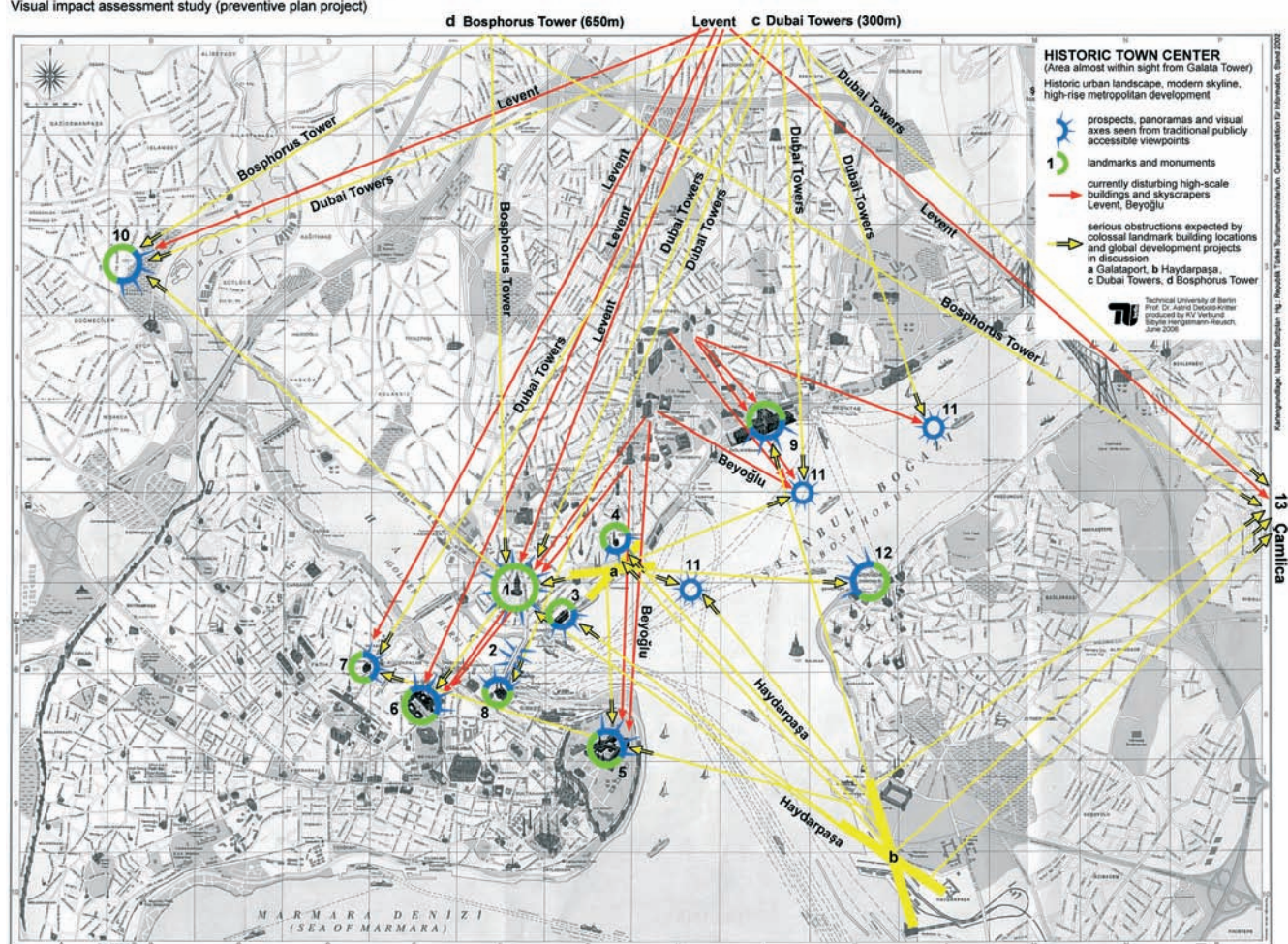
Istanbul UNESCO World Heritage Site
Visual impact assessment study (preventive plan project)



Istanbul, metropolitan area visual impact assessment study

Istanbul UNESCO World Heritage Site

Visual impact assessment study (preventive plan project)



Istanbul, historic centre visual impact assessment study

one of the most beautiful ancient cities of the world. By this it might be possible to define elements of urban and architectural qualities and topics to create a 21st century modern Istanbul skyline without compromising the outstanding universal values for which it was put on the World Heritage List in the first place. Today several skyscrapers of Beyoğlu, Sisli and Levent appear, but they do not give the impression of a planned skyline.

Istanbul's metropolitan area finds itself in the middle of a rapid process of drastic urban transformation, a renewal with new big-scale building complexes and skyscraper clusters of unprecedented dimensions as to their cubic measure, density and extreme elevation. Since the late 1970s high-rise buildings generally did not grow to more than 100 m while the new generation of skyscrapers is expected to start with 300 m and to end by about 650 m. To put this into perspective with the scale of the landscape: the highest mountain, the Çamlıca, rises to about 260 m. Comparable to this is also the change of bulk and height of the projected Galata Port development with a mass of up to five gigantic cruise ships located in the historic Tophane area.

This presentation concentrates on only some of the colossal building development projects under discussion such as Haydarpaşa, Dubai Towers, Bosphorus Tower and Galataport, which might come in conflict with the World Heritage sites of Istanbul. With regard to

these projects a general lack of official information and transparency on the side of the metropolitan administration has to be stated. In a general way these simulations may map out a coming reality even if the elements of skyscrapers and ships were chosen without detailed knowledge of the actual projects and plans and even without a topographical town-plan which would indicate the exact locations. Nevertheless, it might be relevant for the discussion to recognize the gigantic scale of the development project, to visualize the dimensions of urban renewal and to become aware of the alarming extent of the impending transformation within the metropolitan area of a WH site. Even if there were aesthetic design alternatives of iconic architectural works created by "star architects", this would not really diminish the risk of compromising the outstanding universal value of Istanbul's historic urban landscape.

This presentation, realised at the Technical University of Berlin by Prof. Astrid Debold-Kritter as a member of ICOMOS CIVVIH, concerns a number of colossal development projects. At the Department for Town and Regional Planning, Prof. Debold-Kritter was assisted by Dipl. Ing. Canan Savaş, student research assistant Jan Polívka and cartographer Sibylle Hengstmann-Reusch. The topic was stimulated by the ICOMOS CIVVIH Scientific Symposium on "Historic Centres in Metropolitan Areas" held in Istanbul in 2005.

Presentation of historic prospects, panoramas and view points by Melling (1819), photo documentation and digital simulations from 2006

This research on the historic urban metropolitan landscape of Istanbul is based on an extensive topographic folio volume by Antoine-Ignace Melling, which contains panoramas and topographical maps with detailed locations and descriptions of each presentation.



Fig. 1 Part of Constantinople with point of Serail, seen from Pera (Melling's Panorama 24, 1819). This well known panorama represents the Peninsula with the cape of Topkapı Palace and the town silhouette crowned with mosques, domes and minarets, as well as the Golden Horn and the Princess Islands.



Figs. 2 and 3 Constantinople seen from Eyüp (Melling's Panorama 14, 1819) and view from Eyüp towards Istanbul World Heritage Site, 2006. This view from Eyüp towards the natural harbour is seen from an elevated viewpoint. At the horizon to the left appears the Galata Tower. Istanbul's Golden Horn and World Heritage site is almost undisturbed (if one ignores the bridge). The city's vulnerable town shape has been protected and preserved for 70 years due to effective and active measures by restricting the height of buildings to 50 m.



Fig. 4 Viewpoint at Eyüp, 2006. Haydarpaşa lies in this view angle at a distance of about 10 km. It seems possible that on days of high visibility this high rise project with seven skyscrapers would appear in the background between the Galata Tower and the protected WH site silhouette. The extent of the disturbance from this viewpoint at Eyüp near the famous Pierre Loti's café will depend on the future elevation, bulk and surface material of the projected tower buildings.

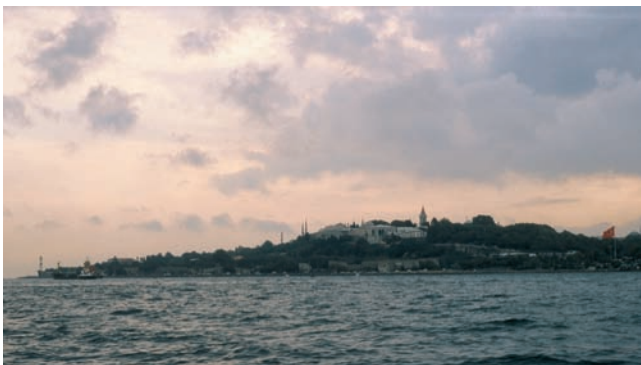


Figs. 5 and 6 Haydarpaşa seen from Marmara Sea, 2006, and Haydarpaşa Towers (simulation). It is this shore area between the Selimiye Baracks and the Bagdad Railway Station which is supposed to become a private development project Haydarpaşa with seven high-rise towers of at least 300 m height and several less high but densely packed new buildings. This Simulation of the Haydarpaşa Towers is an alternative attempt to the one of the Architectural Chamber, which presents the complete building project including seven uniform towers. In order to demonstrate how drastically these new colossal towers might influence the historic urban silhouette, different existing skyscrapers were chosen and have been made unidentifiable for this purpose.





Figs. 7 and 8 Haydarpaşa seen from Topkapı Terrace, 2006 and Haydarpaşa Towers (simulation). A very much appreciated viewpoint is the one very near the Topkapı Terrace. The simulation presents that it would become a gigantic Manhattan-like sight.



Figs. 9. and 10 Cape of the peninsula with Topkapı (simulation)
A recent view on the cape of the peninsula with Topkapı taken in the evening from the boat coming from Princess Islands. The slightly rising hills and Topkapı Palace on the cape of the peninsula seen from Karaköy would be compromised by a gigantic new scale: seven towers of 300 metres height.



Fig. 11 Haydarpaşa and Süleymaniye Mosque seen from Zeyrek Terrace (simulation). The colossal Haydarpaşa site would appear from Zeyrek Terrace in the range of the Süleymaniye Mosque degrading the venerable silhouette and aura of the cupola and four slim minarets. (The Haydarpaşa towers are presented in a calculated scale). The Haydarpaşa Project will be visible from Galata Tower as well as from Galata Bridge and might even appear as a monster project in the view from Cihangir Mosque Garden. It was Yahya Kemal who in a poem perpetuated this famous view from Cihangir to Üsküdar at sunrise.



▲ Fig. 12; Fig 13 ▼

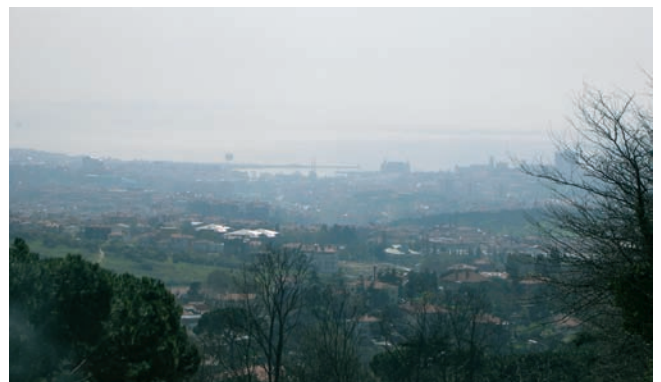


Fig. 14 ▼





Fig. 15 Tophane (Melling's Panorama 21, 1819). This panorama presents the Tophane place situated on the European shore of the Bosphorus with vast barracks and other representative still existing buildings: the Kılıç Ali Paşa Mosque built by architect Sinan, the Tophane fountain (1732) and the gunfoundry vaulted with six domes. It forms a highly representative urban prospect and scenery of the distinguished residential Pera quarter including the harbour with splendid ships in the foreground



Fig. 17 Cruise ships at Galata Port hiding the prospect of Tophane. Tophane shore is frequented by huge cruise ships which, if several ships are mooring at the same time, form a high and long barrier. The famous Pera prospect seen from boat excursions on the Bosphorus is hidden very often behind gigantic tourist steamers. This applies accordingly to the characteristic domes of the gun-foundry and mosques. The cruise ships present a new scale in the urban landscape which implies a break with the traditional cultural landscape of Byzantium, Constantinople, Istanbul.



Fig. 16 Tophane Pier with Cihangir Mosque, 2006. Today there are stores and administrative buildings situated right at the shore and covering a large fenced area. There are still freighters being loaded, which however can only be observed from the terrace of Istanbul Modern Museum, located in one of the reused stores. The public Tophane place of today is very much reduced and dominated by traffic. Behind this the densely built up hill of Pera with the Cihangir Mosque right up.



Fig. 18 Galataport (simulation). Galataport is planned for the moorage of four or five cruise ships at a quay about 1,5 km long. Five ships of the size which can already be seen in a simulation here will necessarily cause extensive demolition and new building development. The traditional city prospect seen from the Bosphorus will disappear with its historic monuments.

Fig. 19 Tophane Fountain and Kılıç Ali Paşa Mosque, 2006. The projected Galataport would even enlarge the barrier between the restored fountain and the Sinan Mosque and cut off the main remaining view on Bosphorus and Marmara Sea for ever. This would also mean a further loss of public space in favour of a private project.

- ◀ Figs. 12, 13, 14 This view from Çamlıca, the highest swelling ground in the urban landscape (268 m), directed to the South West presents the European shore of the Bosphorus, Galata Tower and the protected silhouette of the peninsula in the background, to the right of the Golden Horn. Üsküdar is to be seen in the fore-ground as well as the rural region bordering the Marmara Sea which later became Haydarpaşa. An impression of the Istanbul urban landscape with Galata and the Peninsula seen from Çamlıca on a rather misty day. Baedeker (1914) notes this view of the Bosphorus and the Marmara Sea and the entire city of Constantinople, a traditional viewpoint which is frequently visited by Istanbul's families. The Haydarpaşa Towers will rise up from the plain near Marmara Sea; this area, called Calcedonia, presumably the location of the oldest settlements, might appear in later years as a Manhattan-like scenery overlapping the peninsula and the World Heritage site.





Fig. 20 Cruise ship at Tophane Pier seen from Cad Necatibey, 2006. These huge cruise ships up to 60 m high will block the traditional views from the city, that is to say the characteristic prospects on Bosphorus, Marmara Sea, Üsküdar and Haydarpasa in perpetuity.

Fig. 21 Cruise ship seen from Cihangir Slope near the Mosque, 2006. Already now some brutal barriers blocking the view from public streets and elevated places of Cihangir, as for instance right near the Cihangir Mosque and its garden can be noticed. Considering the expected mass tourism – up to 15 000 daytourists could arrive here more or less at the same time – this would cause a tremendous pressure on the city neighbourhood, especially with regard to public space and places. This dense, various and ambiguous urban structure with narrow stairs, crooked and steep streets are substantial remainders of the old and famous Galata harbour and Pera quarter.



Fig. 22 Dubai Towers and Bosphorus Tower seen from Süleymaniye Terrace (simulation). The Dubai Towers and Bosphorus Tower will appear in the view angle out of the WH Site from the terrace of Süleymaniye Mosque (which is about 50 m high and 10 km away) in the background of Galata, Beyoglu, Sisli in a truly colossal dimension. They might extremely rise above the height of the Galata Tower and the context of several high-rising modern buildings. The Dubai Towers und Bosphorus Tower as viewed from the WH Site will definitely degrade and compromise the Byzantine Galata Tower of the Genuese port (the hill has an elevation of 45 m, the gallery of the tower of 44.5 m).

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UNITED STATES OF AMERICA

The 11 Most Endangered Historic Places in the United States

The 11 Most Endangered Sites is compiled annually by the National Trust for Historic Preservation, and is meant to illustrate the plight of many other sites throughout the United States. The National Trust is a major partner organization of US/ICOMOS.

1. Arts & Industries Building of Smithsonian Institution, Washington, D.C.

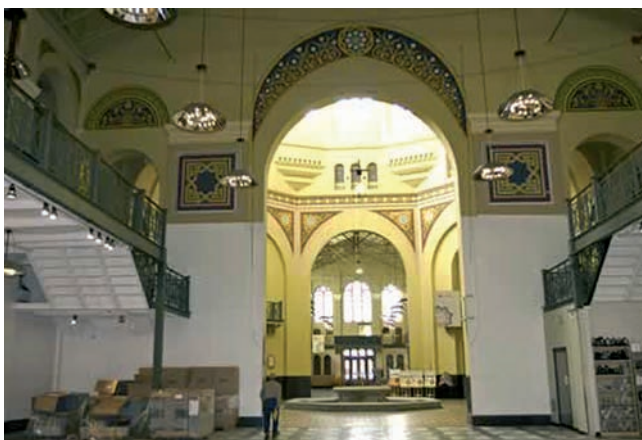
In 2004, this monument to history and culture was closed, and it has yet to reopen. Its distinctive architecture and prominent location on the Mall attract curious visitors, who are disappointed to find the doors firmly locked, with no hint as to when—or whether—they will open again.

“The Smithsonian Arts and Industries Building represents a serious challenge for the Smithsonian and an exceptional opportunity for preservationists”, said Richard Moe, president of the National Trust for Historic Preservation. “What was once the crown



Arts & Industries Building of the Smithsonian Institution, Washington

Interior of the Arts & Industries Building of the Smithsonian Institution, Washington



jewel of the Smithsonian Institution has become an empty relic. It's time to find a productive use for this landmark—perhaps even an appropriate private use that incorporates public access—and return it to the spotlight it so richly deserves.”

2. Blair Mountain Battlefield, Logan County, West Virginia

The 1,600-acre Spruce Fork Ridge of Blair Mountain, about 90 minutes southwest of Charleston, West Virginia, was the scene of the 1921 showdown between a miners' army at least 7,500 strong and a 3,000-man defensive force headed by the Logan County Sheriff, Don Chafin, and other law officers, many of whom were on the coal companies' payrolls. The defensive force, bolstered by private planes that dropped homemade bombs on the miners, dug trenches, blocked roads, felled trees and mounted machine guns along the 15-mile ridgeline. The miners used natural pathways to mount the ridge and breach Chafin's line. The confrontation was the largest armed labor conflict in the nation's history, with miners seeking the right not only to unionize but also to exercise civil liberties such as freedom of speech and assembly.

Past preservation efforts have failed because of fierce opposition from the coal companies that own or lease most of the ridge. Hobet Mining, Arch Coal, Massey Energy Company and Aracoma Coal Company, among others, are intent on strip-mining, which would destroy the battlefield. Permits for strip-mining are issued through the Army Corps of Engineers, which is subject to a federal preservation review process that provides for consideration of—but not necessarily protection of—historic sites.

By increasing public awareness of the significance of the Blair Mountain battlefield, preservation advocates hope to win support for permanently protecting the site with easements and developing an economically sustainable interpretive program, possibly through the National Coal Heritage Area, which would allow the region to take advantage of West Virginia's fastest-growing industry—tourism. An independent evaluation of alternate mining methods may illuminate means by which the site could be mined and preserved. The best possible solution would be a compromise between the property owners and preservationists that will save the site for interpretation, while bringing economic benefit to the owners and local residents.

3. Doo Wop Motels, Wildwood, New Jersey

Families have been vacationing at the Jersey Shore for more than 100 years, and the Wildwood Doo Wop motels have been a major beach destination since they were constructed from 1956 to 1970. The Doo Wop district offered families an affordable vacation that seemed exotic because of the motels' far-out design and faraway-sounding names such as Tahiti, Caribbean and Starlux. Named for a popular singing style of the day, Doo Wop motels sport neon-bright colors,



Example of a Doo Wop motel in New Jersey

funky signage and exotic architecture decked out with sawtooth angles, crazy overhangs, space-age “Jetson” ramps and lava rock siding. Considered the largest collection of mid-20th century commercial resort architecture in the nation, the motels celebrate a number of kitschy styles, including the Polynesian-inspired “Pu Pu Platter”, the “Chinatown Revival” with its *de rigueur* pagoda roof, and “Phony Colonee”, a tribute to American patriotism. Besides boasting a well-loved boardwalk, the Wildwood area became known as a rock-and-roll hot spot where Bill Haley and the Comets performed “Rock Around the Clock” in public for the first time in 1954 and Dick Clark broadcast his “American Bandstand” program live in 1957.

Doo Wop motel, illuminated advertising



The demand for resorts that offer modern amenities means that motels in the Doo Wop district, which encompasses the cities of Wildwood, Wildwood Crest and North Wildwood, are ripe for development. Nearly 100 Doo Wop motels have been demolished in recent years, usually for the construction of market-rate condominiums. While the architectural and historic significance of the motels has been widely recognized, local governments have not reached agreement on how—or whether—to regulate new development.

The Doo Wop Preservation League is lobbying local elected officials for zoning restrictions and incentives to support property owners who want to keep and renovate their Doo Wop motels. The Art Deco District in Miami Beach is one example of a success story, as is nearby Cape May, which saved its late-19th century architecture from the wrecking ball. The Caribbean Motel, widely regarded as the Wildwoods’ quintessential Doo Wop motel because of its super-sized neon sign and multi-colored “space ship” lights, has been purchased by new owners who are making a significant investment to preserve and refurbish the property. Many of the motel’s unique but aging architectural features are being fully rehabilitated, while the interiors are being professionally redesigned with stylish Doo Wop-inspired furnishings.

4. Fort Snelling Upper Post, Hennepin County, Minnesota

Fort Snelling was established in 1820 to protect fur traders and early settlers. Beginning in the late 1800s, dozens of new buildings were constructed on the Upper Bluff area for training, supplies and administration. Today, Fort Snelling is a National Historic Landmark, and the Fort Snelling Historic District is listed in the National Register of Historic Places. Twenty-eight buildings in the Upper Post area are considered historically significant or important to the future use of the site.

The military gradually abandoned all of the buildings in the Upper Post area after World War II, disposing of parts of the site to various federal and state agencies, and now there is no clear authority responsible for overall infrastructure. While several of the buildings were shuttered at the time they were vacated, many have suffered from deferred maintenance and vandalism over the years. Buildings are deteriorating at an increasingly rapid rate as a result of broken windows, damaged gutters and downspouts, and deteriorated roofs—some of which are on the verge of collapse. The 28 historic buildings that make up Fort Snelling’s Upper Post complex occupy a unique and important place in Minnesota history. But this year may be a critical period for the complex if they are to be preserved and reused.

The Upper Post area contains a collection of significant historic, architectural and cultural resources ideally suited for preservation and sensitive redevelopment. Recently the federal government has taken steps to widen the range of acceptable uses for the buildings in the Upper Post. If this occurs, it will create the opportunity for a public agency to assume responsibility for coordinating the development of the Upper Post by seeking proposals from private parties for rehabilitation and reuse of the buildings. The challenge will be to identify appropriate and feasible new uses that will respect the character of the buildings and their landscape. Many local residents hope that the complex can be transformed into a mixed-use development like Fort Worden near Port Townsend, Washington, or Fort Sheridan near Chicago. If an appropriate public agency like Hennepin County, which is considering the possibilities there, can gain control of the site for redevelopment, the Upper Post could have a bright future.

5. Historic Communities and Landmarks of the Mississippi Coast



House on the Mississippi Coast, damaged by Hurricane Katrina



Destroyed house in Biloxi



Last house on Pearl Street, Biloxi

Badly damaged house designed by Frank Lloyd Wright



Pascagoula, damaged tenement from the 1880s



When Hurricane Katrina's 145-mile per hour winds and 30-foot storm surge hit the Gulf Coast on August 29, 2005 the damage to Mississippi's historic communities was enormous. Unique and charming cities and towns such as Gulfport, Pass Christian and Ocean Springs suffered unfathomable damage which their residents are still working to repair. Between 250 and 300 historic structures on the coast were wiped out completely and more than 1,200 were damaged. Historic Landmarks with significant damage from the

hurricane include Beauvoir, where Confederate President Jefferson Davis wrote his memoirs and spent his final years in Biloxi; Pascagoula's LaPointe-Krebs House, the "Old Spanish Fort"; and the 1874 Bay Saint Louis's Hancock County Courthouse. The stories are heartbreaking and numerous.

The historic communities of the Mississippi Gulf Coast are threatened with land speculation and new development that ignores the remaining historic character of these towns. In addition, lack of

preservation and specific funding hinders individual homeowners from tackling the difficult job of stabilizing and rehabilitating their property. Many of the landmark structures of the Gulf Coast that are open to the public are further threatened by the loss of revenue, jeopardizing their restoration and future viability as community landmarks.

The Senate Appropriations Committee has recommended \$80 million in preservation grants for Louisiana, Mississippi and Alabama. This funding is critical to meeting the preservation needs on the Gulf Coast. Local zoning restrictions, height limitations and preservation laws need to be enforced and defended from development interests seeking more intensive redevelopment opportunities.

6. Historic Neighborhoods of New Orleans, Louisiana

Containing more than 30,000 structures and comprising more than half of the core area of the fabled Crescent City, the 20 historic neighborhoods of New Orleans are an irreplaceable national treasure. They tell a uniquely fascinating story infused with jazz rhythms, unique architectural grace-notes, and Creole undertones. But now the story could be erased: The unprecedented destruction wrought by Hurricane Katrina and a failed levee system threatens to eradicate the character that made these neighborhoods so special.

While the world-famous Vieux Carre, the Garden District and some other districts escaped severe damage from winds and water, other neighborhoods such as Holy Cross, Treme, New Marigny and Broadmoor—all of which are listed in the National Register of Historic Places—remain rubble-strewn and largely unoccupied months after the storm. These neighborhoods, relatively little-known to tourists, are the heart and soul of New Orleans. It is these neighborhoods that housed one of the largest populations of free people of color before the Civil War, provided a new home for immigrants, gave birth to jazz—one of America's greatest gifts to the world—and provided the distinctive architectural setting for the development of the special culture that has always set New Orleans apart from other American cities. These 19th and early 20th-century neighborhoods have been integral to the shaping of New Orleans, and their recovery is essential for the city's future. They provide the homes of the modest income working class on whom this city depends.

Boarded-up house in New Orleans



The challenge of recovering from an unprecedented storm has overwhelmed both public and private efforts. While owners wrestle with the complexities and uncertainties of job losses, flood insurance payouts, levee reconstruction, restoration of public services and endless delays, historic buildings continue to deteriorate. Many have also been unnecessarily "red-tagged" for demolition.

Through volunteers, publicity, advocacy and funding the preservation community has provided assistance and information for owners of historic homes in New Orleans. Continued efforts to protect properties and provide targeted assistance to owners in the most severely affected historic neighborhoods are urgently needed. The National Trust is working with its local partners, particularly the Preservation Resource Center of New Orleans, to ensure that these threatened neighborhoods are restored as healthy, attractive, viable places for people to live.

7. Town of Kenilworth, Illinois

The idea of a model residential community was on the mind of Kenilworth founder Joseph Sears in 1889 when he made his first purchase of a 224-acre wooded site 15 miles north of Chicago. Kenilworth came into being in the rush of excitement and planning for Chicago's 1893 World's Columbian Exposition, where the "City Beautiful" concept was unveiled. Among the noted architects that Sears attracted to his project were Franklin P. Burnham, who was one of Kenilworth's first residents and a director of the Kenilworth Company, which was formed to raise capital for the development. Another key player was architect George W. Maher, one of the most prolific Prairie School architects, who designed more than 40 houses in the Village and was instrumental in continuing the quality and character of the original village as Kenilworth grew to its current boundaries by the end of the 1920s, and the building of homes was essentially complete by the 1940s. Most of the 830 homes in the community are more than 80 years old, with many over 100 years old.

Since the Village has no ordinances on the books to protect the historic homes, teardowns are occurring at an alarming rate in Kenilworth, with 47 houses already lost to demolition. Nearly half of all teardowns have occurred during the last three years, including several homes designed by the most prominent architects involved in the Village's design. Many of these lost architectural gems have been replaced with new houses that are significantly larger in size and not in sync with the style and character of the neighborhoods. Since the National Trust listed "Teardowns in Historic Neighborhoods" on the 2002 list of America's 11 Most Endangered Historic Places, this trend continues to grow and expand across the nation. Kenilworth is one of the more than 300 communities in 33 states the National Trust has documented as struggling to retain their historic community character when threatened by teardowns.

Time is now the enemy since the Village did not anticipate the teardown threat and has no comprehensive plan to stop it. Designating Kenilworth as an endangered historical place is a much-needed first step toward building the community support needed to establish a local landmark ordinance and designation program, in addition to modernized zoning ordinances. To help mobilize Kenilworth and community leaders across the country, the National Trust has launched the initial phase of the Teardowns Resource Guide, an online source for strategies and tools commonly being used to manage teardowns.

8. Kootenai Lodge, Bigfork, Montana

One of the most significant historic places in Northwest Montana, the Kootenai Lodge consists of 20 buildings, including a Main Lodge, several smaller lodges, dining halls and various cabins. The buildings range in size from the humble quarters of the hired help to the magnificent lodge and living quarters for residents and guests. Almost all the structures are built of cedar and larch logs, hand-peeled to retain the colorful and delicate cambium layer as a decorative touch, and all nestle into the landscape as if they have been here forever. To compliment the remarkable log buildings, the landscape was designed with a variety of native and exotic trees and shrubs. Man-made elements, such as stone bridges, gravel walks, arbors and seating areas are scattered throughout the property. Designed to take advantage of the open vistas of the meadow and seclusion of the wooded areas, these spaces enhance the visual appeal and natural serenity of the lake and nearby mountains.

The Milhous Group, which purchased the 42-acre property in 2005, is planning to build 42 condominiums, 24 boat slips, a pool and a new road. The plan calls for the demolition of several structures and the alteration of all remaining historic buildings. The historic barn has already been dismantled and relocated, and many of the old-growth trees have been cut down. The density proposed by the current redevelopment plan will significantly diminish the historic and architectural character of the historic lodge, cabins and landscape, and the addition of 42 new structures will obliterate historically open spaces and vistas. Public outcry has been fierce, with hundreds of residents attending meetings and voicing their opposition to the plan. Due to the unwillingness of the developer to consider alternative plans and the inability of the planning commission to make adjustments due to the lack of zoning, the historic character of the property is in imminent danger of being destroyed.

Opponents of the planned development have encouraged the developer to scale back his plans into a smaller footprint and include more sensitive design and placement of new constructed buildings. If the developer were so inclined, the redevelopment at Kootenai Lodge could be done sensitively while still accommodating some growth, providing a model for redevelopment of a large, historic, recreational property.

9. Mission San Miguel Arcangel, San Miguel, California

Much more than a place of worship, the mission was a colonial institution of great importance in the spread of the Spanish Empire. Spain's colonial ambitions in North America ultimately proved unsustainable, and Alta California passed into the hands of an independent Mexico in 1821. The following decade, the Mexican government secularized Mission San Miguel and all the Franciscan California missions, leading to the mission's virtual abandonment. While the mission complex fell into a state of disrepair, new secular uses were found. During the 1850s, mission buildings housed a series of retail operations, one of which was the most popular saloon along el Camino Real. In 1859, the mission was returned to the Catholic Church by President Buchanan, but two more decades would pass before Reverend Philip Farrelly took up residence as First Pastor of Mission San Miguel and repair work commenced. In 1928, the mission was returned to the founding Franciscan padres, who began an extensive renovation and preservation effort which continues to the present day. Despite its tumultuous history, the San Miguel Mission complex, midway between San Francisco and Los Angeles, enjoys unusual architectural integrity, and today offers a rare glimpse of Spanish Colonial mission life and the forces that shaped its history.

The mission was severely damaged by the San Simeon earthquake in 2003. In addition to significant structural damage, the earthquake caused extensive damage to priceless interior wall paintings. Estimates for total cost of all conservation efforts for the mission will be nearly \$14 million.

Directly following the 2003 earthquake, Mission San Miguel hired a team of architects, engineers and conservators to develop a preservation plan. The mission has already funded nearly \$1 million worth of construction to stabilize parts of the church and other buildings. While progress is being made slowly, it will require collaborative work to ensure that the Mission can receive desperately needed federal and state preservation and disaster funds as well as financial contributions from foundations and the general public to ensure the Mission's continued survival.

Kootenai Lodge, Bigfork, Montana



10. Over-the-Rhine Neighborhood, Cincinnati, Ohio

The dense, compact urban environment known as Over-the-Rhine is just north of Cincinnati's central business district. Starting around 1830, a large number of German immigrants settled in an area to the north and east of the Miami and Erie Canal where land was readily available and affordable for working-class families, helping convert Cincinnati into one of the "most German" of American cities. The Canal came to be referred to euphemistically as the "Rhine," and the area on the other side, "Over-the-Rhine." The architecture in the area reflects the diverse styles of the time – simple vernacular, muted Greek Revival, Italianate and Queen Anne. The buildings range from row houses to mixed commercial/residential structures and free-standing commercial, industrial and institutional structures including churches, a music hall, beer gardens and breweries. The district's Findlay Market is the only historic public market building still open in the city.

The distinctive mid-to-late-19th-century urban architecture in Over-the-Rhine is in danger due to a combination of inadequate planning, low levels of home ownership and a reduced business presence because of rampant crime, reluctance of investors to commit to renewal and renovation, and an increasing pattern of demolition as authorities seek to address public safety concerns.

Designation of Over-the-Rhine as one of America's most threatened historic places will aid the local Community Council and other organizations, such as the Cincinnati Preservation Association, in their efforts to save and safeguard the area. Only through a diverse, collaborative approach that includes urban planners, corporate and philanthropic organizations, and—most important—community groups and neighborhood residents and stakeholders, will it be possible to stop the deterioration of the buildings and improve the quality of life for area residents.

11. World Trade Center Vesey Street Staircase, New York

The Vesey Street Staircase played a significant role in saving the lives of hundreds of individuals who used it as a means of escape from their offices in the doomed Twin Towers. As a result, it has been dubbed the "Survivors' Staircase".

Before the September 11 attacks, the Vesey Street Staircase was seen and used by the public on a daily basis. Located near the intersection of Vesey and Church streets, it consisted of two granite-clad outdoor flights of stairs and an escalator that led from the World Trade Center plaza to Vesey Street. When terrorists crashed two planes into the Twin Towers, the staircase provided a path of escape for hundreds of people. It is the only surviving above-ground remnant of the original World Trade Center, and a vivid and haunting reminder of the September 11, 2001 terrorist attacks. The staircase



World Trade Center, New York, Vesey Street staircase

now stands isolated and consists only of concrete slabs and blocks, a few remaining pieces of stone cladding, and steel supports – but it is nonetheless an authentic and invaluable remnant of the World Trade Center that once stood here.

The staircase is within the footprint of proposed WTC Tower 2, which is being designed by famed architect Norman Foster and is being developed by Silverstein Properties. Public review of the impact of this project on the staircase culminated in early 2007, when the Lower Manhattan Development Corporation announced its proposal to cut up the staircase and to embed several pieces in various locations around the site. Such an inappropriate plan would needlessly strip the Staircase of all its meaning and context. The New York State Historic Preservation Office also objected to this plan, calling for the staircase to be preserved intact.

The staircase structure can and should be moved to a temporary site nearby while construction on the World Trade Center site proceeds. Engineering studies have shown that the staircase can be moved quickly, safely and cost-effectively. The coalition of preservation organizations in the Lower Manhattan Emergency Preservation Fund have been working with several agencies to identify potential, temporary sites for the staircase, and Governor Spitzer's administration has publicly expressed a willingness to consider the views of the public on this issue, and to consider creative solutions.

At the appropriate time, the staircase should be moved back to the World Trade Center site and displayed as closely as possible to its original location. By maintaining a connection with its original site, the staircase will continue to serve as an authentic link to the historic stories of survival it witnessed.

Just as other cities around the world have successfully developed new buildings around historic ruins and remnants, so can New York City. The Lower Manhattan Emergency Preservation Fund is attempting to bring key decision-makers together to commit to preserving this irreplaceable icon.

THEMATIC REPORTS



Rock Art at Risk

The situation concerning the relative under-representation of rock art properties on the World Heritage List has improved to a considerable extent in recent years. Recent inscriptions of rock art sites have included Chongoni, Malawi (2006), Twyfelfontein, Namibia and Gobustan, Azerbaijan (2007). In addition to these properties, the Ecosystem and Relict Cultural Landscape of Lopé Okanda in Gabon in Africa, with a remarkable collection of some 1,800 rock carvings also was inscribed on the World Heritage List in 2007.

In other positive developments, a number of joint initiatives of the World Heritage Centre, ICOMOS International and ICOMOS's Rock Art Committee (CAR) have focussed on the support and facilitation of the process of selection and nomination of new rock art sites to the World Heritage List:

- The publishing of a World Report on Rock Art in 2004 - The Future of World Rock Art (Bertilsson & McDermott, 2004).
- The creation of a draft Charter on Rock Art that was presented in 2004 and waiting to be finally approved in 2007.
- ICOMOS's Rock Art Survey, Analysis and Action Plan were presented at the World Heritage Durban Meeting in 2005. The report is based on the Inventory of Nomination Dossiers of Rock Art Sites Inscribed on the World Heritage List that was accomplished the same year.
- The launching of a new program of Regional Thematic Studies on Rock Art in co-operation with the World Heritage Centre (ICOMOS 2006).
- The creation of Pre-Nomination Guidelines for applications to the World Heritage List (work in progress).
- A designated focus on Rock Art and the World Heritage List at the Valcamonica Symposium in May 2007, including a special session on Managing Rock Art Sites directed by UNESCO-WHC. The UNESCO session held during the biennial Valcamonica symposium was aimed at the development of a site technical cooperation network in the area of conservation and management of Rock Art World Heritage sites.

The accomplishment of the draft Charter has also been followed by initiatives to undertake Regional Thematic Studies and to formulate Pre-nomination Guidelines as supportive tools to facilitate the process of selecting sites with potential for World Heritage List applications. This concept was originally developed by a group of ICOMOS people, namely Regina Durighello, Gwenaëlle Bourdin, Susan Denyer, Ulf Bertilsson and Jean Clottes. It has been further elaborated in close cooperation with Nuria Sanz of the World Heritage Centre, thanks to whom it was officially presented at the meeting organized by the UNESCO World Heritage Centre in Basse Terre, Guadeloupe in May 2006, with the aim of developing a transnational Rock Art nomination in the region. The report on Latin America and the Caribbean was finalized and published in 2006. It is also available on the internet on the following web address: <http://www.icomos.org/studies/rock-latinamerica.htm>. A second report on the Rock Art of North Africa and the Sahara is already in progress and planned to be published in 2007.

The purpose of the Regional Thematic Study on Latin America and the Caribbean is to give an extensive overview of the region that can be used as a tool in the process of selecting rock art properties for future World Heritage nominations. An important starting point for this work was the International Seminar on Caribbean Archaeology held in Fort-de-Franc in Martinique in 2004 and organized by the UNESCO World Heritage Centre and the Regional Council of Martinique.

Regardless of the slow but steady closing of the gap of missing rock art sites on the World Heritage List there are still far too many rock art sites under threat of damage and destruction around the world. One of these that have been under long-term threat of destruction from industrial exploitation is the Dampier Archipelago in Australia.

Dampier Archipelago and Burrup Peninsula in Western Australia

The Dampier Archipelago and Burrup Peninsula in the Pilbara region of Western Australia contain many outstanding concentrations of rock engravings and associated archaeological occupation sites, some individual types of engravings such as anthropomorphs as well as some stone features. Together, these sites are considered to be of national importance. Extensive shell middens occur at these locations with stratified deposits potentially covering many thousands of years of occupation. Groupings of significant stone arrangements occur together with scatters of flaked stone artefacts, major quarry locations and reduction areas and grinding patches occur in varying degrees of density and diversity.

The engravings on the Dampier Archipelago include finely executed images of a wide range of terrestrial, avian and marine fauna many of which can be identified to genus or species level. Most of the engravings, particularly the images of marine fauna, are only slightly weathered and were produced following the rise of sea levels about 8,000 years ago. There are also many deeply weathered images of terrestrial fauna, particularly kangaroo, which date to the time when the sea was much lower and the coast over 100 km away. The different degrees of weathering of particular types of faunal engravings on the Dampier Archipelago provide an outstanding visual record of the course of Australia's cultural history through the Aboriginal responses to the rise of sea levels at the end of the last Ice Age. There are also many deeply weathered 'Archaic Faces' across the Dampier Archipelago, including some images that are locally unique developments of this theme. 'Archaic faces' are widely distributed through arid Australia and are found in the Calvert Ranges, Western Australia, the Cleland Hills and the Victoria River District in the Northern Territory and in South Australia and Queensland. The 'Archaic Faces' on the Dampier Archipelago demonstrate the long history of contact and shared visual narratives between Aboriginal societies in the Dampier Archipelago and inland arid Australia and are exceptional in the course of Australia's cultural history.

The Pilbara has been described as the richest region of rock engravings in Australia. It is the diversity of representations of the human form, many of which are in dynamic attitudes, and the way in which they are sometimes arranged in complex scenes that makes the Aboriginal engravings in the Pilbara exceptional. An analysis of site locations demonstrates that large concentrations of engravings in the Dampier Archipelago are found on inland plateaus, steep valley inclines bordering watercourses and on rock platforms next to the ocean. The Dampier Archipelago contains particularly high concentrations of rock engravings when compared with other rock art provinces in Australia.

The distribution of engraved motifs across the Dampier Archipelago reflects economic and cultural variability. Previous

work on the Dampier Archipelago provides an outstanding demonstration of the way in which a detailed analysis of archaeological remains (middens, grinding patches, quarries) and associated rock engravings can contribute to an understanding of the cultural and economic meaning of the rock engravings.

Standing stones on the Dampier Archipelago range from single monoliths through to extensive alignments comprising at least three or four hundred standing stones. While some standing stones are associated with increase ceremonies, *thalu*, others were used to mark particular places with scarce resources, such as seasonal rock pools, and were also used to mark sites of traditional significance. Hunting hides and fish traps are also found amongst the extensively modified cultural landscape of the Archipelago. The range of stone features in the Dampier Archipelago is outstanding in a national context for the number of purposes they are known to have served.

The engravings on the Dampier Archipelago include detailed and finely executed examples of water birds, crabs, crayfish, kangaroos, turtles and fish, some of which, because of their detail, can be identified to species level. The finely executed animals identified to species level, the diversity of human forms and the panels of engravings showing scenes of human activity exhibit a high degree of creativity that is spectacular for Australian rock engravings.

The battle for protecting the rock art and archaeological remains at Dampier Archipelago has gone on for many years giving rise to strong professional and popular support. These endeavours have finally resulted in a happy ending; on July 3rd, 2007, two weeks after a letter of intervention was dispatched by CAR, the Minister for the Environment finally announced that the renowned rock art of Western Australia's Dampier Archipelago (including the Burrup Peninsula) had been included in the National Heritage List. The reasons were stated as follows:

"The Archipelago was formed around 8,000 years ago with underlying rocks amongst the oldest on earth, formed in the Archaean period more than 2,400 million years ago. In the rocky red valleys we can begin to understand how Aboriginal people responded to changes in the landscape from the last Ice Age. Rock engravings are thought to number in the hundreds of thousands, possibly millions, with individual sites like Skew Valley in the Southern Burrup containing over 20,000 individual engravings. Images in the Burrup area range from humans including figures engaged in everyday activities such as hunting, to animals like fish, turtles, kangaroos, emus and snakes and species such as the thylacine or 'Tasmanian Tiger' that have been extinct on the mainland of Australia for thousands of years."

A factor of vital importance for the final decision was the two-and-a-half-year assessment of the Dampier Archipelago and Burrup Peninsula performed by the Australian Heritage Council that included extensive research, stakeholder consultation and opportunities for public comment. The declaration has demonstrated how environment and heritage protection can be balanced with economic and industrial development on a site that is home to Australia's second largest tonnage port, supports thousands of jobs and contains in excess of \$35 billion in industrial developments. The decision shows that the Archipelago's significant heritage can co-exist alongside resource-rich industrial areas. The positive implications of this partnership approach are further witnessed by the long-term management of the site through the development of Conservation Agreements and industry contributing many millions of Australian dollars to protect this unique heritage place. (See also Australia report, p. 30).

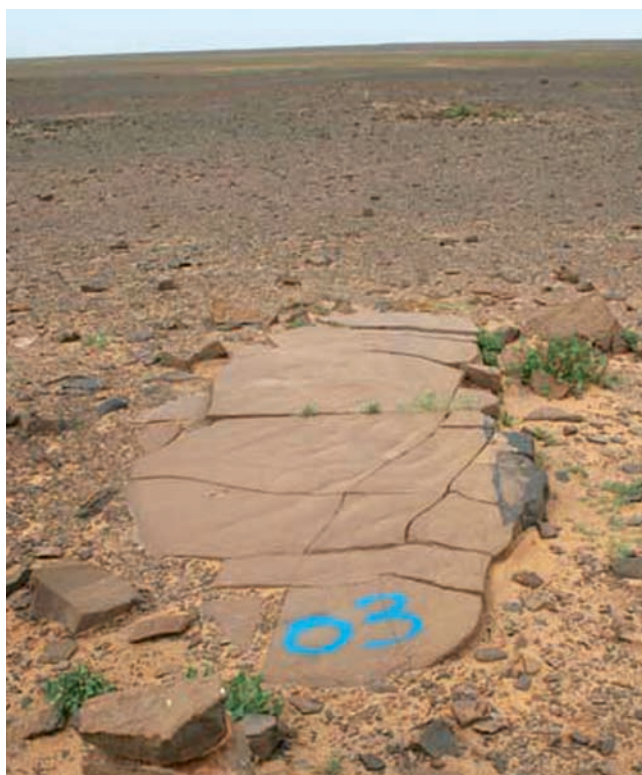


Graffiti signatures made with charcoal over the prehistoric rock paintings at Rekeiz Lemgasem (Tifariti) by both Sahrawi (left) and MINURSO (right) (Photo: Joaquim Soler i Sublis)

Damage to rock art sites in Western Sahara

The University of Girona (<http://www.udg.edu/sahara>) has been developing archaeological research in the Frente Polisario-controlled part of the Western Sahara since 1995 in collaboration with the Ministry of Culture of the Sahrawi Republic (the other part of Western Sahara has been occupied by Morocco since 1975). In the course of the study there have been alarming observations of damaging activities at several rock art sites. The damage seems to be concentrated in the most visited places and consists of engraved and painted (with charcoal or spray) graffiti.

Numbers marked with the UN blue sprays. They deface more than ten engraved slabs at Sluguilla Lawash (Photo: Joaquim Soler i Sublis)



Part of the damage seems to stem from the use of the rock-shelters as dwellings during the war of independence. It was clear that the Sahrawi soldiers were responsible for the damage: the graffiti are written in Arabic and the content was related to war, fatherland or God. Although this type of graffiti still occurs the Ministry of Culture is regularly in close contact with the military to reduce such acts and to promote knowledge and respect for the rock-art among the local population. We are now proud to report that the Sahrawi army has become involved in the research and protection work.

Another part of the damage, however, is caused not by the local population but by the international troops deployed in the country. The soldiers of the *Misión Internacional de Naciones Unidas para el Referéndum del Sahara Occidental* (MINURSO) were engaged in September 1991 to monitor the ceasefire and to organize and conduct a referendum which would allow the people of the Western Sahara to decide the Territory's future status. Some of the painted signatures on the rock panels have been thoroughly studied and the result is that they seem to correspond to the list of participating troops published on the website of United Nations: Argentina, Austria, Bangladesh, China, Croatia, Denmark, Egypt, El Salvador, France, Ghana, Greece, Guinea, Honduras, Hungary, Ireland, Italy, Kenya, Malaysia, Mongolia, Nigeria, Pakistan, Poland, Russian Federation, Sri Lanka, Uruguay and Yemen. Researchers working in the area have collected a wide spectrum of examples of damage which have apparently been the members of the MINURSO:

- Troops from the above mentioned countries wrote their names, origin and the date.
- The texts are written in English or an oriental alphabet.
- At the Sluguilla Lawash site, panels with engraved images have been sprayed with blue paint, which is regularly used by the MINURSO's blue helmets in order to mark GPS points and routes. The same blue colour spray is used regularly by the troops all through the Western Sahara.

This damage has been documented on several sites and over a wide time-span. The Ministry of Culture has contacted those responsible for MINURSO but the damaging activities continue. Therefore, the researchers of the University of Girona have decided to share this problem with colleagues and the international agencies which care for the culture and the World Heritage.

This sad example of members of the UN blue helmets forces damaging the Western Saharan rock art obviously stands in sharp contrast to the engaging and demanding words of the past Secretary General of the United Nations, Kofi Annan, about the value of the African rock art and the need for including more sites on the World

Heritage List. Therefore CAR and ICOMOS have to intervene to make these unethical activities to cease.

The World Heritage property of Sierra de San Francisco, Baja California in Mexico

One of the most remarkable rock art sites that have been inscribed on the World Heritage List is that with the marvellous rock paintings at Sierra de San Francisco at Baja California in Mexico. In recent years advanced plans to develop an infrastructure for tourism with motorways, hotels and other facilities typical of modern society have been presented. Such plans are becoming more frequent in connection with World Heritage properties and sometimes they are also needed to improve conditions and to facilitate visitors' access to sites. But at others they may just as well pose threats to the authenticity and significant values that once justified the decision of the World Heritage Committee to inscribe the property on the List. The prehistoric rock art at Sierra de San Francisco is definitely an example of the latter. The incomprehensible aesthetic of the rock art images and the pristine beauty of the serene landscape would be lost if a modern infrastructure were imposed on the property. To avoid such a devastating measure, World Heritage rock art experts and World Heritage rock art site managers, international experts and representatives of the World Heritage advisory bodies met during the session entitled 'Managing Rock Art World Heritage Sites' (22-23 May 2007) directed by Nuria Sanz of the World Heritage Centre at the 22nd Valcamonica International Symposium on Rock Art. These experts sent a motion to the responsible Mexican authorities stating that the proposed plans would threaten the outstanding universal values of the property and therefore must be stopped immediately. The experts highlighted that a monitoring mission to the site may be necessary, depending on the reaction of the State Party to the motion.

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Ulf Berthilsson
President of CAR



Rock art site at Sluguilla Lawash damaged by blue spray paint (Photo: Joaquim Soler i Sublis)

Neolithic and Bronze Age lakeside settlements in the Alpine region

Threatened archaeological heritage under water and possible protection measures – Examples from Switzerland and Southern Germany

Neolithic and Bronze Age pile dwellings – a circum-Alpine phenomenon

The lakeside settlements in the Alpine region (most of which date from between 4300 and 700 BC) are among the most important examples of archaeological heritage in Europe. The special conditions under water have led to an exceptionally good preservation of the organic materials. Remarkably well preserved timber-built constructions and numerous artefacts made of wood, bark and textiles as well as copious amounts of plant and animal remains constitute the outstanding scientific significance of the pile dwellings. It is these finds categories which have not been preserved in dry-land sites that provide us with a detailed insight into the everyday life and culture of the early agrarian societies around the Alps. It is of great importance to be able to determine precise dates for finds assemblages and the constructional history of villages by means of dendrochronological analyses.

The wetland settlements in lakes, rivers and bogs throughout the foothills of the Alps have been investigated for over 150 years. Numerous artefacts from the pile dwellings were retrieved from lakes and wetland areas using rather primitive methods as far back as the 19th century. While extensive excavations were already carried out in the 1920s, the documentation of the features to modern standards, with few exceptions, was really only introduced after 1970. At the same time, dendrochronological research experienced a breakthrough, although the earliest tentative tree ring dating experiments go back to before 1940.

The pile dwellings can be classified into three types of site, the most numerous being the lakeside settlements, followed by bog settlements, while pile dwelling sites along rivers are only occasionally found. As regards the lakes, one must differentiate between the large lakes in the foothills of the Alps, whose water systems are determined by the Alpine glaciers, and the smaller lakes spread throughout the young moraine landscape. These are often bodies of water largely without effluences, located in the transition area between the mountainous regions and the surrounding fenlands.

Based on the registries of six Alpine countries, approximately 750 sites are today classed as pile dwelling sites. With 450 sites, Switzerland boasts the majority of these. Particularly dense concentrations of settlement sites exist in Western Switzerland (the so-called Three-Lake-Region with Lakes Bièvre, Morat and Neuchâtel), in the Lake Zurich area and at the lakes that form the boundaries between Switzerland and Germany, and Switzerland and France, Lakes Constance and Geneva respectively. These are the two largest inland bodies of water in Central Europe, and, together with the northern foothills of the Alps, they constitute the core area of the pile dwelling phenomenon. This region continues to the north with numerous bog settlements in Upper Swabia, particularly around Lake Federsee, and to the east with sites around the lakes of the Bavarian and Upper Austrian foothills of the Alps. A unique geographical position is represented by the French lakes with sites throughout the Jura Mountains and deep into the Alpine Valleys. There are also similar micro-regions in Northern Italy; however, most of these sites are clustered around the lower area of Lake Garda, the largest of the southern Alpine lakes. The sites located in what is now Slovenia are concentrated in an area limited to the vast bog lands of Ljubljansko Barje.

Early research into pile dwellings – chances and consequences

With the Zurich Antiquarian Society and its President Ferdinand Keller, there was an established network of experts as early as the mid 19th century, suited to its time and with a great interest in the subject of pile dwellings, not least for political reasons. The main result of this early form of “networking” were the twelve “pile dwelling reports”, published between 1854 and 1930, the primary function of which was to highlight the research and “exploitation” of the Swiss lakeside settlements, while also featuring expertise and developments in neighbouring countries. Reports of pile dwellings discovered in the Baltic were discussed, as were ancient accounts of similar edifices in northern Greece. This early research community also produced the first analyses of prehistoric plant remains and animal bones, whose extraordinary potential in terms of archaeo-biological research had been recognised early on.

In most countries, the advances made by the study of these sites were linked with external circumstances, which brought unexpected possibilities and chances, while also, however, often leading to irreparable damage to the archaeological evidence. In Switzerland these were the two Jura waters correction projects, which, from 1872 onwards, lowered the levels of Lakes Neuchâtel, Bièvre and Morat by a good two metres and exposed the prehistoric settlement sites, thereby making them easily accessible. In Upper Swabia, the construction of the first railway line prompted intensive peat cutting in order to fuel steam locomotives. Numerous remains of settlements were subsequently found and some of them were also badly disturbed during peat cutting around Lake Federsee.

Due to their easy accessibility, bog settlements became the subject of great public interest mainly in the early 20th century, not just in Southern Germany but also in Switzerland and Italy. Sites under water remained out of human reach for a long time until Jacques Cousteau's invention of the aqualung made autonomous diving possible. From around 1970, this led to professional archaeologists going under water and carrying out the earliest studies.

The dilemma posed by archaeology as a science – increased insight destroys the sources

Naturally, the past 150 years of research have had an effect on the body of sites. Tentative first steps towards a heritage protection philosophy and an effective “maintenance” of the archaeological sources were only initiated after 1970. Owing to the fact that under water sites were largely inaccessible, one can say that, until the 1950s, systematic destruction – apart from a few exceptions – remained relatively limited. Most of the damage in Switzerland would have been caused by the Jura waters correction projects. This affected three lakes in Western Switzerland (Lakes Neuchâtel, Bièvre and Morat). On the other hand, Canton Berne, for instance, passed the first heritage protection law in an effort to safeguard the

pile dwellings around Lake Bienne as early as 1873. This had been prompted by raids on the lakeside settlements of Lüscherz by local residents, who had started a lucrative business trading in the artefacts. The lakeside settlements of Bodman and Sipplingen on Lake Constance had been exploited in a similar way. Here, a decree issued by the Grand Duchy of Baden put an end to these illicit excavations. However, recent studies have shown that the damage tended to be limited to individual sections and even in settlement sites previously deemed destroyed, the piles driven deep into the lakebed and abundant assemblages of artefacts often still remain intact. The excavators of the 19th century had little interest in many of the finds such as broken vessels and other fragmented implements, and left them behind. The bog settlements were also only affected peripherally, because peat cutting only went to a certain depth and the cultural layers were unsuitable as fuel. Until well into the 1950s, large-scale archaeological research excavations were largely limited to the bog settlements of Upper Swabia and Central Switzerland. In the case of the Upper Swabian Federsee bog, these excavations took place between 1920 and 1937, while the Central Swiss Wauwilermoos fenland was the site of extensive bog excavations mainly during the 1950s. The earliest large intrusions at Lake Constance began in the 1960s, when yacht marinas were dredged and pipes laid in the lakebed. Thanks to a phase of economic boom large studies became possible in Switzerland in the 1970s. Large urban development projects were increasingly realised for the first time in raised lakeshore areas and linear constructions such as motorways and later railway lines ran along the lakeshores straight through vast prehistoric settlement sites. While this prompted the first systematic and high-standard rescue excavations along with immense scientific advancement (since 1972, the costs for national projects such as motorways are funded entirely by the parties responsible), these large-scale developments ultimately led to the total destruction of the archaeological evidence. The large development projects of the 1970s made the archaeological dilemma painfully clear for the first time: increased archaeological insight permanently destroys its own non-reproducible sources.

Pile dwellings under threat – erosion of lakes, drying out of wetland areas

Today, the shores of lakes and rivers in all of the Alpine states are considered to be especially ecologically sensitive and are usually subject to particularly rigorous planning legislation. Many of the lacustrine landscapes have, at this stage, been cared for by substantial lobbying for decades and there are numerous NGOs devoted to the protection of “their” lake (Association pour la Sauvegarde du Léman [Association for the Protection of Lake Geneva], Interessengemeinschaft Bielersee [Friends of Lake Bienne], Internationale Bodenseekommission [International Commission for the Protection of Lake Constance], to name but a few). The danger of uncontrolled construction affecting waters has therefore decreased significantly in the past number of years. The capacities of harbours to accommodate amateur captains have been exhausted and bank reinforcements in the form of walls and dams, often practiced before, have completely gone out of fashion thanks to the introduction of lakeshore renaturation projects. Intrusions into bog land areas have also decreased slightly, due to increased environmental awareness and the protection of wetlands (special legislation in Switzerland, identification of new

natural heritage and fauna-flora-habitat areas according to guidelines stipulated in the Habitats Directive in Germany, 1971 Ramsar Convention on Wetlands). However, old drainage systems and sinking groundwater levels still cause problems. It is also entirely unknown, to what extent global warming will affect wetland areas in the future.

Currently, circum-Alpine pile dwellings around the large lakes are threatened by the aggressive erosion of the shallow water zone, which can extend up to 300 metres into the lake. This erosion is caused by various overriding factors largely beyond our control. Some of these factors are the numerous regulating intrusions into the regime of tributaries and effluences of the waters since the mid 19th century, wave reflection and changes in currents due to bank reinforcements, declining lakeshore vegetation caused by the eutrophication of the lakes, decreased sedimentation due to barrages in the headwaters of the tributaries, and the intensive traffic of motor-driven boats and ships.

The erosion of the shallow water zone usually leads to the large-scale ablation of sediments covering the archaeological layers. In absence of the protecting sediments, the organic components and finds made of wood, bark or plant fibres are destroyed very quickly. Harder artefacts such as pottery may well survive for some years but will also erode rather fast and will lose their archaeological potential, leaving just rounded sherds. After a few decades, all that will be left of the 5000 year old settlements, extraordinarily well preserved up to a short while ago, will be the hardest objects such as stone and bronze artefacts. Compared to the archaeological layers still intact, such eroded layers, having been reduced to “hard ware” only, have lost most of their archaeological evidence. However, compared to “dry-land sites” these sites are still valuable cultural witnesses thanks to the thousands of piles that were driven deep into the lakebed, still possessing a last scientific potential in terms of dendrochronological, and maybe in future also climatological studies.

Completely different processes occur in the dried up areas of small lakes and in bogs. In order to gain more farm land, many of the small bodies of water were “ameliorated” in the past, i.e. lakes without outlets were provided with artificial outlets, the sills of existing outlets were lowered and wetlands were drained using large-scale drainage systems. Ultimately, all these measures have the same effect: Groundwater levels sink and the archaeological sites, preserved in water-saturated conditions for millennia, subsequently dry out. Atmospheric oxygen penetrates the originally waterlogged sediments and micro-organisms commence their destructive work on the organic material. They are extremely efficient: It only takes a few decades for the entire organic material to be totally decayed. To put it simply, they systematically turn valuable archaeological artefacts into simple humus. It goes without saying that this represents a grave loss of archaeological potential.

At this moment in time, one can say that the “pile dwellings” around all the lakes throughout the foothills of the Alps are threatened by erosion to a greater or lesser extent. Decreasing groundwater levels are witnessed all across Europe, which effectively threatens all bog settlements. To date, however, this scenario has usually only concerned parts of the sites. As a rule, they show a succession of already badly eroded peripheral areas to sections at the centre of the settlements that are still intact. Bog settlements, in turn, show the opposite, i.e. the central areas are often located at higher levels and are therefore dried up more than the edges located lower down and are thus often still below the groundwater level.

Erosion protection measures and future possibilities

Because of the situation described above, numerous rescue excavations were carried out over the past 25 years in order to document acutely threatened settlement sites, while pure research excavations took a back seat. This strategy is basically in accord with the European Convention on the protection of archaeological heritage. The treaty document, ratified in 1992 is also called the 'Malta or Valletta Convention' and puts it plainly: the *in situ* conservation of archaeological cultural goods takes priority over an excavation. First experiments in actively protecting archaeological sites under water have also been carried out over the past approximately 25 years. The first methods have been developed almost simultaneously in Western Switzerland and Southern Germany. Initial experiments consisted of securing lakeshore sections by installing "rigid" reinforcements and coverings with sand bags, sand deposits and similar methods. For the past number of years, geotextiles covered with gravel deposits have proven successful. Various heritage protection agencies have developed specially designed floating implements in order to carry out this work and to put in place efficient and cost-effective erosion protection measures. The experiences with this method gathered over the past approximately ten years have been extremely positive. At the outset, the performance of the gravel coverings on top of the geotextile was viewed as the main critical aspect. It was feared that currents on the lakebed, for instance during storms, would shift the gravel and uncover the geotextile. So far, this has not occurred; however, empirical data on the most advantageous gravel mixtures and range of geotextiles is still incomplete. One must also ensure that any intrusions into the shallow water zone are ecologically viable and comply with legislation such as the Habitats Directive guidelines.

The method of using a combination of geotextiles and gravel deposits has proven so successful in Lake Bienne that, for instance, breakwater systems using timber palisades and fascines, which were still being installed until the late 1990s, no longer seem viable today.

While great strides have been made over the past twenty years in terms of protecting archaeological sites from erosion, efforts made with regard to the *in situ* conservation of archaeological sites in wetland areas have not evolved much. An exception to this rule is the Federsee region in Southwestern Germany, where new nature reserves have been identified in close collaboration with nature conservation organisations, and where large areas of land have been bought and withdrawn from intensive farming by reallocation procedures. In some areas, the groundwater levels could be raised again and the fluctuations in groundwater tables are now being closely monitored by numerous measuring stations. For the pile dwellings in other bogs throughout the Alpine region, however, there is no systematic monitoring, which would enable us to observe the long-term development of the state of organic wetland sediments. Changing to extensive farming in the proximity of small lakes and wetland areas is a first step. Extensive agriculture, however, involves a change in farming practices and limited use of fertilizers and manure. Such efforts clash with the wishes of the landowners concerned and can sometimes lead to conflicts.

Over the past number of years, a rich pool of practical knowledge has been amassed through international exchange of information and close collaboration. A network of experts dealing with the subject has evolved over the years, and there have been two round table talks to date (Archéologie et Erosion, Lons-le-Saunier

1994/Neuchâtel 2004), the results of which have been published. We aim, in future, to link up with other existing networks dealing with the same topics throughout the Anglophone and Nordic regions (Preserving Archaeological Remains *in situ* PARIS1-3, London 1996 and 2001/Amsterdam 2006). Focal points of the discourse would mainly be the protection of archaeological sites in wetland areas. In terms of pile dwelling bog settlements, the collaboration between heritage protection and nature conservation authorities and NGOs, and the consistent enforcement of treaties like the Ramsar Convention has, to date, only occurred in isolated instances; however, it must be demanded for the future.

The project initiated by Switzerland in 2004 to include the circum-Alpine pile dwellings in the list of UNESCO World Heritage sites primarily intended to protect the archaeological sites from further destruction. The UNESCO label provides invaluable support because archaeological sites such as pile dwellings attract public attention (and along with it financial assistance) and protection from other interests only if their scientific value is acknowledged at the highest level. The pile dwellings need dedicated lawyers who are fully committed to the fight for the protection of the archaeological heritage under water and in wetland areas.

(Translation: Sandy Haemmerle MA, Shantalla, Galway, Ireland, www.prehistrans.com)

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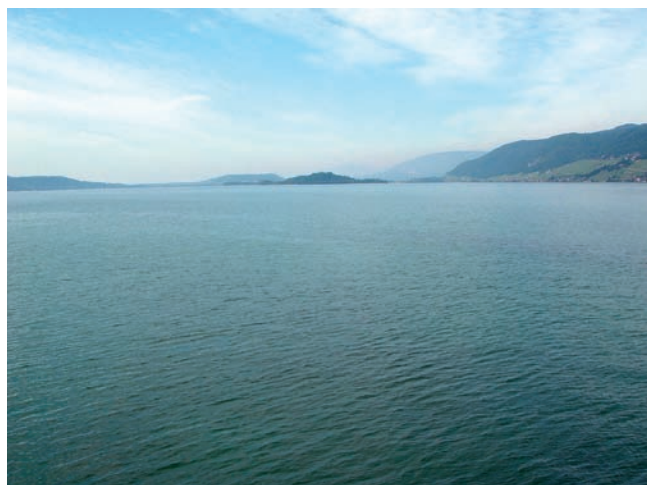
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Lake Federsee (foreground), situated 60 km north of the Alps (background) in the state of Baden-Württemberg, is a classic example of a dried up lake in the foothills of the Alps with a rich body of preserved settlements, plank ways and dugouts dating from the Stone Age to the Metal Ages. Nature conservation and heritage protection work hand in hand to create reserves and to raise groundwater levels. Photograph: Stuttgart Regional Council, O. Braasch.



Lake Bienne (Canton Berne) is one of the smaller bodies of water in the Swiss Midlands, which in turn are located between Lakes Geneva and Constance, the two largest European inland lakes. While there are 35 'pile dwelling' sites on the 17 km long Lake Bienne, Switzerland boasts a total of approximately 450 sites. Around 750 pile dwelling sites are known throughout the circum-Alpine region. Photograph: Archaeological Service of Canton Berne.



Aerial photograph of the pile dwelling site of Unteruhldingen on Lake Constance. The erosion of the shallow water zone is ongoing, palisades and ground plans of houses are constantly being exposed. Photograph: Stuttgart Regional Council, O. Braasch.

Excavation of the timber structures of a Late Stone Age house (dated dendrochronologically to 3279 BC) on Lake Federsee. For thousands of years, the preservation conditions in the peat were ideal; today, drainage systems and decreasing groundwater levels are threatening the archaeological evidence. Photograph: Stuttgart Regional Council, W. Hohl.

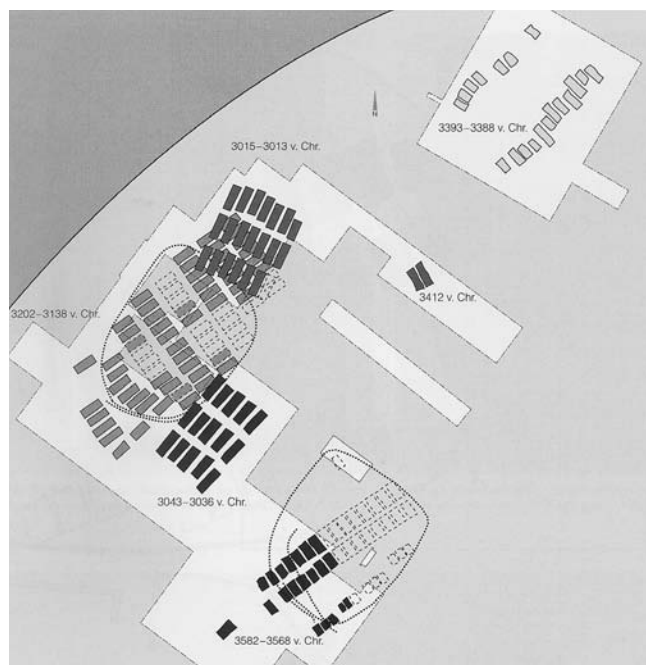


Divers among the piles at a site in Lake Bienne, which were exposed by the erosion of the lakebed. The situation pictured here is an extreme form of destruction caused by waves and wind and also by human intrusion into the natural balance of the body of water. Photograph: Archaeological Service of Canton Berne.



Situation of a pile dwelling site on Lake Bienne, the archaeological layer of which is in the process of disintegrating. Crabs are already burrowing into the archaeological layer – it looks like Swiss cheese. Jutting out of the lakebed are the stumps of piles from a settlement that was destroyed by a conflagration in 2704 BC.





Example of a Neolithic settlement sequence (Sutz-Lattrigen on Lake Bienné) between 3600 and 3000 BC. During the rescue excavations, samples were taken from thousands of piles, which will be analysed by dendrochronological means and will provide exact dates. Figure: Archaeological Service of Canton Berne

Artefacts made of organic materials survived thousands of years in the wetland settlements throughout the foothills of the Alps in exceptional states of preservation. Textiles, wooden vessels, a comb and a knife dating from the Late Stone Age found at the lakeside settlements of Vinelz and Lattrigen on Lake Bienné. Figure: Archaeological Service of Canton Berne/Stuttgart Regional Council, A. Kalkowski.



Groundwater level measuring stations monitor the groundwater tables in an area of the Federsee bog, which has undergone wetland restoration. The archaeological evidence remains preserved beneath the peat cover. Photograph: Stuttgart Regional Council, H. Schlichtherle.



Erosion protection measures at Lake Bienné, Switzerland (2003-2004). 'ROBOR' catamaran in action with geotextile mats. 6,000 m² of the settlement site in the bay of Sutz-Lattrigen have been covered over and 30,000 m² have been excavated archaeologically. Photograph: Archaeological Service Canton Berne.

Divers recording exposed and eroded timbers. Rescue excavations often provide the last pieces of information before they are destroyed forever. Photograph: Archaeological Service Canton Berne.



Cultural Landscapes of Vernacular Architecture in Extreme Danger

Vernacular architecture is frequently made up of groups of buildings that are an integral part of the landscape, both in terms of their own environment as well as the natural environment that surrounds the settlement. Over the past years, several cultural landscapes where vernacular architecture was found have suffered from severe deterioration due to their alteration, destruction or disappearance.

The International Scientific Committee of Vernacular Architecture (CIAV) has decided to analyze this point, making it the main focus of its discussions during the annual meeting to be held in the Philippines in November 2007. The title of the conference is *Vernacular Landscape in Danger*; and one of the subtopics will be *The Safeguarding of Vernacular Traditions in Disaster Areas*.

The loss of this unique heritage is a grave matter, since it is protected in only very few cases. Vernacular heritage and the cultural landscape to which it belongs are defended only when a vernacular complex is part of a site that has been declared “historic” and is safeguarded by its native country’s heritage laws; otherwise, they tend to be rapidly altered. Since most traditional building materials such as wood, soil, stone and natural fibers do not contribute to global warming (in contrast to industrial ones such as steel and concrete), the conclusion can be drawn that materials used in vernacular buildings support sustainable development. It should therefore be considered that the significant reduction of built vernacular heritage considerably alters this type of balanced development that protects the environment better.

There are different reasons behind the disappearance of vernacular cultural landscapes. One, as mentioned before, is the absence of legal protection; a second one, encountered frequently, is uncontrolled urban growth and real estate speculation. The unrestricted exploitation of natural resources affects the landscape of the environment. But there are some other reasons that are not so tangible and are instead of a more cultural and subliminal character: for example, the desire different social groups may have of living in “modernity”, with a misconstrued concept of what is “modern”. This aspiration, which can be very legitimate, can however lead to the mistake of considering vernacular cultural landscapes as something out of the past, something that has to do with economic and social underdevelopment, and to associate it with the opposite of “modern”—and consequently the opposite of “progress”. Therefore, authorities at all levels fail to take into account the protection of cultural landscapes where there are groups of traditional vernacular architecture, and instead watch their slow disappearance with indifference, without attempting any kind of protection or recognition.

The destruction of vernacular cultural landscapes by natural disasters is also very serious. When a region is affected by an earthquake, a hurricane or any other type of disaster that—besides the irreparable loss of lives—causes severe damages to the vernacular cultural landscape, what usually happens is that reconstruction does not take into account the traditional forms of the buildings nor the settlements that gave value to the cultural environment.

The fact that these landscapes have not been appropriately recognized has also led to their neglect by academics and to the fact that they are hardly being taught at universities, especially at schools of architecture and higher learning. For instance, examples of these subjects are scarce in doctoral theses. Consequently, architects and other professionals that have graduated from universities do not consider vernacular cultural landscapes to have any value whatsoever and contribute to their destruction by implementing



Demolition of an adobe house

projects for new buildings with no relationship to the cultural or environmental context.

In face of this situation, what we propose is to discuss in as many forums as possible the historic importance of cultural landscapes whose distinctive feature is vernacular architecture; to make not only their cultural values known, but also the fact that their preservation can boost the economic growth of an area and reinforce the cultural identity of its inhabitants; to indicate how the loss of this heritage degrades cities and rural settlements, transforming them into places without quality of life, due to the absence of conservation of authentic landscapes. Dissemination by means of conferences, publications and interviews in the media can promote an understanding of the severity of the loss of traditional landscapes. Efforts are also necessary to increase the teaching, study and research of vernacular cultural landscapes in institutions of higher learning, in order to reinforce academics’ knowledge of the subject.

ICOMOS, by means of its national and scientific representatives, can tackle the task of dissemination among the authorities at all levels and in the very society that is being affected. This is why having discussion forums in each country and greater dissemination can help create the feeling and the need for preservation or even restoration of vernacular cultural landscapes.

Also, ICOMOS national committees from around the world should be present in places affected by natural disasters to aid in the adequate restoration of vernacular cultural landscapes.

Paisajes Culturales de Arquitectura Vernácula en Riesgo Extremo



Adobe house with thatched roof

La arquitectura vernácula constituye en numerosas ocasiones conjuntos edificados que forman parte integral del paisaje, tanto de su propio entorno como del medio natural que rodea al asentamiento. En los últimos años numerosos paisajes culturales en los cuales se ha insertado la arquitectura vernácula han sufrido un serio deterioro debido a su alteración, destrucción o desaparición.

El CIAV (*International Scientific Committee of Vernacular Architecture*), ha decidido analizar este tema que será el punto principal de sus discusiones durante su reunión anual que se llevará a cabo en el mes de noviembre en Filipinas. El tema de la conferencia es: "Paisajes vernáculos en peligro" (*Vernacular Landscape in Danger*). Uno de los subtemas será: "La protección de las tradiciones vernáculas en zonas de desastre" (*The safeguard of vernacular traditions in disaster areas*).

La pérdida de este singular patrimonio es muy grave pues en muy pocos casos se encuentra protegido. Sólo cuando un conjunto vernáculo forma parte de un sitio que ha sido declarado como histórico y está salvaguardado por la ley patrimonial del país de que se trate, se defenderá el patrimonio vernáculo y el paisaje cultural al que pertenece, pero de no ser así tiende a verse alterado rápidamente. En virtud de que los materiales de construcción tradicionales tales como la madera, la tierra, la piedra y las fibras naturales no contribuyen al calentamiento global como ocurre con los de tipo industrial, por ejemplo el acero y el concreto, se puede concluir que los materiales empleados en las construcciones vernáculas apoyan el desarrollo sustentable. Por ello debe tenerse en cuenta que la disminución significativa del patrimonio vernáculo edificado altera significativamente este tipo de desarrollo equilibrado que protege mejor al medio ambiente.

Las causas de la desaparición de los paisajes culturales vernáculos son diversas. Una, como lo hemos señalado es la falta de protección jurídica, otra que a menudo se presenta es el crecimiento urbano y la especulación inmobiliaria incontrolados. La explotación irrestricta de los recursos naturales afecta el paisaje del entorno

ambiental. Pero hay algunas otras razones, más de carácter cultural y subliminal que tangibles: por ejemplo el deseo de los diversos grupos sociales de vivir en la "modernidad", cuando moderno es un concepto mal entendido. Esta aspiración que puede ser muy legítima, lleva cometer el error de considerar al paisaje cultural vernáculo como perteneciente al pasado, al retraso económico y social, a vincularlo con lo opuesto a lo moderno y por lo tanto al progreso. Por ello autoridades de todos los niveles omiten la protección de los paisajes culturales en los que se insertan grupos de arquitectura tradicional vernácula y simplemente ven con indiferencia su desaparición paulatina, sin intentar algún tipo de protección y de reconocimiento.

Es también muy seria la destrucción de los paisajes culturales vernáculos que se ven afectados por desastres naturales. Cuando una región es azotada por un sismo, huracán o cualquier otro tipo de desastre que además de cobrar vidas cuya pérdida es irreparable, causa graves daños al paisaje cultural vernáculo, lo común es que la reconstrucción no considere la forma tradicional de las construcciones ni los asentamientos que le daban valor al entorno cultural.

El hecho de que estos paisajes no se hayan reconocido oportunamente también llevó al olvido su estudio por parte de las académicos y de su enseñanza en las universidades, muy especialmente en las escuelas de arquitectura y de educación superior. Son muy escasos los ejemplos de estos temas en las tesis de doctorado, por ejemplo. Por lo tanto los arquitectos y otros profesionales egresados de las universidades no les consideran valor alguno y contribuyen a su destrucción al realizar proyectos de nuevas edificaciones sin relación alguna con el contexto ambiental ni cultural.

Ante esta situación lo que proponemos es difundir en todos los foros posibles la importancia histórica de los paisajes culturales cuyo rasgo distintivo sea la arquitectura vernácula. Dar a conocer no solo sus valores culturales sino el hecho de que su preservación puede impulsar el crecimiento económico de un sitio y reforzar la identidad cultural de sus habitantes. Señalar cómo la pérdida de este patrimonio degrada las ciudades y los poblados rurales, convirtiéndolos en sitios carentes de calidad de vida, en virtud de la falta de conservación de un paisaje auténtico. Solo la divulgación por medio de conferencias, publicaciones y entrevistas en los medios, puede ayudar a comprender la gravedad de la pérdida de los paisajes tradicionales.

Es necesario también hacer esfuerzos por impulsar la enseñanza, estudio e investigación de los paisajes culturales vernáculos en las escuelas de educación superior, para reforzar el conocimiento de los académicos sobre el tema.

El ICOMOS por medio de sus representaciones nacionales y científicas puede llevar a cabo la tarea de la difusión ante autoridades de todos los niveles y ante la misma sociedad afectada. Por ello la realización de foros de discusión en cada país a los que se les brinde la mayor difusión podrá ayudar a crear el sentimiento y la necesidad de la preservación o de la restitución, en su caso, de los paisajes culturales vernáculos.

Asimismo las representaciones diversas de ICOMOS en el mundo deben estar presentes en los sitios afectados por desastres naturales para auxiliar en una adecuada restitución del paisaje cultural vernáculo.

Valeria Prieto
CIAV

The World Heritage Convention and the Buffer Zone

The World Heritage Convention and the Buffer Zone was the subject of the 2006 symposium of the International Scientific Committee on Legal, Administrative and Financial Issues (ICLAFI). Meeting in Hiroshima, Japan, November 26 through December 1, the committee addressed the issue through several case studies, including the Atomic Bomb Dome.¹

Participants from 15 countries participated in the workshop, including 17 participants and 16 observers from Kyushu University, Tokyo University and ICOMOS Japan. The participating countries were Australia, Belgium, Bulgaria, Canada, Croatia, Finland, Germany, Japan, Netherlands, Peru, Poland, Spain, Sri Lanka, Sweden, and United States of America.

The protection of a World Heritage site has long been focused on the core area in which the World Heritage site was located. The original operational guidelines (1977) to the World Heritage Convention (1972) did not focus on the broader surroundings of the World Heritage site at all. It is only since the revision of the operational guidelines in 1980 that the protection of the broader surroundings was inscribed under the concept of the buffer zone. It was recognized that the universal value of a Cultural Heritage site could be jeopardized by alterations in its broader surroundings. Notwithstanding this formal recognition, many aspects remained unclear. Many problematic cases involving changes occurring within the buffer zone emerged. The revision of the operational guidelines in 2005 aimed partially at responding to the problems of the concept of the buffer zone. The inclusion of a definition and some requirements for its application could be seen as a major improvement.

This recent evolution is one of the main inspirations for the topic of the conference. A recent building project in the near vicinity of the World Heritage site of the Atomic Bomb Dome, located within the buffer zone, was another source of inspiration for the topic. The latter made it also appropriate to choose Hiroshima as the venue of the conference. The choice of Hiroshima was further instigated by what is happening in a small fishing village, Tomonoura, near Hiroshima. Even though Tomonoura is not recognized as a World Heritage site, it has long-standing value as a part of the cultural route between Japan and Korea. The village might lose its value by a bridge building project completely altering the surroundings of the harbor and the village. The well-preserved natural and historical heritage might be lost for future generations. Comparable to the Atomic Bomb Dome, Tomonoura shows that respect for the surroundings of a valuable heritage site is of utmost importance.

The World Heritage Convention (WHC) is undeniably one of the most successful projects of UNESCO. Since its adoption in 1972, the World Heritage Committee has inscribed 830 properties of outstanding universal value as World Heritage. The preservation of these World Heritage sites, however, has not always been smooth. A lot depends on how local legislation has been elaborated.

In Japan, for example, the Law for the Protection of Cultural Property does not protect the buffer zone. The Operational Guidelines for the Implementation of the Convention require that a buffer zone be determined whenever it is necessary for the proper conservation of the cultural or natural property. In order to fulfill this requirement, Japan has developed the practice of recourse to various laws regulating areas for purposes other than the conservation of its cultural value. Hence, the legal basis for the buffer zone

in Japan is very fragile. Related to this, the concept of the buffer zone is not legally elaborated, and therefore its objectives are not clear. Under current practice, it fully depends upon the goal of each separate law. We might expect that what is designated as the buffer zone will be regulated, for example, by laws to preserve natural resources or to prevent the construction of large-size factories. If these laws were amended for reasons which have nothing to do with the protection of cultural property, the protection of the buffer zone would be weakened.

The construction of a tall apartment building in the neighborhood of the Atomic Bomb Dome in Hiroshima exemplifies the urgent need to rethink the Japanese approach towards the concept of the buffer zone. To reach this goal, this conference was set up to learn from experiences in other countries and use them to draft a recommendation.

The participants took part in a site visit to Hiroshima Peace Park and the Atomic Bomb Dome. Prof. Maeno, President of ICOMOS Japan, and Prof. Kono, Kyushu University and ICLAFI member of ICOMOS, guided the participants during the visit, demonstrating that the buffer zone around the World Heritage site of the Atomic Bomb Dome is not well respected.

The participants were interested to know why five tall apartment buildings, including one in the immediate vicinity of the Atomic Bomb Dome, could be constructed within the area designated as a buffer zone to this World Heritage site. Moreover, questions were raised in regard to the appearance of the buildings just outside the buffer zone. It became apparent that one of the buildings just outside the buffer zone would have to be demolished because of its non-conformity with the nature of the neighborhood.

From the Hiroshima Peace Park, the participants went to Tomonoura. This small fishing village has an extremely well preserved visual environment dating back to the Edo-period. Besides this external value, Tomonoura has also an intrinsic value. Historically, this port has functioned as a cultural route between Japan and Korea. Even though this unique ensemble is not inscribed as a World Heritage site, it deserves attention. Similar to what is happening to the site of the Atomic Bomb Dome, this unique ensemble is in danger of losing the previously mentioned values by a bridge building project.

The presentation of the papers was initiated by Professor Kono, who explained the emergence of the concept of the buffer zone in World Heritage law. The introductory presentation was followed by the general presentations over two days. The full text of the presentations may be found on the Internet at: <http://www.law.kyushu-u.ac.jp/programs/english/hiroshima/index.htm>.

The outcome of the conference on the World Heritage Convention and the Buffer Zone is laid down in three recommendations, one for the Atomic Bomb Dome, one for Tomonoura and one for ICOMOS. The recommendations were presented to the general public in their original language (English) and in a translated version (Japanese). The recommendations on the Atomic Bomb Dome and Tomonoura illustrate that the protection of the surroundings is a problem and it needs to be taken much more seriously. How the protection should be properly done is an issue for further study. Therefore, an additional recommendation was adopted, addressing ICOMOS to promote the study of the buffer zone concept.

Recommendations for the Atomic Bomb dome

We, the expert members of the International Committee for Legal, Administrative and Financial Issues of ICOMOS attending the Conference on The World Heritage Convention and the Buffer Zone in Hiroshima, Japan:

Acknowledging with sincere appreciation the International Council on Monuments and Sites Japan (ICOMOS Japan), and the Asia/Pacific Cultural Centre for UNESCO (ACCU) for their valuable organization of the conference;

Recognizing that the buffer zone issues have been very important in World Heritage, especially their legal, socio-economic, environmental and political aspects;

Welcoming the decision to remove the black building, Shokokaigisho, located very near the Hiroshima Atomic Bomb Dome as it harms the view and diminishes its cultural integrity and outstanding universal value;

Expressing our deep regret and disappointment over the construction of five high-rise buildings in the buffer zone, including the recently completed apartment building adjacent to the Atomic Bomb Dome;

Being concerned about possible similar constructions in the future;

Call upon the Prime Minister of Japan, the Governor of Hiroshima Prefecture, and the Mayor of Hiroshima City:

- 1. To study and reflect upon the cases of Cologne and Dresden as they pertain to construction that impedes, if not diminishes, the overall integrity of the property inscribed as a World Heritage site;*
- 2. To see the planned demolition of the Shokokaigisho building as a recognition that obstruction of the view and spatial integrity of a World Heritage site is a diminution or dilution of its cultural value and to ensure that any future use of this area will strengthen the outstanding universal values of the World Heritage site; and*
- 3. To adopt binding regulations to control development projects in the vicinity of the World Heritage site in terms of height restrictions, building color, aesthetics, and other compatibility factors.*

These Recommendations were adopted in Hiroshima, Japan, on 29 November 2006, during the Conference on The World Heritage Convention and the Buffer Zone.

Recommendations for Tomonoura

We, the expert members of the International Committee for Legal, Administrative and Financial Issues of ICOMOS attending the Conference on The World Heritage Convention and the Buffer Zone in Hiroshima, Japan:

Considering that by Resolution No. 9 on the Tomo Bridge, the 15th General Assembly of ICOMOS in Xi'an, China, resolved to ask the Prefectural and City Government to reconsider the Tomo bridge proposal since conservation should embrace the visual environ-

ment, including the adjoining sea, the islands and mountain backdrop it should consider the historical role of the port including its function as part of the cultural route between Japan and Korea. The proposed bridge would damage or completely destroy a number of these important values;

We strongly endorse Resolution No. 9 because it recognizes the great value of Tomonoura to the cultural heritage of Japan.

Call upon the Prime Minister of Japan, the Governor of Hiroshima Prefecture, and the Mayor of Fukuyama City:

- 1. To consider the port and town of Tomonoura as a unique ensemble of international significance that should be preserved in its entirety;*
- 2. To draw on the valuable experience of the city of Dresden, which was placed on the World Heritage Endangered List, to realize that the conservation of important sites, be they potential or already inscribed on the World Heritage List, entails the preservation of the site itself and also the protection of the environment and surroundings, crucial for the integrity of the unique ensemble;*
- 3. To abandon the bridge building project and reconsider the alternatives that do not harm the unique ensemble.*

These Recommendations were adopted in Hiroshima, Japan, on 29 November 2006, during the Conference on The World Heritage Convention and the Buffer Zone.

Recommendations for ICOMOS

We, the expert members of the International Committee for Legal, Administrative and Financial Issues of ICOMOS attending the Conference on The World Heritage Convention and the Buffer Zone in Hiroshima, Japan:

Acknowledging with sincere appreciation the International Council on Monuments and Sites Japan (ICOMOS Japan), and the Asia/Pacific Cultural Centre for UNESCO (ACCU) for their valuable organization of the conference; and

Recognizing that the buffer zone issues have been very important in World Heritage, especially their legal, socio-economic, environmental and political aspects;

Call upon ICOMOS:

- 1. To further study the issues of buffer zones and how they can be adequately protected and, in the process, support the cooperation of its relevant committees, acting jointly, on buffer zone issues;*
- 2. To increase awareness of the existence, necessity and protection of buffer zones in the Asia-Pacific region and localities;*
- 3. To convince national governments, local governments, corporations and construction companies to be respectful of heritage places and their buffer zones and that any development must be compatible with their protection and enhancement;*
- 4. To conduct activities that emphasize the belief that corporate*

goals should include the continuing and genuine commitment by the business sector to behave responsibly and ethically and exercise an important duty of care to all of its stakeholders including the community at large;

5. To promote the idea of responsible citizenship as a key element in the preservation and promotion of cultural heritage;

6. To further stress education to intensify global awareness of the measures needed to protect heritage sites and their buffer zones so as to preserve and transmit to future generations the cultural context of World Heritage sites, both listed and potential;

7. To stress the idea that every World Heritage site has intangible aspects and dimensions, notably the cultural and historical, that must be respected; and

8. To promote these significant matters to the World Heritage

Committee and the member-states of the World Heritage Convention.

These Recommendations were adopted in Hiroshima, Japan, on 29 November 2006, during the Conference on The World Heritage Convention and the Buffer Zone.

(Both issues are also discussed in the Japan report, pp. 102-104)

ICLAFI

¹ The Symposium was organized by ICOMOS Japan and the Asia/Pacific Cultural Centre for UNESCO (ACCU), in cooperation with Kyushu University as one of the 2006 Programmes for Professionals in the Fields of UNESCO's Competence within the framework of the ACCU International Exchange Programme under the UNESCO/Japan Funds-in-Trust for the Promotion of International Cooperation and Mutual Understanding.

Logistic and Other Factors Constraining Conservation of Heritage Sites in Antarctica

While there are important conservation projects being conducted at many worldwide sites where access and environmental factors create major difficulties, many of the most complex problems presented to managers and conservators arguably occur in polar regions. Some of the world's most unique historic sites are located in the Antarctic and Arctic and the challenges that must be overcome in order to conserve them, make them subject to risks that are normally less severe in other parts of the globe.

Perhaps the most obvious difficulty arises because these higher latitudes experience long periods of darkness during winter so conservation work is necessarily restricted to a few weeks during the summer. Freezing temperatures and extreme weather conditions, however, continue to create practical problems, even in summer. What is less obvious though, is that problems of access to polar sites generate complex logistical challenges. Combined, these factors severely limit the opportunities to reach the sites and periods of work when conservation activities are possible.

Access

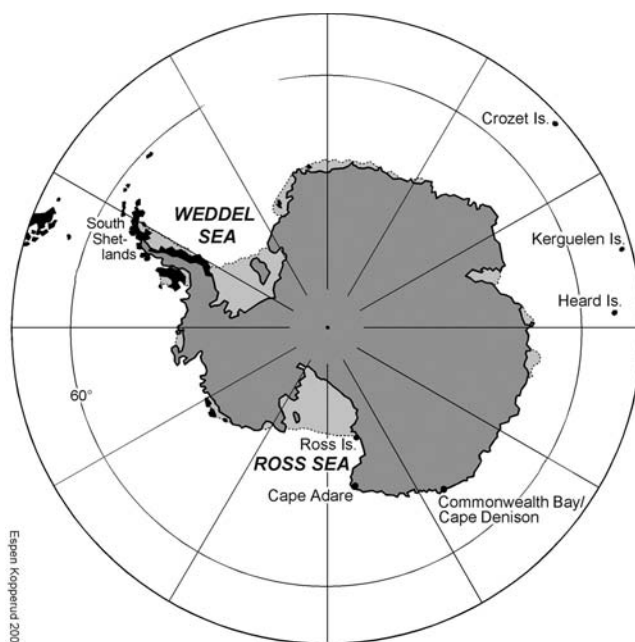
No matter where you depart from, you must cross over 1,000 km of some of the roughest seas in the world to reach any part of the Antarctic continent. In winter sea ice spreads north from the continent, so a landfall by sea is impossible until mid-summer. Even then sea access is only possible in favourable conditions for a period of six to eight weeks before the ice returns.

While it is possible to travel by air to some parts of Antarctica, air transport is restricted and specialist aircraft are required. Limited private services are available into a very few parts of the continent but the only flights into most areas are managed by government research programmes. Use of these may be granted to reach one of the government bases but once there, helicopter transport or some form of surface travel is needed to reach the historic sites.

Given such problems of access, the need to carefully plan work at any of these sites becomes paramount. In addition to the requisites of the conservation work itself, practical and safety considerations demand meticulous planning of transport, provisioning and shelter.

Environmental constraints

In Antarctica additional constraints are presented by the need to comply with the provisions of international agreements that were originally designed to protect flora, fauna and the environment. Now the Antarctic Treaty and its associated protocols provide a regulatory framework to protect the natural, as well as the historic values of the continent. Clearly there are significant benefits that come from these internationally recognised mechanisms for protection of historic sites, but the same regulatory system places onerous conditions on the way conservation work is conducted. Compliance



Map of Antarctica (Credit: International Polar Heritage Committee)

with these conditions can in some cases limit aspects of the work, but at the very least compliance demands extremely detailed planning and preparation.

The physical environment in Antarctica creates additional difficulties. The same harsh weather that accelerates the wear and tear on the structures also poses challenges (and some risk) for those engaged in the conservation work. Conservators can of course adapt to the discomfort of working in extreme weather conditions and living in primitive accommodation, but the limitations of such basic needs as fresh water and "portable energy sources" make the task of conservation very difficult. Safety also becomes an issue when the isolation of the site makes rescue difficult if not impossible.

For the purpose of illustrating these problems, this article focuses on a site in Antarctica.

Borchgrevink's huts – Cape Adare

Cape Adare lies at the western entrance to the Ross Sea. Further south, on Ross Island, can be found three other historic sites where the better-known explorers Robert F. Scott and Ernest Shackleton made their bases. These four sites date from the so-called "heroic era", a period generally regarded as being from 1889 until 1917.

Cape Adare is without doubt one of the world's most isolated historic places and where the first structures ever built on the Antarctic continent still stand. They were erected on the same rocky beach where, in 1895, the first documented landing on the continent took place. These two unique huts were built five years later by Norwegian Carsten Borchgrevink as his base for the

"British Antarctic ("Southern Cross") Expedition" - 1898-1900. This expedition became the first to winter-over on the Antarctic mainland. The two wooden structures, built side by side, were originally connected by an improvised annex.

This site is designated within the Antarctic Treaty System as an "Antarctic Specially Managed Area" (ASMA No. 159). It also embraces the ruins of the hut built later by Scott's Northern Party during the British Antarctic Expedition of 1910-13. Conservation of the site is being undertaken by Antarctic Heritage Trust (AHT), an international organisation based in New Zealand. The Trust is responsible for the three other sites in the Ross Sea region and has charitable status in several countries.

The flat shingle beach on which the huts are constructed is about 45 hectares in area and presented an appealing location for the early explorers. Unfortunately though, it is also an appealing site for penguins and now one of the greatest difficulties faced by conservators is that it is the location of the largest breeding colony of Adelie penguins in the world. From October to February each year, 500,000 pairs of Adelies converge on the beach to build nests that cover nearly every square metre of the site to form an almost impenetrable barrier. Like other wildlife on the frozen continent the penguins are protected and cannot be disturbed. Such a concentration of penguins also produces tons of guano which they deposit around the huts and over the many artefacts that now lie buried there.

Logistics

Cape Adare lies about 3,000 km south of New Zealand. It is almost another 1,000 km further south to Ross Island where the Antarctic bases and ice-runways of New Zealand and the USA are located. There are no suitable areas at Cape Adare to land a fixed wing aircraft and without a complex array of fuel depots, it is well out of range of helicopters.

The only practical option for access, therefore, is with ice-strengthened ships. Then the only realistic options depend either on assistance from US Coast Guard icebreakers (through international research programme agreements) or on the goodwill of Antarctic tour operators.

By mid summer the sea-ice has usually broken up enough to approach the Cape by boat. Even then, however, the use of zodiacs to shuttle workers, equipment, fuel and supplies through the drifting sea ice and strong currents remains difficult and often dangerous. After a successful landing it is still difficult to find a space to set up camp. By this time some of the earlier penguin chicks have fledged and begun to leave the beach and the density of birds slowly reduces, but tents must still be erected on a bed of penguin guano. Initial water supplies must be taken ashore until clean ice can be collected from some distance away.

Conservation techniques

The fabric of such Antarctic sites inevitably means conservation of a wide range of materials, and experience has shown that successful techniques in temperate climates can be ineffective in cold climates. Some techniques are simply impractical, especially procedures that require use of water or coatings that react badly to freezing temperatures. The situation is compounded by the fact that all such historic sites in Antarctica are within metres of the coast and its salt-laden atmosphere.

Planning

Getting a conservation party on site and providing them with the essential "life support" materials demands careful and complex planning. In many respects the planning of a conservation project is almost as complex as the expedition itself.

In any event initial planning needs to begin at least two years ahead of the intended work to ensure that the necessary transport is available. The most recent expedition during the summer of 2003 was to a large extent a scoping expedition and since then planning has continued for the next expedition which has no confirmed date. For 2003 the first requirement was to arrange access and with uncertainties about the availability of a US Coast Guard icebreaker, negotiation was required with a tour operator which had itineraries that might suit timing for putting in and picking up the work party. Fortunately, Quark expeditions were able and willing to cooperate, so the party was transported aboard their icebreaker "Kapitan Khlebnikov".

Once transport is confirmed, the employment of appropriate conservators can proceed. Conservators of course need a range of specialist equipment and materials so further detailed planning for these is essential because, once on site, the lack of a relatively minor item can quickly turn success into failure. Once in the field there is no prospect for delivering anything that has been forgotten so such oversights can mean not only a compromised project, but perhaps more seriously, compromised safety.



Cape Adare huts (Credit: Paul Chaplin)

Interior artefacts (Credit: Paul Chaplin)



Because of the complexity of access and on-site accommodation, conservation teams are necessarily small, but even a small team must have large amounts of equipment and provisions if it is to be safe for an extended period in the field. Living conditions in the field in Antarctica are seldom comfortable, but they must provide for adequate rest and shelter if the work programme is to be completed.

Other considerations

Weather. Cape Adare is renowned for its strong winds. Hurricane force winds can sweep in with little warning and not only make work impossible but make moving about the site dangerous. Twenty-four hour daylight does help maximise possible work periods during these summer months, but while temperatures can at times be above zero, the wind chill factor can be a severe limitation. Work parties in the past have also reported problems caused by wind driven salt spray that saturates tents and clothing.

Safety. Should an accident or illness occur that requires an emergency evacuation, this may only be possible with the cooperation of the Italian Antarctic programme and a long range helicopter from their base about 250 km further south.

Fire. Strangely enough, one of greatest risk factors in polar areas is fire. The atmosphere is generally very dry and many of the conservation materials involved are highly combustible. Conservation processes, as well as the comfort of conservators, often require some form of heating. Available forms of energy are limited it is not easy to create heat without some form of naked flame so extreme care is essential. Should a fire begin it could quickly become a disaster given the lack of water in liquid form.

Compliance. Legal constraints are created by the need to comply with the (New Zealand) Antarctic Environmental Protection Act 1994. This requires all on site work to be subject to one or more environmental impact assessments to ensure that the work involved will not have adverse effects on the environment or wildlife. To ensure this often demands compromises that would not become limitations in other parts of the globe.

There are also other compliance issues that govern the way in which different tasks must be carried out. New Zealand legislative constraints include the Resource Management Act 1991, The Building Act 1991, The Health and Safety in Employment Act 1992 and The Historic Places Act 1993, all of which dictate minimum standards of various kinds. Few of these pieces of legislation were enacted with any consideration for the unique and demanding conditions that must be faced when working in remote and difficult polar locations.

Causes of deterioration

In addition to the forgoing practical constraints that generate unique problems for work at such sites there are a range of physical factors that impact directly on the historic materials at the sites.

Wind. In addition to the effect that wind has on working conditions it contributes in no small way to the deterioration of historic materials. In winter the frequent hurricane force winds blast the

structures with wind-bourne ice and stone particles causing abrasion and erosion of building materials. These extreme forces also place massive physical strains on the structures causing mechanical damage. Evidence of this is very visible at the nearby hut built in 1911 by Captain Scott's so-called Northern Party. This conventionally framed structure has now been reduced to ruins.

Biological decay. There is a popular belief that the freezing conditions prevent biological decay but this is far from the truth. Many forms of organism continue to function in sub-zero temperatures and when temperatures periodically rise above freezing during summer months, bacterial, fungal and other organisms flourish. This not only causes decay in the wooden structures, but in the many other materials that make up the huge variety of artefacts remaining in the huts.

Marine effects. The wind driven salt spray that causes comfort problems for work parties is also the cause of more serious problems for historic materials. Salt acts as a catalyst in the oxidation of all ferrous materials and this has become a major problem with iron fastenings and other components in the hut structure. The ferrous content of the artefacts within, such as food cans and implements, are also adversely affected.

Fluctuations in temperature and relative humidity. It is well known that the effect of temperature change, and in particular freeze/thaw cycles, can cause a breakdown of many materials. The site at Cape Adare is no exception as the wooden structure absorbs water from surrounding snow and ice as well as windborne salt water. The surface layers of the wood are then regularly subjected to freeze/thaw cycles causing mechanical breakdown of the fibres.

These ambient temperature changes are exacerbated by the effect of solar warming which is transmitted into the hut causing changes of internal relative humidity with subsequent problems of condensation and ice build up on items within.

Wildlife. As previously mentioned the constant presence of penguins during the short months of summer hinders work because the prescribed codes of conduct mean that wildlife cannot be disturbed. A greater problem however comes from the guano they deposit. When the original human occupants departed they left many of their stores around the huts and these have now been buried under a thick layer of guano. The same guano provides a fertile medium for bacteria and other organisms that attack historic materials.

Mawson's hut – Cape Denison

This article can only provide a summary of some of the special factors that impact on conservation in Antarctica, and to some extent in Arctic regions. It is by no means a complete overview of the conservation challenges posed in such places. With this in mind it should be noted that, while the historic site at Cape Adare is perhaps a more extreme example of risk factors that apply to such sites, it is by no means unique.

By way of providing a similar example of these problems, it is relevant to mention an equally difficult site built in 1912 by Sir Douglas Mawson for his "Australasian Antarctic Expedition (AAE) 1911-14". The huts he built remain at Cape Denison, in

Commonwealth Bay, over 1,000 km to the west of Cape Adare. Cape Denison has justifiably earned a reputation as "the windiest place on earth". In historic terms, Mawson's achievements were unfortunately overshadowed by the events surrounding Amundsen's and Scott's bids to be first to the South Pole, but he nevertheless left a very important legacy of scientific study and discovery in Antarctica. His former base at Cape Denison remains one of the most significant historic sites on the Antarctic continent.

The primary responsibility for this site lies with the Government of Australia which has vested the management of it in the Australian Antarctic Division (AAD). The Mawson's Hut Foundation, an independent agency, is the major source of funding for the conservation of the site which has a place on the Australian National Heritage List, as well as being listed within the Antarctic Treaty System as an "Antarctic Specially Protected Area" (ASPA No.162).

As with Cape Adare, the remoteness of Cape Denison, not only from Australia but from other Australian bases, creates major logistical constraints on planning and implementing conservation work. Virtually all the conservation problems that exist for the site at Cape Adare apply at Cape Denison and the majority of them apply in varying degrees at a range of other historic sites in the Antarctic.

These factors combine to make conservation of historic sites in Antarctica (and many heritage sites in the Arctic) considerably more challenging than conservation projects in less extreme climates. As a consequence, these unique polar historic sites often face greater risks than the majority of sites in more temperate regions.

Additional information about Cape Adare and the Borchgrevink expedition can be found at: www.norwaysforgottenexplorer.org/, and www.heritage-antarctica.org/index.cfm

More information on the Mawson's Hut site is available from: www.aad.gov.au/default.asp?casid=217, and www.mawsons-huts.org.au/

Paul Chaplin
Secretary General
International Polar Heritage Committee (IPHC)
<http://www.polarheritage.com/>



Mawson's hut (Credit: Geoff Ashley)

SPECIAL FOCUS: GLOBAL CLIMATE CHANGE



ICOMOS Climate Change Initiatives: A Cooperative Project with International Committees

Global Climate Change is a topic being discussed in a major way at the international level, involving governments, development banks, environmentalists, businesses, etc. A British study released on 30 October 2006 “conclude[d] that rapid and substantial spending to combat global warming is needed to avert a catastrophic reduction in worldwide productivity on the scale of the Great Depression that could devastate food sources, cause widespread deaths and turn hundreds of millions of people into refugees” (Kim Murphy, “Warming Forecast: Economic Disaster”, *San Francisco Chronicle*, October 31, 2006, page A1). The field of natural heritage has been an important component of these discussions and yet cultural heritage issues have been woefully underrepresented.

In September 2006 in Edinburgh, ICOMOS’s Scientific Council voted to accept Global Climate Change (GCC) as the topic for interdisciplinary scientific research. A brief was prepared in November 2006 as a document presenting the Scientific Council’s strategy and program to contribute to the work of ICOMOS in relation to the theme of Global Climate Change. The Scientific Council and its membership of International Scientific Committees of ICOMOS have developed this initiative to bring together the various professional and scientific fields of the organization to bear on this increasingly threatening subject. It is being implemented by the Scientific Council in coordination with other initiatives of ICOMOS or its National Committees, particularly in the context of Resolution #35 of the 15th General Assembly adopted in Xi’an (China) in October 2005, and/or in support of ICOMOS’s contribution to research undertaken by the World Heritage Center relative to climate change and World Heritage, in accordance with the decisions of the World Heritage Committee.

Background

Among the international cultural heritage community, Global Climate Change was first suggested as a topic for interdisciplinary research at the International Scientific Committee (ISC) retreat in Bergen, Norway, in September 2004. During ICOMOS’s 15th General Assembly held in Xi’an, China in October 2005, Resolution 35 on Climate Change was unanimously adopted. During the Scientific Council meeting in Rome in June 2006, GCC was adopted as an Inter-ISC scientific theme by the International Committee on Risk Preparedness (ICORP), the International Polar Heritage Committee (IPHC), and the International Scientific Committee for Earthen Architectural Heritage (ISCEAH). It was agreed that a preliminary report would be presented at the Scientific Council meeting in Edinburgh in September 2006. This led to its adoption by the Scientific Council.

The World Heritage Committee has also shown interest in this topic. During the Committee’s 29th session, the World Heritage Center (WHC) was asked to convene a working group of experts to explore the impacts of climate change on World Heritage (Decision 29 COM 7B.a). As a result, a special expert meeting of the World Heritage Convention (*World Heritage and Climate Change*) was convened in Paris at UNESCO’s headquarters on 16-17 March 2006. The meeting, supported by the government of the United

Kingdom and the United Nations Foundation, was held between the World Heritage Committee, World Heritage Center, the Advisory Bodies (ICOMOS, IUCN and ICCROM), and experts from around the world. This led to the development of a document, “Predicting and Managing the Effects of Climate Change on World Heritage” (WHC-06/30.COM/7.1, available on the web at <http://whc.unesco.org/uploads/news/documents/news-262-1.doc>) which was issued at the 30th Session of the World Heritage Committee in Vilnius, Lithuania in July 2006, as well as the adoption of Decision 30 COM 7.1.

In early November 2006, the United Nations Environment Program (UNEP) hosted the 12th Conference of the Parties to the UN Framework Convention on Climate Change and the 2nd Meeting of the Parties to the Kyoto Protocol in Nairobi, Kenya. UNEP and researchers from the Stockholm Environment Institute have recently issued a report, *The Atlas of Climate Change: Mapping the World’s Greatest Challenge* (available for purchase through www.earthscan.co.uk and www.ucpress.edu). Achim Steiner, UN Under-Secretary-General and UNEP Executive Director, stated that “We must ... use our intelligence and scientific know-how to assist managers of culturally important sites like buildings and archaeological finds. Losses here as a result of climate change may impact on the livelihoods of local people and, especially in developing countries, add to poverty...” Koichiro Matsuura, Director-General of UNESCO, further said in reference to World Heritage Sites, “Protecting and ensuring the sustainable management of these sites has, therefore, become an intergovernmental priority of the highest order” (“National Parks, Ancient Artifacts, Monuments and Barrier Reefs at Risk from Global Climate Change”, UNEP Press Release, 7 November 2006). UNEP’s climate change website for the UN Climate Change Conference is <http://www.unep.org/themes/climatechange/UNFCCC/>.

UNEP and the World Meteorological Organization established in 1988 the Intergovernmental Panel on Climate Change (IPCC). Its role is to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation. IPCC does not carry out research nor does it monitor climate-related data or other relative parameters. It bases its assessment mainly on peer-reviewed published scientific and technical literature. IPCC publishes periodic assessments of the nature and impact of climate change. The Third Assessment was issued in 2001. The Fourth Assessment is being published in successive parts during 2007. All its publications can be found on the IPCC website (<http://www.ipcc.ch/>).

The Scientific Council Initiative

From the preliminary GCC report prepared by IPHC and ISCEAH and submitted to the Scientific Council at the Edinburgh Scientific Council meeting in September 2006, as well as from the WHC report, it is obvious that there are and will be serious ramifications of GCC to cultural heritage. The WHC report also confirms that

IUCN is way ahead of ICOMOS in terms of its research on this topic. This is most likely a result of the fact that the environmentalists have been studying the effects of Global Climate Change on natural heritage for several decades. The WHC report, however, identifies key areas of concern for GCC's effect on cultural heritage. These include:

- a) The uncertain state of conservation for sensitive archaeological materials preserved underground once the equilibrium of burial is altered due to changes in the hydrological, chemical and biological processes of the soil.
- b) Increases in soil moisture resulting in greater salt mobilization having damaging effects on historic buildings, which tend to be less isolated from the ground and to be constructed of more porous materials than their modern equivalents.
- c) Migration of pests in altitudes and latitudes subjecting timber and organic construction materials to increased biological infestation.
- d) Increased flooding causing deterioration to materials that cannot sustain prolonged immersion and potentially encouraging damaging microorganism growth (mould), in addition to the risks posed by the eroding effects of rapidly flowing water.
- e) Structural damage caused by increased strength of storms and wind gusts.
- f) Moveable heritage subjected to higher RH, temperatures and UV exposure.
- g) Implications to societal systems and resulting population migrations due to environmental conditions, like drought, which are no longer conducive to sustaining traditional ways of life (agriculture, human health, and infrastructure). This would amount to a loss of local populations who effectively sustain and maintain various cultural sites (WHC-06/30.COM/7.1, pages 29-32).

In addition to this list, we add:

- h) Economic impacts due to loss of cultural tourism. Conversely, impacts to fragile materials due to increase of cultural tourism at previously less accessible sites.
- i) Resulting losses to intangible heritage, cultural landscapes, vernacular construction technologies, and sustainable construction and repair practices.
- j) Increase of freeze/thaw cycles and their effect on porous building materials.
- k) Differential settlement causing structural damage due to changes in soil compaction through dewatering or increase in ground water levels.

Goals

As a first step, the goals of the Scientific Council initiative are for the International Committees to perform the research necessary to produce a report of case studies linked to the scientific data on GCC. The results are published herein as a special "section" of *Heritage at Risk*.

Our next step is to organize a scientific symposium at the Advisory Committee meeting, scheduled for the fall of 2007 in Pretoria, South Africa, in which the focus will be to propose conclusions and recommendations for adaptation to the effects of GCC in reference to cultural heritage sites. At this point, initiatives for creating and implementing Inter-ISC cooperative adaptation projects will also be proposed and adopted.

Following this, a second meeting may be organized for the late spring of 2008 bringing together interested parties and reviewing

the preliminary results of the Inter-ISC cooperative adaptation projects and strategies.

Research

Each International Committee and interested National Committee designated a representative who joined the Inter-ISC Global Climate Change (GCC) working group and cooperated on the reports. The GCC working group began researching GCC's effects on cultural heritage in their particular area of expertise or geographical location.

International Committees and interested National Committees were encouraged to interact with relevant national and international organizations studying GCC. (Several universities have programs studying GCC including the Center for Sustainable Heritage at the University College London, and Yale, Michigan State and Duke University in the US. The International Committee of the Blue Shield is an organization which also comes to mind.) Scientific data for GCC exists but has seldom been collated and interpreted towards its effects on cultural heritage. Anecdotal evidence needs to be qualified by scientific climatic data, if we are in any way to influence decision makers. This data is a product of long-term monitoring.

Although case studies cited are not specifically about World Heritage Sites, the final product of the Inter-ISC Cooperative Project produces material that is useful to and informs the research of the WHC.

Report Structure

Generally, the reports were structured as follows. Sites were identified and designation status indicated (WH site, nationally or locally designated, etc). Following this a description of the general conditions of the place was included. The reports then described the anecdotal evidence, physical evidence, and meteorological data. Risk preparedness strategies, if they are in place, are evaluated.

Some of the questions reports sought to answer are:

- What is the current situation?
- What is the predicted future climate change?
- How rapidly is it changing?
- What are additional causes (other than general climate change), like pollution, lack of risk preparedness and adaptation, etc?
- What are the consequences of climate change impact in the short, medium and longer term?
- Is the site being recorded either for posterity or to monitor change?
- What is the proposed adaptation remedy (if any)?
- What are the site managers actually doing to cope with the predicted impacts?
- What else needs to be done and when?

In addition, reports were asked to be mindful of differences between Kyoto Protocol non-signatory (Australia, USA, India, China, etc) and signatory countries. What are signatory countries doing differently to prepare for the effects of climate change on their cultural heritage sites and what are the results of these actions? From these case studies, can strategies be developed to lobby non-signatory countries?

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Global Climate Change: Every Cultural Site at Risk?

Despite the 150,000-year pedigree of modern humans, the ice age that ended about 12,000 years ago forms a left parenthesis to virtually all of the major constructive activity of humankind. As much as we may cherish our surviving architectural and archaeological heritage, its destiny, like ours, is dust. Yet it is precisely this ephemerality that makes us appreciate the richness of human existence and the consequent value of preserving diverse exemplars of past cultural expressions. It is, therefore, with no trace of fatalism that we confront an environmental challenge beyond our collective experience, one rooted in divisive power politics, yet requiring unified action on a previously unimaginable scale.

Growing scientific consensus on the existence of global warming has led to a shift in public and scholarly discourse toward consideration of its likely effects. While it is clear that the impending challenges to heritage preservation posed by global climate change will pale next to the human and environmental costs, it is nevertheless incumbent upon heritage specialists to anticipate and adapt to these problems to the extent possible. In keeping with the theme of *Heritage at Risk*, my aim is to outline the major adverse impacts of global climate change on cultural heritage.

It is ironic that the combustion of carbonized life-forms - themselves victims of past environmental catastrophe - constitutes the principal threat to present-day life on earth. The accumulation of "greenhouse gases" - carbon dioxide, methane and nitrous oxide - caused by the burning of fossil fuels, and to a lesser extent, deforestation, trap heat within the earth's atmosphere. The ability of the earth to retain heat is critical to its long-term equilibrium, but too much heat retention leads to rising mean global temperatures, or global warming. Among the evidence for a recent warming trend is the observation that eleven of the last twelve years rank among the twelve years with highest average global surface temperature since 1850, when reliable records began (IPCC 2007a).

The scope and complexity of the probable effects of global warming defy precise estimation. The repercussions will cascade across time and space, varying with local conditions and future production or reduction of greenhouse gases. The Intergovernmental Panel on Climate Change (IPCC), the leading relevant international scientific research group, couches their projections in terms of competing scenarios. To provide such multi-track analyses specifically for cultural heritage is beyond the available data and the capabilities of the author. Here we simply consider direct, environmental and indirect, social impacts.

The main climate change parameters affecting cultural heritage are temperature change, atmospheric moisture change, sea level rise, wind, desertification, pollution and biological infestation (WHC 2006). Rising temperatures are melting polar and high altitude ice and snow and are causing the thermal expansion of seawater, resulting in an uneven global increase in moisture. This supercharging of the hydrologic cycle results generally in higher humidity, greater precipitation, higher sea levels, and more groundwater. Yet patterns of oceanic and atmospheric circulation cause some regions, particularly in the Tropics and Subtropics, to experience drier conditions accompanied by heat waves, drought and wildfires. A further outcome of higher temperatures and atmospheric moisture content is an increase in the frequency and severity of storm events. The resulting changes in seasonality, the availability of food and habitat, biodiversity, nutrient cycling, stress, disease vectors and other factors will have increasingly profound consequences for the composition, distribution and survival of biotic communities around the world.

According to the IPCC, global mean temperatures are expected to rise by 1.4 to 5.8° C by 2100 (WHC 2006). This increase will result in more extreme seasonal heating and cooling, altering the severity and periodicity of freeze/thaw and wet/dry cycles. This leads to problems for buildings such as biochemical deterioration, damage due to

water infiltration and freezing, and frost damage. Structures at the Indus Valley site of Moenjodaro, Pakistan, for example, are suffering damage due to thermal stress. The stratigraphy and integrity of archaeological sites are prone to deterioration caused by freeze/thaw-related ground movement and to decomposition due to the introduction of microbes to previously frozen environments. A recent 2° C temperature increase observed in mountainous southern Siberia, for instance, portends the thawing and destruction of the contents of 1,500-year old Scythian burial mounds (WHC 2007).

Atmospheric moisture change threatens cultural heritage in a multitude of ways. It is associated with increased humidity, rainfall and flooding; glacial lake outburst floods, changes in ground water and water tables; and altered soil chemistry. Resultant problems include rising damp, salinisation, erosion, subsidence, waterlogging, mold, ground heave, corrosion of metals, and deterioration of materials due to relative humidity shock. Increasingly heavy rainfall is implicated in subterranean erosion of Palatine Hill in Rome, and structural deterioration of earthen architecture at early Buddhist temple sites in Ladakh, India; the colonial town of Coro, Venezuela; and the archaeological sites of Chan Chan and Túcume in Peru (WMF 2007). Subsurface archaeological remains are also increasingly affected by erosion, chemical alteration, and the introduction of waterborne agents to previously desiccated or anaerobic environments. The melting of coastal sea ice is subjecting archaeological sites and historic structures in Arctic North America to high levels of storm surge and wave action, causing their loss due to erosion.

Climbing global temperatures are predicted to result in a sea level rise of .09 to .88m by 2100 (WHC 2006). Not only does this spell disaster for low-lying coastal areas and islands, but it also presents sites and structures with dangers due to storm surge, erosion by wave action and the incursion of salt water. Well-known examples of World Heritage Sites for which sea level rise is a looming menace include historic Venice and Westminster Palace, the Tower of London and the historic ensemble at Greenwich in London. Shoreline heritage properties in places such as Great Britain, western North America, Australia, New Zealand, Oceania, and western Africa are increasingly subject to damage by coastal erosion.

Changes in the frequency, severity and timing of extreme weather events associated with GCC will expose structures to potentially damaging wind and wind-driven salt, sand and rain. These can erode surfaces, penetrate porous materials, and cause static and dynamic loading (WHC 2006). In a 2005 survey of World Heritage States Parties, the most frequently cited threat to cultural properties was hurricanes, storms and lightning (WHC 2006). Recent severe storm episodes impacting immovable heritage include Hurricane Katrina, which damaged or destroyed thousands of historic buildings in southeastern USA, the 2006 flash flooding of the twelfth-century site of Sukhothai in Thailand, the 2002 inundation of the historic center of Prague, and the 1994 flooding of the Citadel of Alessandria in northwest Italy (ICOMOS 2005).

The chief danger to historic structures and archaeological resources in some areas will be the lack, rather than the surfeit, of water. Heat and drought cause evaporation and lowering of water tables, drying out structural materials and exposing them to salt weathering. Salt efflorescence is a major problem at Moenjodaro in the Indus Valley, Pakistan, for example. Notable examples of the desertification of heritage sites include the fifteenth/sixteenth century mosques of Timbuktu, Mali and the Chinguetti Mosque, Mauritania (WHC 2007).

According to the recent World Heritage Report on climate change and world heritage, the deleterious effects of global climate change

and airborne pollutants on stone and metal is mutually reinforcing. Increasing levels of atmospheric sulphur dioxide and nitrogen oxides (one of which is nitrous oxide, a greenhouse gas), caused by the burning of fossil fuels, are producing higher incidences of acid rain. While acid rain is not causally related to global warming, the effects of acid rain combine with the effects of climate change to hasten processes of decay. Airborne pollutants and acid rain are known to be damaging monuments at the Pre-Columbian site of El Tajin in Mexico, the petroglyphs of the Dampier Rock Art Complex in Australia, and grave markers at the Cimitero Acattolico in Rome, Italy (WMF 2007).

Global temperature increases lead to the spread of insects and other potentially damaging organisms into previously inhospitable areas, putting organic materials at risk. In addition to the spread of invasive pests, global warming will facilitate the proliferation of potentially harmful indigenous organisms, including fungi, mold and insects, as they expand their range and adapt to changing conditions. The wooden structures of Omo Hada in Indonesia and the woodwork of buildings in the Sonargon historic complex in Bangladesh are both included in the World Monuments Watch List of the 100 Most Endangered Sites due to biological/insect infestation. Although these cases cannot be attributed to climate change, they represent situations likely to be encountered at ever-higher latitudes in the future. It is likely that rising oceanic temperatures will permit expansion of the wood-eating teredo worm, whose intolerance of cold waters explains the remarkable preservation of shipwrecks such as the Swedish warship Vasa.

The effects of global climate change will inevitably extend to landscapes and their associations with heritage properties. Not only is there the potential to impair the settings and constitutive values of significant places, but there is also a risk of losing traditional building materials. The original relationship between the design, materials and use of historic buildings, on one hand, and local climatic conditions, on the other, is susceptible to environmental perturbations that may result in abandonment, demolition or unsympathetic alteration.

While the direct, environmental impacts of global climate change are profound, the human responses to these changes may pose the greatest threat to cultural heritage. The eventual loss of glacial meltwater, the incursion of salt water and increased evaporation of fresh water will expose hundreds of millions of people to shortages of potable water. Extensive changes in ecosystem functioning will differentially impact agriculture, fisheries, animal husbandry, forestry and other forms of food production. Ecological changes will result in the widespread movement, behavioral change and/or extinction of plant and animal species, with far-reaching consequences for human subsistence practices. Rising sea levels threaten millions of people living on low islands and in coastal areas, such as the mega-deltas of Asia and Africa. Increased incidence of environmental disasters, including floods, fires, droughts and hurricanes, as well as malnutrition, cardiovascular, respiratory and infectious diseases make up a sampling of the health hazards associated with global climate change.

It is sobering to reflect on the consequences of even one of these scenarios, let alone a combination of them. Economic destabilization, disinvestment, modified land use, local and regional conflict and mass migration are plausible outcomes. Current patterns of socio-cultural dislocation associated with rural-urban migration, industrialization and economic polarization will be exacerbated by these shifts, leading to increases in looting, the insensitive exploitation or ideologically-motivated vandalism of heritage sites, the redevelopment of urban cores and the relative devaluation of land for its intangible qualities.

Tragically, the negative consequences of global warming will be felt most strongly in the countries least equipped to deal with them: rainfall patterns are shifting precipitation away from the equator, toward the poles; one quarter of the African continent is already in the

process of desertification (WHC 2007). While wealthier nations are investing in water desalinization facilities, flood barriers and drought-resistant seeds, African countries - which collectively are responsible for just 3% of total greenhouse gas emissions - lack the resources for such protective measures (Revkin 2007).

There is growing appreciation among heritage professionals that the fates of tangible and intangible heritage are intertwined. Given the differential persistence of indigenous cultural groups in the remoter parts of less-developed countries, and the disproportionate impact of global climate change on many of those same countries, there is reason for alarm. Just as global warming puts already marginal ecosystems and species at greatest risk, so too does it especially imperil those cultures and sites with the least room for maneuver.

Everywhere, global environmental change will prompt new human adaptive strategies that may conflict with traditional beliefs regarding the social role of sacred sites, historic structures, cultural landscapes and archaeological remains. These new imperatives could undermine the viability of traditional lifeways, sacrificing long-held knowledge of crafts, industries, conservation methods, and much more along the way. In places such as Amazonia, much of which is destined to become savannah in the coming decades; the Arctic, where melting ice and rising sea levels are drastically altering subsistence regimes; or Oceania, where the homelands of some Pacific island societies are threatened with inundation by rising sea levels, the very survival of indigenous cultures is at stake.

It is easy to conceive of cultural heritage as a prostrate victim before the onslaught of relentless, inimical *Climate Change*. Yet I would argue that the regenerative power of heritage to unify, inspire and galvanize individuals will be a key to our success in confronting this challenge. The effects of global warming will alternately interrupt and reinforce the centrifugal and centripetal tendencies of globalization, elevating the importance of cross-cultural cooperation and understanding. The trial of climate change holds the challenge for heritage professionals to embrace the political nature of their work and the opportunity for them to meaningfully integrate the conservation of natural and cultural heritage. Heritage sites have the power to provoke public introspection, reawakening cultural memories of crises met, and by reminding us of our varied pasts, suggest the possibility of alternate futures.

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Landscape Heritage, Biosphere Change, Climate Change and Conservation A General Approach and an Agenda

Introduction

I began writing this discussion paper in an attempt to find a rational approach and way of structuring the complex question of how Global Climate Change might affect the landscape heritage, the cultural heritage in general, and their conservation. The purpose of this was to find an approach that will assist the processes of thinking, researching, teaching; providing guidance on the subject; and finding practical solutions to the challenges that are posed by the phenomenon of Global Climate Change. But it also has another purpose which is to help open up a discussion about how Global Climate Change, landscape heritage and conservation relate to the wider topic of Biosphere Change and what are the main current priorities for the landscape heritage sector.

Biosphere Change

At an early stage in thinking about the question of a rational approach, it became evident that the subject of Global Climate Change is in fact part of a larger phenomenon and needs to be seen in this wider context and not simply on its own. The larger phenomenon is that of Biosphere Change. The Biosphere consists of the surface layers of the Earth and its atmosphere and Biosphere Change includes such things as environmental deterioration (incorporating the effects of pollution and over-population), environmental improvement, ecology, the ecology of humans, the quality of life for both humans and non-human life, and of course, Global Climate Change.

The current changes that are taking place in the Biosphere are due to many factors, mostly it would seem connected with humans and human activity. The changes appear to be accelerating in the direction of severe environmental deterioration on a global basis.

Global Climate Change

It is a widely held opinion that Global Climate Change is now one of the most significant factors that is causing negative Biosphere Change; that Global Climate Change is being caused by Global Warming; and that humans and human activities are now a primary cause of Global Warming. The primacy of the human contribution to Global Warming is widely accepted but it is not a universally held view.

The increase in Global Warming is generally measured in terms of the increase in Global Mean Temperature and this has been adopted as a way of measuring the extent of Global Climate Change and of indicating the nature of the effects that it will have on the world. A rise of 1 degree Celsius in the Global Mean Temperature represents the range of 0.5 – 1.5 degrees C; a rise of 2 degrees represents a range of 1.5 – 2.5, and so on (Stern 2006 p. 65). The increase is that which is calculated to have taken place since the period 1750-1850. From a global perspective, this period is referred to as being 'pre-industrial'.

The Stern Review comments on the effects of rising Global Mean Temperature in the range of 1 to 6 degrees C. It is thought that above 5 degrees, 'the "socially contingent" effects could be catastrophic' (Stern 2006 p. 69).

Landscape Heritage (including gardens and parks)

A suggested primary definition of landscape is as follows: '*A landscape is a concept, a real or imaginary environment, place, image or view in which the land, and natural and semi-natural elements, are prominent, dominant or the only ones. Landscapes may, and often do, include humans and man-made components as well. They are the product of the appearance, uses and perceptions of places that are part of the outdoor environment.*' (GARLAND Guidelines: 1. Topic: Landscape. 15 May 2007).

In relation to those of a physically real kind, and at the broadest level of characterisation, the main general types of landscape can be described as being:

1. Uncultivated Landscapes (Natural and Semi-natural Landscapes);
2. Cultivated Rural Landscapes;
3. Urbanised and Industrialised Landscapes;
4. Gardens, Parks and Designed Ornamental Landscapes.

'*Uncultivated Landscapes*' covers the range from 'wilderness' to land that is managed by humans but not cultivated in the sense of being ploughed, or having the surface broken up or planted with non-local plants. Wilderness is a natural landscape in which the effects of human intervention are entirely absent or minimal.

'*Cultivated Rural Landscapes*' refers to land that has been settled by humans and where arable cultivation (i.e. ploughing, or having the surface broken up) and the growing of non-local plants are a main feature of the local economy and way of life.

'*Urbanized and Industrialized Landscapes*' are landscapes where urban and industrial developments are prominent or dominant. These terms appear to be inconsistent with Garland's definition, above, but are useful when the land, natural or semi-natural elements are less than prominent, but where one wishes to emphasize or call attention to their existence.

'*Gardens, Parks and Designed Ornamental Landscapes*' are usually found within Cultivated Rural Landscapes and Urbanised Landscapes. The characteristics that make them distinctive are the high level of ornamental work, aesthetic modification and improvement, and horticultural activity that they exhibit. (GARLAND Guidelines: 1. Topic: Landscape. 15 May 2007).

Heritage is made up of those things that are inherited or inheritable. It includes those that we inherit from other people as well as those that come from the past in general. The people from whom we inherit may be living or dead. Heritage also includes the things that we, in turn, pass on to others either in the present or the future.

The things that are inherited may belong to either the natural or the cultural dimensions of life and environments, or to both at the same time. The word 'cultural' signifies those things that are of human origin or the result of human activity. The historical dimen-

sion is one aspect of both the natural and the cultural; it places things in time and relates them to the different contexts that exist during the course of time.

Heritage includes not only tangible (physical) objects, but also intangible ideas, responses and skills. This definition accepts that we can add to heritage on a continual basis and at the same time we can conserve and care for those things that we inherit and that are of value in one way or another. These two approaches to heritage do not necessarily exclude each other, where they do come into conflict with each other, specialist knowledge and assessment will be needed to find a resolution.

Landscape heritage is a combination of natural heritage and cultural heritage. It embraces both dimensions.

Structuring our Thinking about Biosphere Change and Landscape Heritage

Global Climate Change affects every aspect of nature and life. Its effects will be all pervading on a global basis because it will bring significant and fundamental changes to the processes by which the Biosphere currently functions. It has become usual in Western civilization for people to operate on the basis that these processes are normally fairly stable, constant, orderly and predictable. However, phenomena such as significant rises in Global Mean Temperature will cause life to become increasingly more unstable, inconstant, disorderly and unpredictable; in other words more chaotic.

Another important factor is that changes may take place slowly and incrementally over a seemingly long period in relation to an average human lifetime, and this can lead to them being underestimated or even ignored by humans. An apparently long period for humans may however be a very short period in terms of the natural adaptation of species and other natural processes. The survival of species may be made more precarious by the relative rapidity of the changes.

Biosphere Change is a very large and complex subject and a basic, reliable and generally usable way of structuring it is required both by specialists and everyone else so that it can be dealt with on a rational and logical basis, a 'scientific' basis in fact.

The concept of 'Nature' is a good starting point for structuring the subject of Biosphere Change in relation to its effects on landscape heritage. Nature may be thought of as consisting of two main ingredients, i.e.:

1. Non-living Nature (Inanimate Nature).
2. Living Nature (Animate Nature).

Non-living Nature includes: energy, temperature, atmosphere, water, climate, rocks, and minerals.

Living Nature is made up of the scientifically recognized Kingdoms of living things. There are at least five of these (New Encyclopaedia Britannica 2003, vol. 14, pp 1094-1095):

1. Monera (including bacteria, archaebacteria, blue-green algae)
2. Protista (Algae other than blue-green algae, slime molds, protozoa)
3. Fungi (Molds, mushrooms and toadstools)
4. Plantae (Typical green plants from mosses and liverworts to flowering plants of all kinds)
5. Animalia (Animals, from sponges and mezozoans to mammals)

From a human perspective, and because humans are now such a dominant and environmentally influential life-form, it is often useful to think of living nature as also having two main ingredients, those of human life and non-human life. Amongst the factors that distinguish human life from non-human life are the exceptionally

high ability of humans to:

1. Observe objects and phenomena very closely and remember them;
2. Think abstractly and imaginatively;
3. Think and act on a rational basis;
4. Reason and act on the basis of what is 'good' and 'bad' for them;
5. Engage with their environment and particular places, and modify them;
6. Make inanimate objects;
7. Communicate feelings, thoughts and ideas.

Collectively, the factors that distinguish humans from other forms of life can be referred to as the 'cultural factors'. It might be argued that, in origin, the cultural factors are natural; some would say that they are divine. Whatever their origin, at some point in human evolution, it has become a very prominent and semi-independent ingredient of humans. This semi-independence gives rise to a duality in humans which might be regarded as being a partnership between primary human nature and the cultural factors. These are the two main ingredients of Humanity, but the concept of 'Humanity' usually implies that the cultural factors are dominant.

This leads to the question of whether Humans are to be regarded part of Nature or not. It is clear that they are part of it, but at the same time there is a very important part of them that is not the same as the rest of Nature. This important difference needs to be recognized, and this is why it is a useful convention to think of humans as being a distinctive form of life. Within this context, Nature might be defined as 'that which exists or occurs without being consciously planned by humans, either as individuals or as groups.'

The subject of Biosphere Change may be considered under the sub-headings provided by the three main ingredients of Nature described above. They may be referred to as the three primary components of the Biosphere. They are:

1. Non-living Nature (Inanimate Nature);
2. Non-human Life;
3. Human Life (Humanity).

Each of these represents a main vehicle through which the dynamic forces that determine the course of events in the Biosphere operate. Of course, these three primary components interact with each other.

Opening up a Discourse on Biosphere Change

A discourse on Biosphere Change in relation to landscape heritage, and indeed in relation to other forms of heritage, can be opened up by applying four Key Questions, individually or in combination, about each of the Primary Components of the Biosphere. Three of the Key Questions are about the effects of Biosphere Changes and the fourth is about the action that might be taken. The four questions are:

Key Question 1: What effects will, or might, Biosphere Changes have on each Primary Component of the Biosphere in terms of the nature of the effects and their relative significance?

Key Question 2: What additional effects ('knock-on' effects) will, or might, changes in one Primary Component of the Biosphere have on each of the others?

Key Question 3: What additional effects ('knock-on' effects) will, or might, changes in one Primary Component of the Biosphere have on Biosphere Change in general?

Key Question 4: What action can, or should, be taken to control and manage Biosphere Change and its effects?

NB In general terms, the effects might be beneficial, neutral, or detrimental.

Each of the four Key Questions needs to be asked and answered within a stated 'context' and this might be defined in terms of a number of different Context Defining Factors which might be used on their own or in combination with others. These factors include such things as the following:

- The Primary Component of the Biosphere, or individual elements of it, to which the Key Questions are being applied. (It would be helpful to have a structured concept of the nature of each Primary Component. The structure might be a hierarchical one.)
- The aspect of Biosphere Change, or individual elements of it that are to be considered. (It would be helpful to have a structured concept of the nature of the aspects of Biosphere Change. A hierarchical structure might be appropriate.)
- The magnitude of the increase in the Global Mean Temperature on the scale of 1 - >5 degrees Celsius. In the Stern Review, a table is given that indicates the nature of the global changes that will occur with rising Global Mean Temperature at intervals of 1 degree Celsius (Stern 2006, Table 3.1, pp 66-67). It might be useful to think of each of these levels as a separate 'context'.
- The mental and intellectual context (or the point of view) from which the Key Questions are being asked. The point of view might, for example, be professional, academic or at the level of general interest. In each case it might be specified more closely by reference to particular already named subject areas or fields of interest.
- The global region in relation to which the Key Questions are being asked. There are different ways of defining global regions. Possibly a combination of factors will be needed. For example: continents, oceans and latitude zones. (Tropical: 0 - 22.5 degrees Lat.; Sub-tropical: 22.5 -45.0 degrees Lat.; Temperate: 45.0 - 67.5 degrees Lat.; Polar: 67.5 - 90.0 degrees Lat.)
- Climatic type.
- The type of place in terms of its extent (eg international region; national region; locality; and individual site).
- And in relation to Key Question 4, the type of action that is under consideration, such as: Legislative and administrative action; Education, training and awareness raising; Recording; Investigation and Research; Direct intervention; Indirect intervention.
- Others?

The Cultural Dimension and Heritage Conservation

The term 'conservation' is used here in the UK sense, meaning a rational approach to protection that is based on clear principles and but which can be flexible, as opposed to inflexible, where circumstances allow flexibility. This can lead to a range of actions such as preservation, restoration, reconstruction, adaptation and recording.

For humans, cultural factors and the Cultural Dimension of Heritage Conservation are of special significance. These factors include the mind and the soul of individuals, and they require nourishment and support, just as much as the human body. For this reason the different aspects of the Cultural Dimension must be taken fully into account in relation to Biosphere Change and environmental management.

The scope of the mental dimension stretches from basic perception and cognition to aesthetic, intellectual and spiritual interpreta-

tions. It includes such things as:

1. Human responses to life as individuals, groups and communities;
2. Human emotions and rationality;
3. Human aspirations and satisfaction with life.

The prime professional responsibility for conservators and conservationists working in the field of movable works of art (such as paintings, sculpture, furniture), or with settlements, buildings, structures and architecture, is usually the conservation of non-living objects. However, in the field of landscape heritage, their prime responsibility also includes living things (eg plants and animals) as a very important component. The landscape heritage is a combination of living and non-living phenomena. This difference provides a basis for a significant distinction between three types of conservation, which are as follows:

1. Conservation that is primarily concerned with non-living phenomena;
2. Conservation that is primarily concerned with living phenomena (both human and non-human life);
3. Conservation that is concerned with both non-living and living phenomena at the same time.

Conservation of landscape heritage belongs to the last, ie item 3. In general, conservation of landscape heritage has much in common with both the conservation of the natural heritage and the conservation of non-living artefacts, but it also deals with living artefacts.

A General Method for Opening up a Discourse on Biosphere Change in Connection with Landscape Heritage and Conservation?

The various points made above provide a basis for a general method for identifying, analyzing and assessing the effects of Biosphere Change and the action that might be taken. The method can be formulated, in brief, as follows:

1. Note the four Key Questions and select which are to be applied;
2. Define the context within which the Key Questions are to be asked. Two of the main Context Defining Factors are the component of the Biosphere and the aspect of Biosphere Change that are to be considered;
3. Apply the appropriate Key Questions to the selected context;
4. Assess the results and prepare a statement about the conclusions that can be drawn;
5. Compare and contrast the results for the selected context with those for other contexts, and prepare a statement about the conclusions that can be drawn;
6. Agree to a course of action and implement it;
7. Repeat the process for other contexts.

The number of contexts that might be addressed using this method is extremely large, and this raises the question of where to begin?

Different organizations and individuals could begin with the contexts with which they are already particularly familiar. This would make use of their existing and particular expertise. It might, however, lead to a patchy coverage of the overall range of contexts, so the results would need to be kept under review so that gaps and also the more important results that emerge can be identified, widely disseminated, and then addressed.

Another approach would be to encourage planned programs of investigation and action which would examine particular contexts or groups of them.

An important group of contexts has been identified by the Council of Europe's 'European Landscape Convention' (2000). This

convention is about landscapes in general, and not specifically about landscape heritage. Nevertheless, it is highly relevant. In Article 6, nine 'Specific Measures', are listed under five main headings. These specific measures are ones that each party to the convention is expected to implement. They are all forms of action and therefore relate to Key Question 4. They are as follows:

Awareness-raising

Each Party undertakes to increase awareness among the civil society; private organisations; and public authorities of the value of landscapes, their role and changes to them.

Training and education

Each Party undertakes to promote:

1. Training for specialists in landscape appraisal and operations;
2. Multidisciplinary training programmes in landscape policy, protection, management and planning, for professionals in the private and public sectors and for associations concerned;
3. School and university courses which, in relevant subject areas, address the values attaching to landscapes and the issues raised by their protection, management and planning.

Identification and assessment

With the active participation of the interested parties and with a view to improving knowledge of its landscapes, each party undertakes:

1. to identify its own landscapes throughout its territory;
2. to analyse their characteristics and the forces and pressures transforming them;
3. to take note of changes;
4. to assess the landscapes thus identified, taking into account the particular values assigned to them by the interested parties and population concerned.

These identification and assessment procedures shall be guided by the exchanges of experience and methodology, organised between the Parties at European level.

Landscape quality objectives

Each party undertakes to define landscape quality objectives for the landscapes identified and assessed, after public consultation.

Implementation

To put landscape policies into effect, each Party undertakes to introduce instruments aimed at protecting, managing and/or planning the landscape.

The specific measures identified by the European Landscape Convention are relevant and important in connection with the combined context of Biosphere Change, Landscape Heritage and Conservation. But:

1. What aspects and effects of Biosphere Change need to be addressed as a matter of priority by these specific measures?
2. To what extent are these specific measures already being put into practice?
3. What improvements are needed and how might they best be made?
4. Where are the resources that will be needed come from?

These questions provide an initial agenda for fuller discussion.

Summary

This paper has put forward some ideas for consideration. These include:

1. That Global Climate Change should be seen in the wider context of Biosphere Change.
2. A rational approach and way of structuring the complex question of how Biosphere Change might affect the landscape heritage and cultural heritage in general.
3. That landscape heritage is a combination of natural heritage and cultural heritage; it embraces both.
4. That the Cultural Dimension is important to humans.
5. That conservation of landscape heritage has much in common with both the conservation of the natural heritage and the conservation of non-living artefacts, but it also deals with living artefacts.
6. A method of opening up the exploration of the subject of Biosphere Change. This includes four Key Questions.
7. A method of opening up the exploration of the subject of Biosphere Change in relation to landscape heritage and conservation. This includes four useful Key Questions.
8. That developments in knowledge and understanding of the relationships between Biosphere Change, landscape heritage and conservation need to be kept under review and the outcomes of the process of review need to be widely disseminated and addressed.
9. That the Specific Measures advocated by the European Landscape Convention provide a useful starting point for a planned programme of investigation and action.
10. An initial agenda for further discussion and action in relation to Biosphere Change, landscape heritage and conservation.

A discussion of the above points and an agenda for making progress is needed.

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Archaeological Heritage Management, Climate Change and World Heritage in the 21st Century

Archaeologists are confronted every moment of their working lives with the impacts of climate change over the past millennia. With differing levels of intensity and duration, the climate of the earth has always been changing and offering challenges to human society. When archaeologists or prehistorians conceptualize past societies, they cannot ignore environmental and climatic settings. And when they view descendent communities, again they cannot help but consider the impact of environmental change on the lifestyles of peoples who live close to nature. Changes in climate have altered the shapes of continents, induced human speciation, spurred on technological change, and caused adaptations and accommodations in human behavior and social institutions. Change demanded by radical fluctuations in climate has shaped environments and in turn has punctuated human evolutionary history (Eldredge and Gould 1972). Humans have sought spiritual guidance, developed technologies and have altered social systems to cope with the impacts of climate change on their environments. Some of those adaptations have been relatively successful and others have been dismal failures (Diamond 2005). Stress on environmental resources is of major importance. There is no doubt that an overriding factor in dealing with climate change is the interplay between the cultural and natural realms in providing the framework for the choices and responses that societies make when confronted with constraints resulting from competition for resources.

Climate change has made us what we are! What we will be depends upon the choices that we make!

Although politicians and scientists may argue over the root-causes of global warming, there is no doubt that it is taking place and will continue to do so (Chapman 2002: 241). The natural heritage world has an ongoing interest in climate and its impact on flora and faunal biodiversity, and on landforms. Information is available, for instance, on the impacts on alpine fauna of receding snowlines, bleaching of coral reefs and on increased dangers from wild fires (UNESCO World Heritage Centre 2007: 168-191). Cultural heritage specialists have only recently offered viewpoints of likely impacts, with those provided for the built environment (Cassar 2005) being more specific than those offered for archaeological remains (Pearson 2006).

The best point of departure for a consideration of the impact of climate change on heritage management, although it does not deal explicitly with archaeological remains, is the work of the University College of London, Centre for Sustainable Heritage that was sponsored in 2002 by English Heritage. *Climate Change and the Historic Environment* by May Cassar offers a thoughtful consideration of the measures that need to be taken to ameliorate the impacts of climate change on heritage resources (refer also to Cassar and Pender 2005; and, UNESCO World Heritage Centre 2006b). Climate change will highlight long standing conservation issues and actions to monitor and undertake timely maintenance will be essential. Cassar asserts that difficult decisions will need to be made as to which properties can be preserved and that emergency preparedness will be essential.

Fluctuations in water levels can be devastating to all manner of heritage resources. Changes in the moisture regimes of soils will

adversely impact the preservation of organic archaeological materials. Marked seasonal fluctuations, increases in annual temperatures and greater fluctuations in diurnal temperatures will weaken ancient building materials. Gradual processes of deterioration will increase in magnitude if climate change accelerates, and little-to-no time may be available to prepare for sudden and devastating events. The Mississippi Heritage Trust reports that: 'the historic buildings on the coast have suffered extreme damage and in some cases blocks of buildings in historic districts have been wiped clean by Katrina's storm surge!' Impacts on populations that are supported by heritage places are poorly understood, but expanding on the example of the impact of Katrina on New Orleans, it is quite likely we will see an increase in looting as law-enforcement systems become strained coping with natural disasters. The Trust's web-site lists scores of heritage buildings that have been awarded funds under the Hurricane Relief Grant Program. Although there is no direct linkage between climate change and the incidences and severity of hurricanes, Katrina did catastrophic damage to the tourism industry of New Orleans and could well be an exemplar of the likely impacts on coastal World Heritage places and on the communities that are dependent on those places for their economic support.

One of the most dramatic predictions is based on a case study of the World Heritage listed Palace of Westminster and Tower of London. Although these two places are not listed for their archaeological value, no doubt there would be a negative flow-on effect for the management of the archaeological heritage should the worst case scenario eventuate: for the Thames Barriers to become overwhelmed by tidal floodwaters. Prior to the construction of these barriers, it was anticipated that they would be used two to three times a year but, following their initial use in February of 1983, they are now being used six to seven times a year (UNESCO World Heritage Centre 2006a: Box 7). Just one overtopping of the barrier would severely impact the economy of the United Kingdom, causing a loss of £30 billion and catastrophic damage to the World Heritage properties.

Less easy to define in terms of an economic loss, archaeological resources will be impacted not only by climate change but by the measures that will be taken to mediate against severe events and the costs that will need to be paid to deal with the impact of major events on the built environment. Flooding and drainage efforts will be marked in coastal reaches. As engineering works are designed to drain low-lying areas or stabilize coastal reaches, these measures will impact known archaeological sites as well as archaeological resources yet to be discovered. In addition to coastal areas, archaeologists in general terms have considered likely impacts on wet-preserved inland sites with fragile organic remains (Chapman 2002) and on the erosion of coastal sites (Pearson and Williams 1996; Pearson 2006). However, there is a need for site-specific case studies reflecting current baseline conditions and predicted impacts.

Economic strictures will bring about competition for funds needed to mitigate the impacts of climate change. Also, the economics of climate change are such that, in the near future, it is highly unlikely that new funds will be generated to meet immediate needs by governments that are in denial of climate change. It is more than likely that funds allocated to other sectors of govern-

mental activities will be diverted as a band-aid to politically visible projects. For example, it is not altogether unimaginable that heritage managers could find that a portion of their annual budget will have been reallocated to subsidize more politically visible projects, such as alternative energy research and development. At best, heritage funds would remain steady through time instead of increasing to help heritage managers cope with the effects of climate change.

Maintenance and monitoring, and vulnerabilities and threats

Maintenance and monitoring, and identification of vulnerabilities and threats are seen as one of the more urgent responses to climate change with a need to commission baseline studies such that deterioration can be monitored (Cassar 2005: 1). At the present time, funding constraints are such that few monies will be available for field surveys, including baseline studies and condition assessments, long-term artifact curation, and site stabilization/conservation. Difficult decisions may have to be taken with regard to future inscriptions of World Heritage sites. For instance, should assessors factor in to their evaluations the likely impacts of climate change, much as they might do in some circumstances for the impacts of tourism, to the outstanding universal values of the place (Cassar and Pender 2005: 615; and, Labadi 2007: 187-190)?

Vulnerability assessments will need to involve stakeholder communities from the outset (UNESCO World Heritage Centre 2006a: Box 9). *World Heritage and Climate Change* (World Heritage Centre 2006a) offers succinct lists of 'Principal Climate Change Risks and Impacts on Cultural Heritage' and 'An Eight-Step Approach to Guide Vulnerability Assessments.'

One hundred and sixty two World Heritage sites are inscribed on the basis of their natural values. Some of these places are known to contain archaeological and historical resources. The World Heritage listing of the Willandra Lakes Region of New South Wales, Australia is designed to protect both natural heritage values as well as evidence of human occupation in the form of skeletal material and archaeological remains. Other World Heritage sites may contain yet undiscovered archaeological and historical resources of outstanding universal value. Kluane/Wrangell-St Elias/Glacial Bay/Tatshenshini-Alsek, of Alaska and British Columbia, is an example of a World Heritage site where significant archaeological remains may be revealed if the rate of snow-melt continues to expose previously unexposed land surfaces. The place is the ancestral homeland of the Champagne and Aishihik First Nations, and it is inscribed on the World Heritage list for its natural values (Criteria ii, iii and iv).

Concern has been expressed over the retreat of glaciers, flooding and erosion caused by increased melt water, and changes to alpine and near-alpine environmental regimes (UNESCO World Heritage Centre 2006a: sections 20-21). The Kluane/Wrangell-St Elias/Glacial Bay/Tatshenshini-Alsek case study addresses an issue that has yet to be discussed in the literature: the very likely possibility that places inscribed because of natural values may have to be re-evaluated to determine if climate change has caused hitherto unrecognized or unaddressed manifestations of cultural, social or historical value to emerge.

Ice Patches

An 'ice patch' is just that: a patch of ice at a relatively high altitude where caribou in the past have congregated to avoid biting insects and to escape the heat of summer. Thick scatters of dung inter-bedded with snow mark these places (Strand 2003). Herds of caribou made a tempting target for indigenous hunters; they were exploited in the distant prehistoric past and in more recent historic times. Colder times buried the ice patches under layers of snow. Warmer times have melted the permanent snow cover and revealed dung fields with scatters of artifacts employed by the ancestors of the First Nations to exploit the clusters of caribou (Dove *et al.* 2005). Thirty-five of the ice patches, some as close as 30 kilometers to the Kluane/Wrangell-St Elias/Glacial Bay/Tatshenshini-Alsek, have yielded organic remains spanning some 8,000 years (Farnell *et al.* 2004; Hare *et al.* 2004).

Dating to 8,300 years ago, the 'ice patch' archaeological remains represent some of the earliest organic materials found in prehistoric contexts in the Americas (Dove *et al.* 2005: 1). Wooden spear and arrow shafts are the most commonly encountered artifacts with a variety of other kinds of materials also being found. In addition, bone and dung specimens provide information on the prehistoric distribution of large species such as buffalo, mountain sheep and Wapiti as well as the diet of the caribou.

Around A.D. 700 there was a shift from hunting with spears or darts to the use of bows and arrows. This transition is abrupt and graphic, as long slender spears with large projectile points of flaked stone are replaced by shorter and lighter arrows with points made from deer antlers. 'Ice patch' data provide the best documentation in North America of the shift in hunting from spears to bows and arrows. Fragile high-altitude finds are subject to rapid deterioration once they are exposed to natural elements and organic materials must be recovered shortly after exposure by melting snow, if optimum (or any) preservation is sought.

Southern Yukon First Nations peoples are particularly concerned and directly involved with the recently revealed prehistoric cultural materials. Community leaders are actively working with archaeologists to recover artifacts and are using the opportunity presented by the archaeological finds for community-building. Elders are asked to recall their hunting lore and stories that have been handed down from the past to be recorded by community members. One of the most dramatic spin-offs of the community archaeological research are youth educational programs that feature week-long science camps and surveys of the 'ice patches.' A well-illustrated newsletter is a feature of the joint community and Parks Canada work (*Ice Patch* 2002 and 2005).

Overview

Melting of the snow cover of 'ice patches' and the subsequent exposure of fragile organic archaeological materials of considerable importance could become more widespread in alpine and near-alpine environments, as global climate change continues on the present warming trend. This 'ice patch' case study is offered as an exemplar of what should be monitored for in the neighboring World Heritage site of Kluane/Wrangell-St Elias/Glacial Bay/Tatshenshini-Alsek. Discussion of this case study is intended to

extend the present dialogue among archaeologists, inspire scientific research to predict and address impacts resulting from climate change, and to inform heritage managers of the kinds of changes they will need to deal with should the climate continue to change.

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The Effects of Climate Change on Cultural Heritage in the Polar Regions

Introduction

It is a now-documented fact that the changes to the climate in the Arctic are more rapid and deeper than in most other regions of the world. Several large international research programmes address the complexity and have already presented results that show serious implications. For example, the project "International Study of Arctic Change" (ISAC) takes as its starting point changes that already affect the lives of native populations and others who live in the circum-Arctic, including changes in fishery patterns, in vegetation growth and in shipping and transport (<http://www.aosb.org/isac.html>).

The Centre for Climate Research (CICERO) in Norway (www.cicero.uio.no) has compiled the following facts about the latest climate changes in the Arctic:

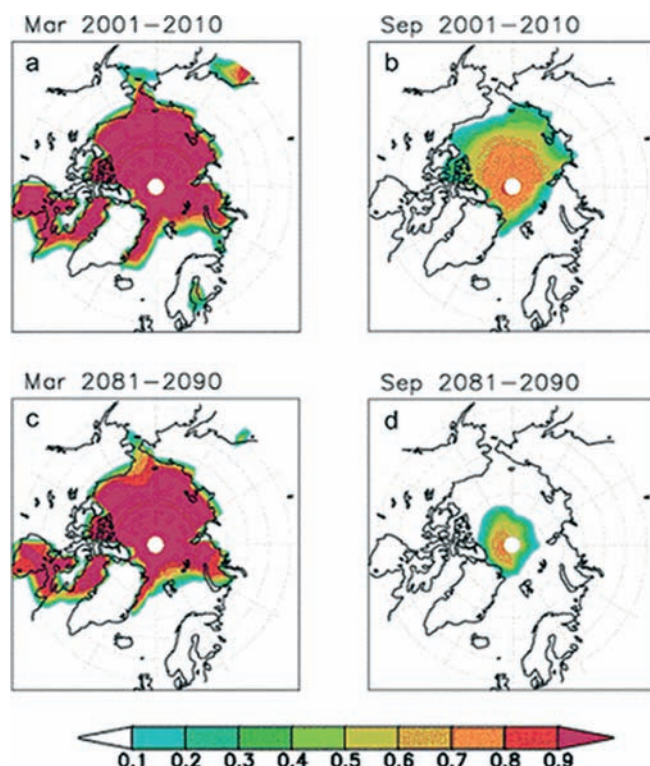
- The average annual temperature has increased about twice as much as in the rest of the world. Glacier melting, sea-ice melting and a shorter snow season are obvious results of this.

Prognosis for diminishing sea ice in the Arctic Basin

From: JOHANNESSEN, OLA M., BENGTSSON, LENNART, MILES, MARTIN W., KUZMINA, SVETLANA I., SEMENOV, VLADIMIR A., ALEKSEEV, GENRIKH V., NAGURNYI, ANDREI P., ZAKHAROV, VICTOR F., BOBYLEV, LEONID P., PETTERSSON, LASSE H., HASSELMANN, KLAUS & CATTLE, HOWARD P., Arctic climate change: observed and modelled temperature and sea-ice variability. *Tellus A* 56 (4), 328-341.

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ECHAM4-modelled Northern Hemisphere sea-ice concentration in late winter (March) from (a) 2001–2010 and (c) 2081–2090, and in late summer (September) from (b) 2001–2010 and (d) 2081–2090. The model has been run using the IPCC IS92 emission scenario comparable to IPCC SRES scenario B2.



- 2005 was globally the warmest year since systematic instrument registering of temperatures started in 1880. The Arctic contributed strongly to this and 2005 was an unusually warm year in the Arctic.
- The summer ice cover in the Arctic Ocean has been substantially reduced during the last years. Whole-year ice is now also melting. Between 2004 and 2005 this ice was reduced by 14%.
- Research in both Siberia and Alaska show that the permafrost is melting in the Arctic. In northern Alaska a widespread and quick permafrost thaw has been registered from 1982 to 2006. Scientists see this in connection with record-high temperatures registered in the period 1989–1998.

However, it must be stated that as with all climate scenarios, the hardest thing to predict is the future. We can show what has already happened, but the modelling of future climates and weather patterns is a complicated matter which leaves room for varying and sometimes completely opposite conclusions. The Arctic Monitoring and Assessment Programme (AMAP) writes in its "State of the Arctic report" from September 2006 (see <http://www.amap.no/>) that: *Many of the trends documented in the ACIA¹ are continuing, but some are not. Taken collectively, the observations presented in this report indicate that during 2000–2005 the Arctic system showed signs of continued warming. However, there are a few indications that certain elements may be recovering and returning to recent climatological norms (for example, the central Arctic Ocean and some wind patterns). These mixed tendencies further illustrate the sensitivity and complexity of the Arctic physical system. They underline the importance of maintaining and expanding efforts to observe and better understand this important component of the climate system to provide accurate predictions of its future state.*

The polar bear has been elected by many as the symbol of a warming Arctic and the worst-case scenario that global warming could result in. The polar bear is actually a marine mammal, not a land mammal. It is dependent on the sea ice as its hunting ground for seals, which are the bear's staple food. Catching, for example, reindeer on land or fish and seals swimming in the sea are not viable alternatives. Less sea ice results in a shorter hunting season, and ultimately (worse case), no hunting grounds at all. It can sometimes seem more difficult to bring the challenges facing the Arctic peoples, and not least the cultural heritage of the Arctic, into the public awareness than the fate of the animal "king of the Arctic".

The Arctic Peoples website <http://www.arcticpeoples.org/KeyIssues/ClimateChange/Start.html> mentions the fact that many non-Arctic people might think that a warming climate is an advantage for those living in the Arctic region. On the contrary, they point out, the Arctic people are well adapted to their traditional climate. A warming climate brings such problems for them as less sea-ice for transport and hunting, more erosion of coastal community shorelines, permafrost movement which disturbs pipelines and building foundations, and more insects which negatively affect reindeer as well as traditional methods of fresh-meat storage.

The warmer ocean and the colder land meet at the coastal zone, and it is in the coastal zone in the Arctic that most human activity and settlement has occurred and still takes place. Cultural heritage and current activities are therefore deeply affected by major changes in the coastal zone, whether it be erosion or land gain. In fact it is erosion that is the main problem for cultural heritage protection around the entire Arctic region, as the two case studies from



San Sebastian, Bjørnøya, erosion of the remains of a mixed site (Photo: Susan Barr)



Ytre Norskøya, excavated 17th century whaler's grave (Photo: Susan Barr)

North America (see Olynyk and Chapple in this volume) describe. During the ice-free summer season, wave action can erode coastal zones up to several metres a year, while the water-land interface during this period warms the newly exposed permafrost surfaces, thus accelerating the erosion process (see the Arctic Coastal Dynamics project, eg. report 2004 at http://www.awi-potsdam.de/acd/ws5-Dateien/5th_ACD_Report_w_links.pdf). With the above-mentioned summer and whole-year ice melting in the Arctic Basin, the coastal erosion will increase.

In the early 1980s in the Norwegian Arctic archipelago of Svalbard, 17th century corpses were exhumed which still had skin and hair intact. Similarly from a graveyard in Alaska in the 1990s it was possible to extract lung tissue for virus analysis from victims of the huge "Spanish 'flu" pandemic in 1918-19 which killed around 20 million people world-wide. The corpses had in effect in part been freeze dried by the cold and dry climate, and in part preserved in the permafrost. A warmer, more moist climate and a deeper "active layer" which thaws each summer and freezes again each winter, will affect such burials as well as other historic organic matter.

The following information from the North Slope of Alaska² illustrates some of the points mentioned above:

In the Arctic, the thin layer of soil on top of the permafrost that thaws every summer, the "active layer," will get deeper as the climate warms. Cultural resources that have been permanently frozen will be subjected to annual freeze-thaw cycles. Surface resources that are anchored in the permafrost may be destabilized.

The continuing decline of summer sea ice cover, resulting in more fetch, already is creating considerable increases in coastal erosion, much of which is caused by wind driven waves. A deeper active layer and potentially more or stronger storm systems add to the destructive impacts of wave action.

Here in northern Alaska, the rate of erosion of Nuvuk, the abandoned [native] village at the tip of Point Barrow, has increased considerably in recent years. The graveyard at the same location holds several hundred burials, of which the archaeologists are lucky to save those that begin eroding each year. This site is only 11 miles from Barrow, so relatively easy for teams to access for mitigation. Cultural resources sites at greater remove are not even visited every year.

A more comprehensive inventory of sites needs to be developed, including smaller locations such as temporary camps and supply caches. Sites need to be rated on their potential value to the public and to science, and the level of threat (immediate, mid- and longterm) to each should be identified.

Facing the challenges

Here we come to the next stage of this climate challenge. Is the future only dark for cultural heritage in the Arctic, or is it possible with mitigation to prevent or alleviate the loss of cultural heritage?

The first step is obviously to recognize the challenges. Although we do not know whether the gloomiest scenarios will ever be fulfilled, we do see certain climate-change effects happening right now. We can also imagine that certain effects might increase before the climate trend may turn again and lead us happily back to more "normal" conditions. So, being better safe than sorry, there is no harm in taking mitigating actions right now against the worst-case scenarios of the future. Such actions may mean the difference between saving and losing important aspects of the cultural heritage during negative climate-change impact or – if the climate actually does not follow the doomsday prophecies – the actions will anyway greatly benefit cultural heritage in the future, climate change or not.

As mentioned by Glenn Sheehan above, an important step is documentation of the sites of all types, large and small. In cases where it seems fairly certain that climate change effects such as erosion will destroy the site within a limited time period, the inventory must conclude with either a complete documentation (with or without an archaeological survey as appropriate) of the site which ultimately will be lost, or measures to prevent or alleviate the erosion threat. Of the latter can be mentioned breakwater or erosion barriers of stone, wood or other materials, or even moving the heritage structure further inland where this may be feasible. Unfortunately some important sites will be impossible to save, but the information from a thorough documentation will still allow the heritage to live on for research, education and in some cases reconstruction purposes. This is a problem and solution challenge which applies to many other regions of the world too and where information exchange on mitigation ideas can be beneficial.

Increased fungal and bacterial growth on organic materials at heritage sites is not a new phenomenon for Arctic sites, but is a phenomenon which is increasing from a relatively marginal conservation issue to become a major challenge. Happily, innovative scientific work is addressing this issue now, and scientists familiar with the issue either in the Arctic or the Antarctic are getting together to compare the problems in both regions and discuss solutions. The same applies to increased chemical reactions caused by chlorines and other salts in the wind-blown spray and increasing rainfall at Arctic (and Antarctic) heritage sites.

As indicated above, the climate challenges facing heritage sites in the Arctic are similar in the Antarctic, although there are varying degrees of impact. The article by Chaplin in this issue, describes climate-change impacts on one of the internationally-significant Antarctic heritage sites. Again it may be mentioned that cooperation on research and mitigation between Arctic and Antarctic scientists is increasing and producing results applicable for both regions.

Hot problems and warm problems

At a recent climate-change workshop at University College London (Noah's Ark project <http://www.ucl.ac.uk/sustainable-heritage/noah.htm>), the worry was expressed by a southern European delegate that increased summer temperatures will negatively affect tourism to heritage sites in his region that are dependent on the income from tourism for adequate maintenance. This may obviously apply also to other hot regions of the globe. In the polar regions the effect is opposite, but may be negative in another way. Less sea ice opens the way for more tourism access, and cruise tourism to the Arctic and Antarctic can be said to have exploded during the past years. In Svalbard the number of persons put on shore from cruise ships during the short summer season increased 13 fold from 1996-2005. In the south there were 10,000 passengers to the Antarctic Peninsula 10 years ago. In 2006 there were 35,000. This may not sound much compared to more accessible and warmer regions, but in the polar regions the effect can be that delicate sites with at best marginal, but still crucial, vegetation cover may be trampled by well-meaning, but still damaging feet; erosion may be accelerated; and loose objects that have been protected for decades and centuries by snow and ice, may be damaged or removed. Protection of these delicate sites demands great care and understanding from the cruise operators and local guides.

Over climate boundaries

Because of the early-warning effect the more pronounced climate changes in the polar regions, particularly the Arctic, can give to the rest of the world, a large amount of research and data collection is already available on the subject. Similarly, because the climate changes already are affecting heritage sites in both the Arctic and Antarctic, scientists have been addressing the challenges for the past few years. Many of the increasing problems are common for other regions of the world too, and it should therefore be fruitful for scientists involved in climate change and heritage projects to work together over regional and climate zones.

More practical information and descriptions of challenges can be found in the three case study articles by Chaplin, Chapple and Olynyk.

Susan Barr
President

International Polar Heritage Committee (IPHC)



Ebeltoftthamna, erosion of a 17th century graveyard into the sea (Photo: Trygve Aas)

¹ ACIA = Arctic Climate Impact Assessment, a climate research programme that reported in 2004 and 2005.

² Provided by email to this author from IPHC US member Glenn Sheehan, Barrow Arctic Science Consortium, Barrow, Alaska.

Case Study: Captain Robert Falcon Scott's 1910-13 British Antarctic Expedition Hut at Cape Evans

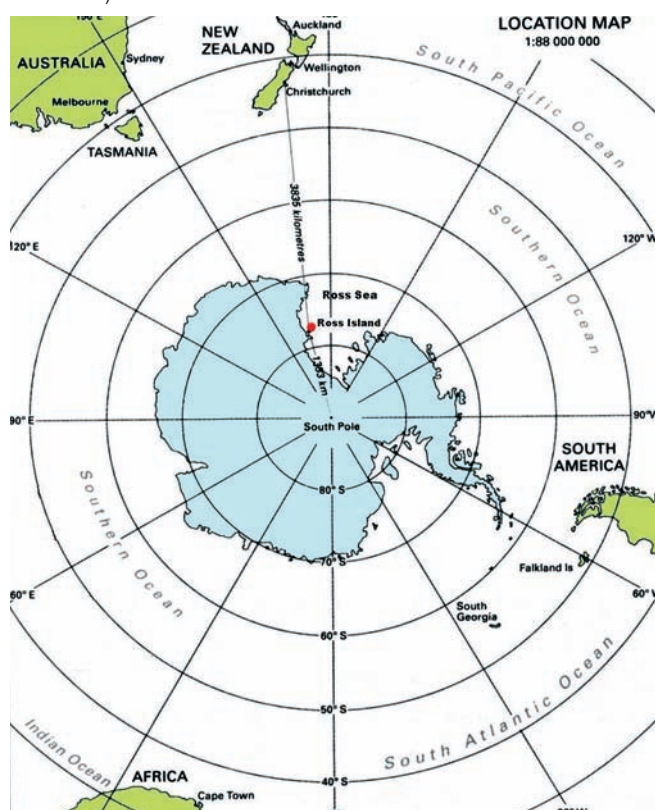
Vast amounts of data about former changes in the climate of our planet lie locked in the ice of Antarctica, a continent that has been the focus of climate studies dating back to the "heroic-era" expeditions at the beginning of the last century. These studies provided the first observations and climate data in these high southern latitudes and built the foundation for today's scientists who are literally drilling for information about the climatic conditions on Earth millenniums ago. These days Antarctica often makes headlines as a place that is reacting dramatically to global climate change - events that may be precursors to changes that are currently only predictions.

It's ironic, therefore, that Antarctica is the location for a few of the most unique historic sites on Earth that are now threatened by global climate changes.

While threats also occur to sites in more temperate climates, Antarctic sites face some problems that are quite different. They can also differ from problems identified in Arctic regions. The severity of the threats varies from place to place, but there is one site that suffers more than most and it serves well to illustrate the issues involved.

Captain Robert Falcon Scott's hut is situated on Ross Island about 25 kilometres north of New Zealand's Scott Base and the large US base of McMurdo. Listed as Historic Site Number 16 in the Antarctic Treaty System register, the hut is also included within an area designated as Antarctic Specially Protected Area (ASPA - 155). This gives it some protection from 'man-made' threats, but it is in no way immune from natural forces.

Map: Antarctica and Southern Ocean (Credit: International Polar Heritage Committee)



Historic significance

It is from this hut that Scott launched his bid for the South Pole from which he and 4 companions never returned. Four years later it served as a refuge and source of provisions for Sir Ernest Shackleton's "Ross Sea Party" that was stranded there when their ship was blown out to sea in a storm. Believing that Shackleton had begun his trans-Antarctic expedition they continued to lay depots towards the South Pole to support him on the second stage of his journey out to Ross Island. The Ross Sea Party had no way of knowing that Shackleton's "Endurance" had been trapped and crushed in the Weddell Sea ice and that he and his men were fighting for their lives on the other side of the continent.

Recorded and observed climate changes

While a large amount of climate data has been collected at the nearby bases, this was not available to the writer in an analysed form prior to the deadline for this publication. It is however known that there are many different micro-climates in the region and these could influence the validity of such data if it was applied to Cape Evans. There is however a wealth of anecdotal evidence that supports the submissions made below.

Potential impacts

As a result of observations in recent years this site is facing a number of new and very real risks. Predictions of future climate change remain uncertain but give no cause for complacency.

The effect of increased snowfall and snow-drift build up

In recent years a significant increase in the winter build up of snow on and around the hut has been observed. The cause of this can possibly be attributed to increased precipitation as well as possible wind pattern changes that combine to increase snow drift.

This build up of snow has two serious adverse affects, the first being the increase of mechanical loading on the structure. In summer 2006-07 it was estimated that over 100 tonnes of snow were removed from in and around the hut. Much of this was taken from roof areas, in particular over the stables where it has cracked rafters in both of the last two years.

A second complication arises during warmer periods in summer when temperatures rise above zero and this snow melts. Increased quantities of snow create increased melt-water and this has begun to run through the hut where it freezes and builds up when cooler conditions occur. This water and ice not only causes damage to artefacts



Scott's hut at Cape Evans is located on a shingle beach less than 50 metres from the water's edge and no more than 2 metres above high water level. Little more than a kilometre to the north the Barne Glacier terminates in a massive wall of ice up to 50 metres high that floats out onto the sea. (Credit: Paul Chaplin)

in the hut, but the expansion effect of freezing is further source of mechanical damage to structural materials and objects in the hut.

For many years there has also been a separate process of "ice heave" caused by smaller amounts of melt-water running under the hut and freezing. The "heaving" effect of this on the structure has caused deformation of the flooring. This problem has been closely monitored but increased quantities of water are exacerbating it.

Temperature change

It can be easily understood that one effect of increases in average temperature in polar regions is an increase in the number of freeze/thaw cycles that occur. This contributes to a breakdown of many building and other materials. Wooden structures tend to absorb free water from the surrounding snow and ice, and when this re-freezes, it expands and begins to break down the surface fibres. Increased average temperatures, therefore, are likely to accelerate the mechanical breakdown of a wide range of materials.

Increases in ambient air temperature can also exacerbate the effects of solar warming. Solar energy is transmitted through the roof and walls of the hut causing an increase of internal temperature and when this occurs relative humidity (RH) increases. Objects within the hut do not warm so quickly, so when higher RH internal air contacts them, condensation forms on the cold surfaces. This dampness causes a breakdown of materials such as paper (labels on metal cans) and it provides a "fertile" medium for forms of biological decay. When interior temperatures cool again, the condensation freezes and contributes to the freeze/thaw problems and mechanical damage already mentioned.

Increased forms of biological decay

There is a popular belief that freezing conditions prevent biological decay, but this is far from the truth. Many forms of organisms continue to function in sub-zero temperatures and when temperatures periodically rise above freezing during summer months, bacteria, fungal and other organisms flourish. This not only causes decay in these wooden structures but in the many other materials, such as paper and fabrics, that can be found in the huge variety of artefacts remaining in the hut. Even a slight increase in average temperatures can magnify this problem.

In recent years there has been a significant increase in the build up of snow on and around the hut during winter. September 2003. (Credit: Scott Base Winter Staff)



Wind action

While actual changes in wind patterns in this area have yet to be analysed, it appears that this factor has contributed to the increased snow drift referred to above. Any change, therefore, raises the possibility that existing problems with windblown salt spray could be exacerbated. Salt acts as a catalyst in the oxidation of ferrous materials and this has always been a problem with iron fastenings and other components in the hut structure. Ferrous content of the artefacts within, such as food cans and implements, are also adversely affected.

Inundation/Flooding

One of the most dramatic illustrations of global warming often seen on the media is the spectacular collapse of ice-shelves and glacier faces. It is not difficult therefore to imagine the effect of the collapse of a huge mass of ice into the sea near the hut, and we have surely all seen examples of the mini tsunami that this can cause.

Scott's hut is located on a shingle beach less than 50 metres from the water's edge and no more than 2 metres above high water level. Little more than a kilometre away to the north is the Barne Glacier which terminates in a massive wall of ice up to 50 metres high that floats out onto the sea. In winter the hut is "shielded" by the sea-ice but for several weeks in summer there is only a short stretch of open water between it and the glacier.

As yet there have been no recorded dramatic collapses from this

glacier, but if global warming continues, a major collapse from the face of the Barne Glacier is a real possibility. Such a collapse could easily create a wave capable of sweeping up the beach and destroying the hut and its contents. It goes without saying that any increase in global sea levels not only increases this risk, but creates a risk of its own.

Site management

The organisation responsible for this, and other sites in the Ross Sea region, is the Antarctic Heritage Trust. AHT, an international organisation based in New Zealand, has charitable status in several countries. It has a proven record of successful conservation projects and is acknowledged as a competent organisation achieving internationally recognised conservation standards in its work.

Despite such competent management, however, there remain some very real practical and economic considerations with work at Antarctic sites. These only serve to compound the effects of Global Climate Change. (See "Cape Adare" in this issue of *Heritage at Risk*)

The Trust has a continuing annual programme of remedial work and monitoring, and more detailed analysis of climate data is being done in an attempt to quantify and anticipate problems.

Paul Chaplin
Secretary General
International Polar Heritage Committee (IPHC)

Objects within the hut do not warm as quickly as the air inside the hut so when the higher RH air contacts them condensation occurs on the cold surfaces. Freeze/thaw problems and dampness can cause a breakdown of materials such as paper (labels on metal cans) and it provides a "fertile" medium for forms of biological decay. (Credit: Paul Chaplin)



York Factory – National Historic Site of Canada Kichewaskahikun (Cree) (“The Great House”)

Nearly four thousand years before the first Europeans arrived in North America, the Hudson Bay area was home to successive waves of Aboriginal peoples such as the Predorset; Dorset; Thule; Cree; Dene; and Inuit people. After the last ice age, both the glaciers and the Tyrell Sea retreated, leaving the rebounding newly exposed land available to plant and wildlife colonization. Aboriginal people traveled into the area and different groups made use of seasonal cycles of game, fish and berries. These people led a nomadic existence, harvesting ringed seals in Hudson Bay, and caribou inland.

European explorers came seeking the Northwest Passage, believed to be a path to the spice-rich Orient. Instead, they found a wealth that rivaled the Far East. The Hudson’s Bay Company (HBC), formed in 1717 to take advantage of this wealth, and the subsequent fur trade, changed the face of North America.

The remnants of the Hudson’s Bay Company settlement at York Factory are now threatened with the effects of climate change and a receding shoreline.

The Hudson’s Bay Company

The Hudson Bay Charter was established on May 6, 1670 when King Charles II of England granted all the lands drained by waters flowing into the Hudson Bay to the “Company of Adventurers of England trading into Hudson’s Bay,” thus creating the Hudson’s Bay Company (HBC).

The economic fortunes of the day were in furs and trading involved cooperation, assistance and partnership between the “old inhabitants”, of the land, the Métis, First Nations and non-native people. This trade prospered for over 200 years.

As the HBC expanded its operations, trading posts were established on Hudson Bay and inland in places such as York Factory, Fort Severn, Norway House and Cumberland House.

York Factory became the gateway between Europe and all of western and northern Canada for the HBC, and now is renowned as the most significant HBC historic site in North America.

York Factory

Three centuries of history are commemorated on the shore of Hudson Bay. York Factory is significant for its critical role in the French-English struggle on Hudson Bay for control of the fur trade, as an important HBC trading post and entrepôt,¹ and for its role in the expansion of the fur trade into the interior of western Canada. As the longest operated HBC post in North America, York Factory is of national significance because of the importance of the fur trade in Canadian history, the international dimensions of the trade and the interaction of aboriginal peoples and their trading partners.

York Factory is located near the mouth of the Hayes River approximately 250 kilometres southeast of Churchill, Manitoba. Its location on the Hayes River near Hudson Bay, and with access to



Historic image of York Factory with its complex of associated buildings and structures, circa 1925 (Library and Archives Canada, PA-041571)

the Nelson River, was a deliberate choice on the part of the HBC. This location was accessible by ocean-going vessels, which would anchor at Five Fathom Hole, and provided safe harbour. From here, goods were transferred to York Factory and smaller boats for inland trade via navigable rivers.

As early as 1670 an attempt was made by the Company to establish a post at the mouth of the Nelson River, but fierce winds hindered landing and the crew sailed back to England. By 1682, however, three groups of traders from New England, England and France had established a series of fur-trading forts in the area of the Hayes and Nelson rivers to compete for control of the territory and fur trade of western Hudson Bay. In 1684, the HBC built York Fort on the north shore of the Hayes River, eight kilometres upstream from the Bay.

Between 1694 and 1697, the French and English battled for control of the original York Factory. Under the command of Pierre Le Moynes d'Iberville, the French captured York Factory in 1694, lost it to the English in 1696, recaptured it the following year, and renamed it Fort Bourbon. It remained under French control until the signing of the Treaty of Utrecht in 1713, which awarded HBC exclusive trading rights on Hudson Bay. York Factory quickly

York Factory, 2005 (Heartland Tours, Manitoba)





Aerial view of York Factory and the bank of the Hayes River, 2005 (Heartland Tours, Manitoba)

became the Company's single most important trading post on the Bay, although its monopoly was successfully challenged by traders from New France who had established a series of posts far to the south in the Lake Superior and Lake Winnipeg regions.

Despite diminishing fur returns, the HBC made no serious attempt to construct any inland posts or to challenge its competitors from New France. With the fall of Quebec in 1760, new merchants — largely Scottish and Métis traders who later formed the North West Company — assumed control of the Montréal-based fur trade and succeeded in capturing much of the trade of the Aboriginal peoples who had traditionally made the long journey to York Factory to exchange pelts for European guns, kettles, knives and blankets.

In order to meet its competitors head-on, the HBC abandoned its sleep by the frozen sea, and in 1774, with the building of Cumberland House in northeastern Saskatchewan, the Company began the construction of a series of inland posts.

York Factory played an important role from the 1680s until approximately 1850, first as a major trading post and then as the main Hudson's Bay Company entrepôt providing the vital link between the vast fur resources of the interior of the continent and the markets of Europe. In 1810, it became the headquarters for the Hudson's Bay Company's newly established Northern Department. Aside from administrative and financial functions, York Factory also served as the entry point for most Europeans bound for Rupert's Land. York Factory, particularly as headquarters for the Northern Department after 1810, represents the HBC's role as an imperial factor in British North America.

Over the next century, York Factory changed from a fur-trade post to a warehousing and transshipment depot with considerable administrative responsibilities. As headquarters of the Company's vast Northern Department, York Factory, at its peak in the mid 19th century boasted over fifty buildings and a large complement of officers, clerks, tradesmen and labourers, as well as a seasonal workforce of Native traders and hunters. It was the political, economic and social hub of western Canada fur trade society. At the same time, York Factory was a vibrant community, home to many Cree people of western Hudson Bay. From their initial position as middlemen and traders of commodities, the role of the Home

Guard Cree after 1820 gave way to a market function based principally upon the sale of their labour. The immediate area around the Factory was inhabited by the Cree who trapped, hunted and fished for the Company. A native community was situated one kilometre downstream of the fort. There were also communities scattered throughout the immediate vicinity of York Factory, for example, Ten Shilling Creek, Crooked Bank, and Kaskattamogan just to name a few. To this day, their descendants consider York Factory their homeland.

After 1850, the post diminished in importance and was abandoned by the Hudson's Bay Company in 1957. Ownership was transferred to the Government of Canada in 1968. York Factory was commemorated as a national historic site of Canada in 1936.

The design of York Factory was both simple and utilitarian and typical of what the Hudson's Bay Company regarded appropriate for its posts.

The buildings of the fort were originally laid out in an "H" shape with the depot building or "Great House" (known in the Cree language as "Kichewaskahikun"), the guest-house, and a summer mess house forming the centre bar. The wings of the "H" were composed of fur stores, provision shops, trading rooms, officers' and servants' quarters. The formality of this scheme was reinforced by the main gate in the encircling wooden palisade being directly in line with the entrance to the depot.

Other structures within the palisades included a doctor's house, Anglican church, clergyman's residence, school, hospital, photographic room, library, cooperage, blacksmith shop, bake house, middlemen's dwelling, and net house. Outside of the formality of this public area of the fort, the inter-relationship of the other structures further from the river, such as the manufacturing shops and dwellings, was not based on as rigid a plan. Subsidiary buildings were arranged around a network of boardwalks much like the streets of a small town. The boardwalk system in place today replicates the historical circulation patterns and, in combination with the vestigial remains of an extensive system of drainage ditches, provides evocative echoes of the historic landscape.

Today, the site includes the "Great House" (depot), archaeological remains of more than seventy buildings and large features, more than 3,000,000 artefacts, and the cemetery.

York Factory is threatened

Canada's most important fur trade heritage site is in trouble. Dramatic and ongoing erosion of the Hayes riverbank has substantially reduced the distance between the river and the heart of York Factory. Erosion of the north bank of the Hayes River has meant that the remains of two earlier York Factories have completely disappeared. It is estimated that the present site, which dates from 1788, will be largely lost within 100 to 150 years. The rate of erosion is about 3 metres/5 years. Artefacts and archaeological features are eroding away and, in time, the "Great House" will be affected. Engineering alternatives to stop or drastically slow down erosion are being looked into, but may not be feasible. Documenting and some recovery of the site before it is lost may be the only viable choice.

York Factory is just within the southern edge of permafrost in Canada. Permafrost temperature monitoring in the region since 1993 indicates rises of up to 2°C (Lemke 2007 p370). On this regional scale, increases in the thickness of the active layer (the upper layer that is subject to freeze-thaw cycles) and the northern retreat of permafrost is expected to continue. As explained by Lemke et al (2007 p369) 'Thawing of ice rich permafrost can lead to subsidence of the ground surface as masses of ground ice melt[,] and to the formation of uneven topography known as thermokarst, generating dramatic changes in ecosystems, landscape and infrastructure performance.'

While climate is an important factor determining the distribution of frozen ground, local factors are also important, such as vegetation conditions, snow cover, physical and thermal properties of soils and soil moisture conditions. Permafrost and drainage are interrelated threats. The York Factory site faces permafrost instabil-

ity from combined effects of warming, increased water drainage, and loose soils. Parks Canada, with great concern for York Factory, has begun monitoring of the area. Systematic permafrost monitoring is being explored that would contribute to planning the salvaging and documenting needs for the site, as well as contribute to regional permafrost studies. Experts in areas of geotechnical engineering, permafrost and cold climate heritage management are assisting in research and planning and developing a management strategy that gives direction for the protection and presentation of York Factory.

We hope the rest of the ICOMOS scientific community will continue to follow, with interest, the plans for this exceptional Canadian site.

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¹ Entrepôt is defined as an intermediary centre of trade and transhipment.

Summary of the Significance of and Threats to Cultural Resources Located at the Historic Settlement Area on Herschel Island Territorial Park of Yukon

The Historic Settlement Area on Herschel Island was designated as a National Historic Event of Canada in 1972 and is part of Yukon's first Territorial Park, established in 1987. The events recognized in its national designation were the whaling industry, the establishment of Canadian sovereignty in the western Canadian Arctic, and the meeting of cultures. It is part of an area called Ivvavik/Vuntut/Herschel Island that is on Canada's tentative list for nomination as a World Heritage site. Ivvavik and Vuntut are each Canadian National Parks located in the very northwest corner of Yukon and Canada.

Sir John Franklin met ancestors of today's Inuvialuit when he visited the island in the summer of 1826 and gave it its English name. There is archaeological evidence here of the Thule culture which would mean at least 1,000 years of human use and occupation. Inuvialuit continue to use the island as a seasonal base for traditional hunting and fishing.

In 1890, American whalers, pursuing diminishing stocks of Pacific Bowhead whales, followed them over the north coast of Alaska into the Beaufort Sea of the Arctic Ocean. The fleet established a "settlement" at the deep and sheltered harbour of Pauline Cove on Herschel Island. At first, ships were simply frozen fast in the ice of the cove to provide shelter over winter in order to get the earliest start possible to the next whaling season. The first structure was built on land in 1892. Today, there are a dozen buildings standing that date back as far as 1893.

There are also archaeological remains of prehistoric, semi-sub-

terranean houses and over 100 grave sites nearby.

As reported in the 2004/5 edition of *Heritage at Risk* (pp 266-7), cultural resources in the historic settlement area are threatened by climate change. The specific effects are rising sea level, coastline erosion, decaying permafrost, and changes to the hydrologic regime. The western Canadian Arctic and Alaska are seeing the greatest increases in yearly average temperature in the world.

Sea level in the Beaufort region has increased by 10 to 20 centimetres in the past century and is conservatively predicted to rise another half a metre in the next century. The Settlement Area is on a low lying spit of land. A rise of this extent will bring water up to the doorsteps of most of the historic buildings and submerge all archaeological sites.

Another effect of warming is the disappearance of sea ice and increasingly violent late summer and fall storms in the Beaufort Sea. These phenomena are directly related to accelerated shoreline erosion due to increased wave action caused by high winds and the fetch provided by the recession of fixed sea ice.

Permafrost and ice lenses are found below ground throughout the island. Solifluction; the downward slumping of the thawed, active layer of soil over the frozen ground beneath has caused coffins to tumble and be pushed out of the ground on the south facing slopes behind the Settlement Area. This deterioration of the permafrost, coupled with a predicted increase in precipitation will inevitably effect the hydrologic regime and surface runoff rates and patterns.



June, 1991 aerial photograph of the Historic Settlement Area with the Northern Whaling and Trading Company (NW&TCO) Store near the shore at centre left and Pauline Cove at right (Credit: Government of Yukon Territory)

Further building relocations have not been required; as of winter 2006/07 however, building foundations that were once dry and frozen are now becoming waterlogged throughout the Historic Settlement Area. This seems to be related to ground thaw and possibly a rise in the water table or land subsidence. Along with shoreline and permafrost monitoring, this introduction of moisture is being monitored for increased freeze/thaw activity and fungal attack that could damage structural integrity.

The development of a Strategic Salvage Plan which will prepare for a worst case scenario for cultural resources on Herschel Island is underway. A team of architectural conservationists, an archaeologist and a palaeontologist from the Government of Yukon will be visiting the island in July, 2007 to study the current situation and collect field measurements to contribute to the plan. The plan will attempt to ensure that as much of the scientific information and cultural values pertaining to the site as possible are retained and at least fully documented for posterity. It will also outline a staged and prioritized reaction as well as cost implications should the predicted progress and extent of climate change, and its effects on the coastal regime be fully realized.

It seems certain that the period of history we are now living in can be added onto the many layers of change over history and onto the exceptional cultural and natural values that Ivuvik/Vuntut/Herschel Island (Qikiqtaruk) embodies and offers the world. The lessons to be learned are many.

Visit www.yukonheritage.com and go to the publications section to see an overview of the heritage of Herschel Island in the two online publications: *Herschel Island - Qikiqtaruk* and *Qikiqtaruk - Inuvialuit Archaeology on Herschel Island*. Further information can be found at <http://www.virtualmuseum.ca/Exhibitions/Herschel/English/menu.html>.

M. Douglas Olynyk
Historic Sites Manager
Yukon Government



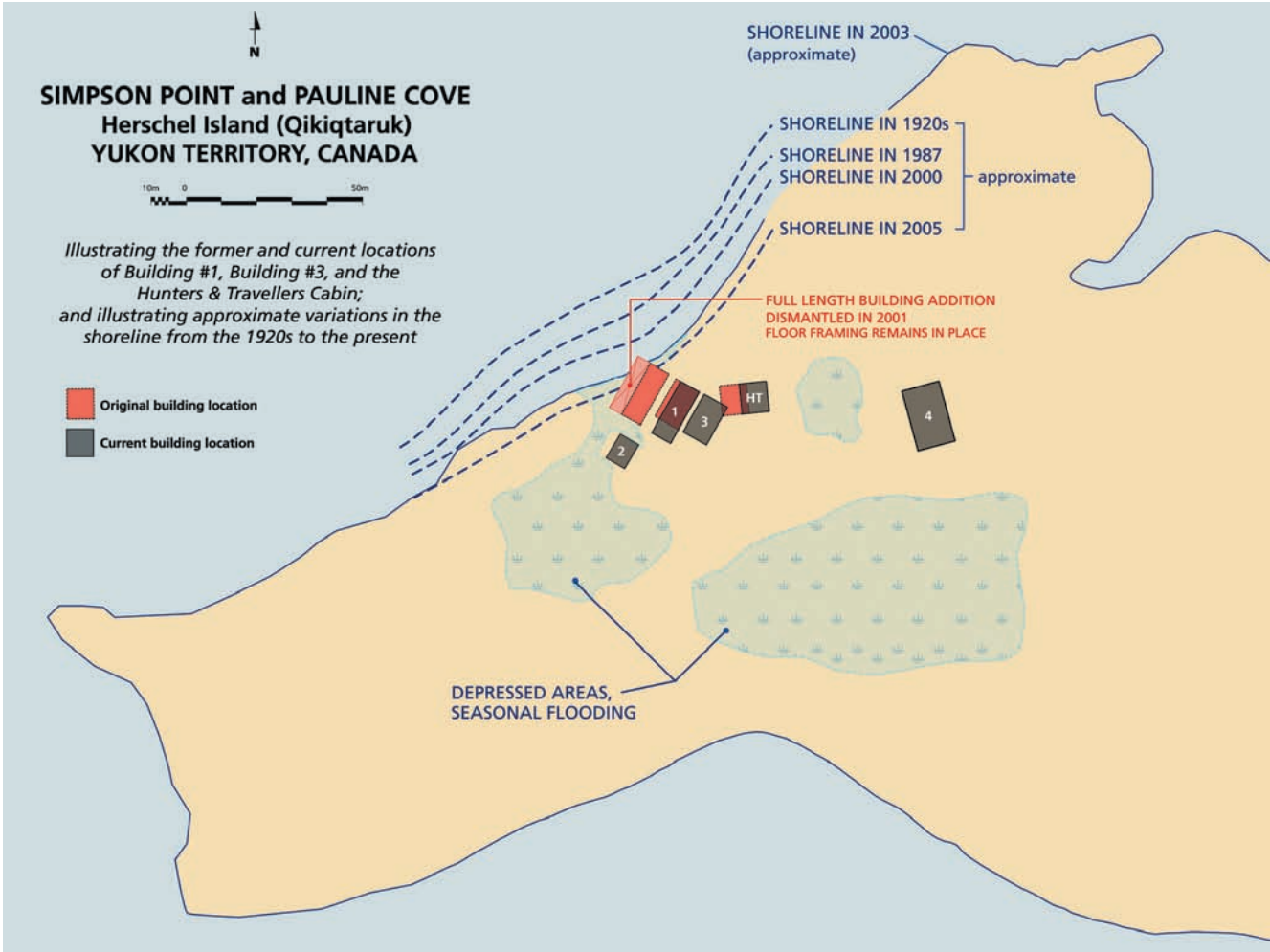
June, 2001 - the NW&TCO Store shed addition after being crushed by sea ice the previous fall (Credit: Government of Yukon Territory)



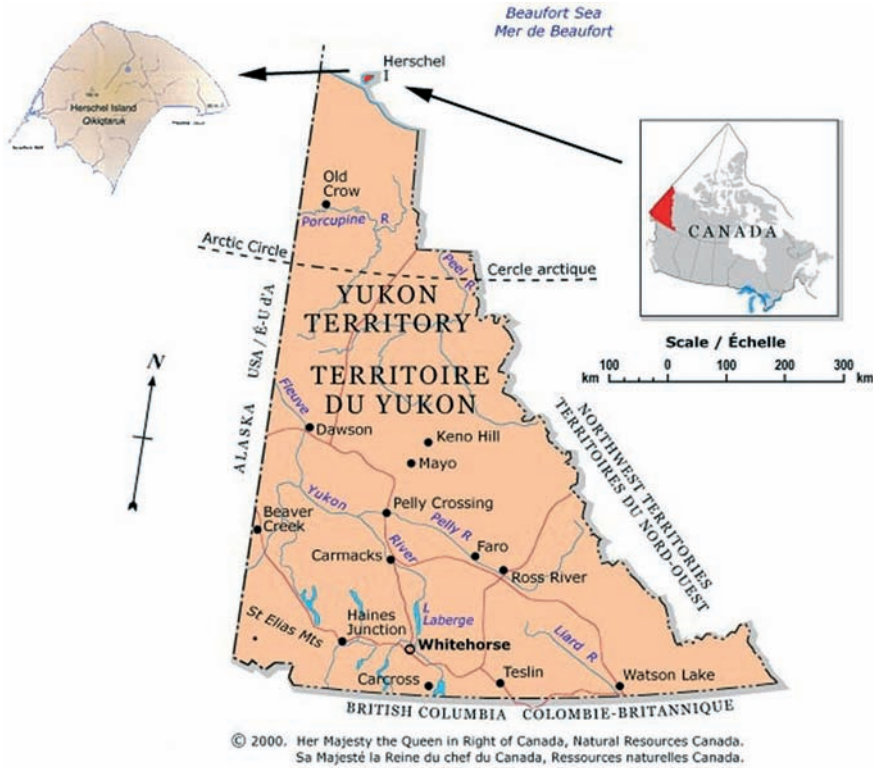
July, 2003 - the NW&TCO Store after the shed addition was removed and the building raised (Credit: Government of Yukon Territory)

August, 2003 - the NW&TCO Store after being moved five metres back from the shore. This building and the Canada Customs Warehouse and Hunters and Travellers Cabin to the left had to be moved an additional five metres in the summer of 2004 (Credit: Government of Yukon Territory)



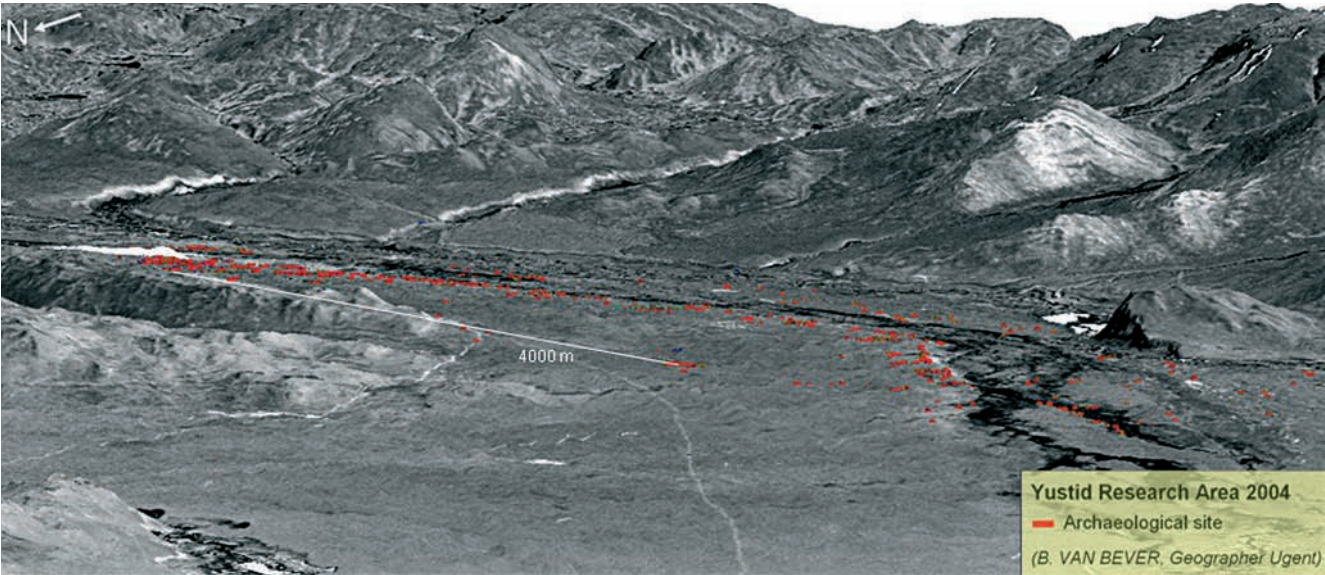


Plan showing building relocations as of 2006. Building #1 is the NW&TCo Store, Building #2 is the Canada Customs Warehouse (Credit: Government of Yukon Territory)

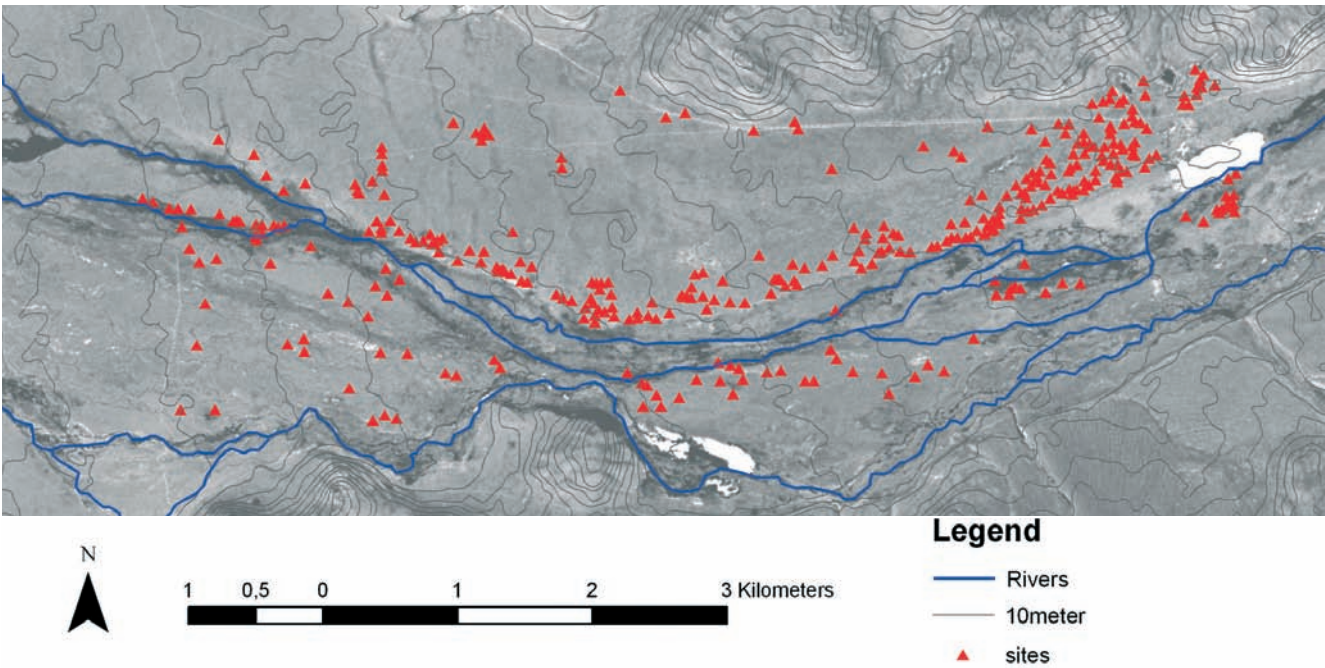


Yukon Territory showing location of Herschel Island

Impact of the Climate Change on the Frozen Tombs in the Altai Mountains



3-D view on the valley of Yustyd, based on the CORONA image, UNESCO Project (UNESCO Copyright)



A map of the middle part of the Yustyd valley, with archaeological sites and 10 m contour lines, based on the CORONA imagery, UNESCO Project (UNESCO Copyright)

The jagged, towering Altai Mountains stretch 2,000 km across China, Mongolia, Russia, and Kazakhstan. The Russian section of this mountain range was inscribed as a natural site on the World Heritage List in 1998. The area inscribed includes Altaisky Zapovednik and a buffer zone around Lake Teletskoye; Katunsky Zapovednik and a buffer zone around Mount Belukha; and the Ukok Quiet Zone on the Ukok Plateau. The region represents the most complete sequence of altitudinal vegetation zones in central Siberia, from steppe, forest-steppe, mixed forest, sub-alpine vegetation to alpine vegetation. The site is also an important habitat for endangered animal species such as the snow leopard. Although the Altai Mountains of Siberia were inscribed for their natural value on the World Heritage List, their cultural value should by no means be underestimated.

The Altai Mountains, indeed, bear unique testimonies to the Scythian civilization that inhabited the Eurasian Steppe during the first millennium BC. They developed a distinct nomadic way of life that was homogenous throughout the Eurasian Steppe, from the Black Sea area to the Mongolian Plain, and interacted with the neighbouring civilizations of China, India, Iran, Mesopotamia and Greece.

As Scythians have left little structural heritage and no written records, there are only two sources of information providing us with knowledge on this nomadic civilization. The first is historical records left by the Greek historian, Herodotus, who devoted the fourth book of his *Histories* to the Scythians. The second is archaeological sites, i.e. Scythian burial mounds, the so-called kurgans, and the artefacts contained in them.

Conserved in their original state, the kurgans in the Altai Mountains are of the utmost importance. The local climate, as well as the peculiar way the kurgans were constructed, created ideal conditions for their preservation; as rain seeped down into the tombs, it froze and never thawed. As such, all the buried material (metal, gold and pottery), even organic material (wood, leather, clothes, textiles and even mummified human bodies and horses' bodies) was kept intact over the millennia. To this day, the only frozen tombs discovered anywhere in the world are those that have been found in the Altai Mountains.

Many 19th-century scholars were prejudiced against Herodotus' record, in spite of numerous archaeological discoveries showing that as a witness he was conscientious and trustworthy.

Now, the organic material yielded by the frozen tombs of the Altai has confirmed Herodotus' accounts of Scythian culture. Occupation, dress, weapons, as well as customs such as the embalment of the corpses of chieftains, burial with a concubine, purifying after burial, and scalping of slain enemies are confirmed by study of the artefacts from the frozen tombs in the Altai Mountains. This information could not have been determined by the research made on the Scythian kurgans in the Black Sea region alone.

The material culture yielded by the excavation of the frozen tombs, in particular the organic material, sheds light, not only on the Scythian themselves, but on the other civilizations with which the Scythians were in contact: the Persian and Chinese textiles yielded from frozen tombs in the Pazyryk are older than any surviving examples in Persia or China.

Furthermore, the frozen tombs also revealed previously unknown connections between different regions during the second half of the first millennium BC. For example, the clothes discovered from the research project led by the Sino-French IPAX-CNRS team in the middle of the Taklamakan Desert (*Djouboulak-Koum*) show striking similarities to those yielded from the frozen tombs belonging to the Pazyryk culture (6th to 3rd century BC) of the high Altai Mountains, thus demonstrating a connection that already existed between East and West long before this route became known as the Silk Road.

The first discovery of a frozen tomb dates back to 1865 by the academician V.V. Radloff in Berel and Katanda, but scientific research started with S. Rudenko's excavations that took place from 1945 to 1949 in Pazyryk and Tuekta on a series of large burial mounds and several small ones. The discovery of frozen content in Pazyryk provided a good understanding of how ice formed within the tombs. In addition, frozen tombs yielded not only organic material such as carpets and wooden material, but also embalmed bodies that had been perfectly preserved. The research on these frozen funerary chambers considerably broadened scientific knowledge of the Scythian culture, and provided the name for the so-called 'Pazyryk Culture' (6th to 3rd century BC).

However, it was only in the 1990s that multidisciplinary scientific research using modern techniques began in this area. In 1993, the Institute of Archaeology and Ethnography of the Siberian Branch of the Russian Academy of Science (Polosmak, N. 1994), excavated a kurgan in the High Ukok Plateau; this was the first barrow found that contained solely a woman, a beautifully tattooed corpse later known as the "Ice Maiden." Her attire was one of the oldest pieces of female clothing ever found from a nomadic society. Her blouse was made of non-local silk from undomesticated silkworms, providing evidence of long-distance trade with India.

The French CNRS (Francfort, H-P. 2002) and the Margulan Institute of Kazakhstan (Z. Samashev), in collaboration with the Ligabue Research Centre of Venice, excavated from 1998 to 2000 a rich frozen burial ground known as Berel 11 (4th to 3rd century BC). The excavation of Berel 11 yielded two mummified bodies, though decomposed, along with thirteen sacrificed, fully harnessed horses,

thus providing rich material for anthropological and paleopathological research on mummies, as well as for DNA study. The examination of organic matter that had been ingested by the horses provided information about the flora history of the region, and even indicated in which season the tombs were constructed.

The most recent research was jointly conducted from 2004 to 2006 by the German Archaeological Institute (DAI) (H. Parzinger), in collaboration with the Institute of Archaeology and Ethnography of the Siberian Branch of the Russian Academy of Science (V. Molodin) and the Institute of Archaeology of the Mongolian Academy of Science (D. Zeveendorzh) in Bayan Olgy, the southern part of the Altai Mountains, northwest of Mongolia. Of particular value, kurgan Olon Kurin Gol 10 contained a completely intact burial chamber with a mummified blond warrior fully dressed and equipped with a full set of weapons. Through a dendro-chronological study carried out on the logs of the burial chamber, the findings of the excavation were identified as belonging to the Pazyryk culture (early 3rd Century BC). The research provided precious information regarding the extent of the Pazyryk culture in the Altai Mountains, found until today only in the northern part of the Altai. This will also contribute to considerably enlarge the current knowledge on the relations of the different nomadic peoples that existed at that time, between Southern Siberia and other regions in its vicinity.

Now, the permafrost layer of the Altai Mountains is endangered by climate change and as such frozen tombs are endangered. In particular, mountain permafrost is most sensitive to climate change; its average temperature remains usually within one or two degrees of freezing point. Temperature data from Mongolian mountain regions available for the last 30 years show a rise in permafrost temperatures by 0.1°C per decade in the Khentei and Khangai and 0.2°C per decade in Kovsgol mountain regions. Glacier research shows that the glaciers in the Altai Mountains have been melting for decades. Rough estimates showed that the glaciers have lost up to 27 % of their mass in the last 100 years. Average retreat rates are 9-20 m per year. Further degradation of glaciers is almost certain, and closely linked to the melting of the region's permafrost layer.

Consequently, significant reduction or disappearance of the permafrost is predicted for the middle of this century in the Altai Mountains. The most significant impact will be observed near the lower boundary of alpine permafrost, where the frozen grounds are very sensitive to climate change. Many frozen tombs in the Altai are situated within this area of sporadic and discontinuous permafrost, and are therefore extremely vulnerable, and will consequently thaw as a result. This will lead us to lose invaluable, undiscovered research material that sheds light on the important culture that flourished during the first millennium BC.

Taking into account the above-mentioned clear indication of the thawing of permafrost in the Altai Mountains that preserved the frozen condition of the Kurgans for millennia, archaeologists, in close co-operation with climatologists, geographers, and geocryologists, requested the attention of UNESCO and its assistance on this urgent issue. The result of this initiative was the UNESCO project, "Preservation of the Frozen Tombs in the Altai Mountains" (UNESCO/Flanders Funds-in-Trust), established in 2005.

The strategy proposed by the project was to first establish an accurate inventory of the remaining kurgans in the Altai Mountains, along with accurate maps produced through advanced satellite imagery technique. The second step would be to identify and locate frozen tombs, and this became possible now thanks to sophisticated geophysical survey techniques, and also specialized geocryological techniques, combined with satellite imagery that can produce a map of permafrost zone. The third step would be to monitor the permafrost



Olon Kurin Gol 10, burial chamber (Copyright: DAI)

layer to determine how quickly the frozen tombs are thawing. The UNESCO World Heritage Centre, under the above-mentioned project, has initiated a monitoring programme to see how quickly the permafrost zone is thawing in the Russian part of the Altai, and will publish its result in its final report end of 2007.

However, climate change is a global phenomenon, and it is obvious that our efforts to prevent frozen tombs from thawing would preserve only a limited number of frozen tombs, if any. Consequently, in order to save as much invaluable research material lying in the frozen tombs as possible, excavations should be considered. In such cases, excavations should be carried out by means that are fully respectful of the local population of the Altai Mountains.

The scope of the current UNESCO project is at present limited to the first step, along with the permafrost monitoring programme. Therefore international academic and scientific communities should be mobilized to ensure that the invaluable research material is at best preserved, or at least documented. For this purpose, co-operation at all levels between the countries concerned would be crucial in order to ensure harmonized procedures and obtain the best synergy. In addition, to manage the frozen tombs, the establishment of an archaeological park in the areas in which frozen kurgans are concentrated is highly to be recommended.

This will, first of all, serve as an open-air museum for educational purposes; secondly, contribute to the sustainable development of the communities concerned; and thirdly, through the systematic monitoring of the frozen tombs within the boundary, prevent the irreplaceable loss of the precious undocumented material.

Finally, it would be highly desirable that the four countries concerned — China, Kazakhstan, Mongolia and Russia — consider that the protection of the Altai Mountains encompassing these precious frozen tombs along with other archaeological heritage making up the unique landscape of the Altai Mountains, through nomination for inscription on the World Heritage List.

The World Heritage Committee, conscious that the World Heritage List should be properly balanced and truly representative of the heritage of humanity, adopted a Global Strategy in 1994 to address the issue of 'non-represented civilizations/culture' on the World Heritage list. In 2000 it requested that ICOMOS proceed with an analysis of the sites inscribed on the List, and elaborate a subsequent action plan to fill the gaps within the World Heritage List.

A deliberation on the significance of the Scythian culture and its outstanding universal value as well as its impact on other civilizations should be highly encouraged both at the levels of the concerned gov-

ernments as well as academic institutions, and would be in line with the above-mentioned Global Strategy; as the place that the Scythian culture occupies in the history of humanity remains a blank spot in the World Heritage List. Future trans-national co-operation between concerned countries for this purpose will be crucial for the appropriate protection of the Altai Mountains.

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A Persian rug found in one of the Pazyryk Kurgans excavated by S. Rudenko, 5th-4th c. BC (State Hermitage Museum)



Climate Change, Fire and Cultural Heritage in Australia

Climate change will have, and is already having, a very wide range of impacts on cultural heritage sites around the world, ranging from permafrost melting causing building instability in polar and circumpolar regions, to increased desertification causing burial of sites beneath moving sand in Saharan Africa and other arid regions (see examples in World Heritage Centre 2007). Many regions around the world will experience coastal inundation caused by sea-level rise combined with an increased severity of adverse weather events, and polar regions will see the withdrawal of protective sea-ice, putting at risk cultural heritage places in low-lying cities and rural areas and along undeveloped coastlines.

In Australia there is similarly a range of observed and potential climate change impact. A series of regional models have been developed that allow some degree of refinement in looking at possible impacts across the continent. These draw on and expand the IPCC TAR 2001 reports, and are informed by local data collection and modelling (Intergovernmental Panel on Climate Change 2001; Pittcock 2003; Allen Consulting Group 2005; Hennessy, Holper & Pittcock 1995.). This modelling suggests the following possible outcomes for Australia, allowing for a range of global emissions scenarios:

- an increase in annual national average temperatures of between 0.4° and 2.0°C by 2030 and of between 1.0° and 6.0°C by 2070 — with significantly larger changes in some regions by each date;
- more heat waves and fewer frosts;
- possibly more frequent El Niño Southern Oscillation (ENSO) events — resulting in a more pronounced cycle of prolonged drought and heavy rains;
- possible reductions in average rainfall and run-off in Southern and much of Eastern Australia with rainfall increases across much of the Tropical North — as much as a further 20 per cent reduction in rainfall in Southwest Australia, and up to a 20 per cent reduction in run-off in the Murray Darling Basin by 2030;
- more severe wind speeds in cyclones, associated with storm surges being progressively amplified by rising sea levels;
- an increase in severe weather events — including storms and high bushfire propensity days; and
- a change in ocean currents, possibly affecting our coastal waters, towards the end of this period.

This paper will concentrate on just one example: the impacts of fire already observed and likely to increase as a result of climate change, in Kosciuszko National Park. Kosciuszko National Park, together with other parks in adjacent states, is a part of the Australian Alps, a mountainous region, low by global standards (Mt Kosciuszko, the highest on mainland Australia, is just 2,229 m), but containing Australia's major examples of alpine environments. The Alps have been used for extensive seasonal grazing and mining prior to their reservation for environmental conservation and recreation, and are the site of Australia's largest hydro-electricity development, the Snowy Mountains Hydro-Electric Scheme. These land uses have left many small huts in the landscape, where people lived for the summer season or shorter periods while working or moving through the mountains. Many of these huts are now used for recreational accommodation by walkers and skiers, and as a group they form a greatly valued part of the cultural heritage of Australia.

In 2003 wildfires (called bush fires in Australia) destroyed 19 out of the 83 surviving huts and hut ruins in the Kosciuszko



Burrungabugge Hut, which was destroyed by the 2003 bush fires and not reconstructed. This hut itself replaced another hut burnt down in 1983.



Franklin Chalet, built in 1938 as an early ski lodge near Canberra, the national capital, and destroyed by the 2003 bush fires. The decision has been made, because of declining snow cover in this area limiting future use of a building this size, and the extent of total reconstruction necessary to recreate a building of this size, not to reconstruct the Chalet, but to preserve elements as a memorial and build a new multi-purpose shelter on an adjacent site.

Geehi Hut, burnt out in the 2003 bush fires and in part restored and in part reconstructed in 2004



National Park (see Kosciusko Huts Association website lists). The 2003 fires were among the most disastrous in Australia's history, being spread over a large area of the southeast of the continent, and impacting on natural bushland, agricultural land and urban areas alike — in Canberra, the nation's capital, some 500 homes were destroyed.

In their 4th Assessment Reports, 2007, the Intergovernmental Panel on Climate Change (IPCC) draws attention to the evidence for climate change already taking place. In relation to fire frequency and intensity, it notes the observation of more intensive and longer droughts since the 1970s, with increased drying linked to higher temperatures, decreased precipitation, changed sea-surface temperatures, and wind patterns all being associated with the drying events. The report on the physical science basis for climate change predicts as 'likely' to 'very likely' more warmer and fewer cold days, warmer and more frequent hot days, and an increase in the frequency of warmer spells and heat waves as being 'very likely' to 'likely' (IPCC 2007a: 8, 9). These are the conditions that lead to increased fire danger.

The IPCC working group II (IPCC 2007b: 11) identified that "Production from agriculture and forestry by 2030 is projected to decline over much of southern and eastern Australia, and over parts of eastern New Zealand, due to increased drought and fire." This clearly has implications for the many timber huts and other historic sites located in these forest and agricultural lands as well as in native forests in national parks. The fires that so severely impacted on Kosciuszko National Park huts in 2003 (and in 2006 in the neighbouring Alpine National Park, Victoria) are likely to become an increasing occurrence in Australia. The IPCC report indicates that other regions will experience similar increased risk, the frequency of wildfires in Southern Europe, peatland fires in Central and Eastern Europe, and forest fires in North America are all predicted to increase in coming decades.

Several challenges face the managers of cultural heritage sites in the light of global climate change projections such as these. One challenge is to raise awareness that the impacts are not limited to broad-acre forestry, agricultural and reserved conservation lands, but will (and are) impacting on cultural heritage as well. Another challenge is to develop adaptation responses that will reduce or remove the threats posed by climate change to cultural heritage places. A range of adaptive responses could be envisaged. A precursor to developing and implementing adaptive responses might be to carry out a systematic recording and assessment of the range of cultural places in localities or environments projected as being particularly at risk. This would have a two-fold outcome — it would help identify the elements or attributes of places and classes of places that might be threatened by particular climate change outcomes (eg likely to be impacted by wind, heavy rain, soil cracking, sea or flood inundation, changed soil chemistry/salt incursion, soil erosion, changing land use etc), and allow targeted adaptive responses to be designed: and it would also properly record those places where adaptive responses are not feasible, and where the place might be damaged or lost under changed climatic conditions.

In the Kosciusko case, the losses to fire have heightened the awareness of the vulnerability of the huts, and set in train a number of actions to increase their protection from fire (such as creation of fire breaks or fuel reduction programs, and provision of fire-fight-

ing equipment at relevant locations) as well as to ensure they are fully recorded to allow restoration/reconstruction if that should become necessary in the future.

The IPCC report II (2007b) states that "The resilience of many ecosystems is likely to be exceeded this century by an unprecedented combination of climate change, associated disturbances (e.g. flooding, drought, wildfire, insects, ocean acidification), and other global change drivers (e.g. land use change, pollution, over-exploitation of resources)." This is a risk not only to the natural heritage of the world, but also to the cultural heritage that is an integral part of an environment in the grips of dramatic global climate change.

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(all photos by Michael Pearson)

Heritage and Global Climate Change: Summer Fires in Greece. The Case of Olympia

The presence of fires is linked to climate change

During the summer of 2007, millions of stremmas¹ of forests and agricultural land, spanning from the Iberian shores to the Turkish hinterland, were engulfed by fires. It was one of the largest catastrophes in the Mediterranean in the last century.

The dramatic changes that have been observed on the forest fire map of the Mediterranean over the last 15 years has led to the conclusion that global warming is the main cause of the frequency and intensity with which fires appear today. Moreover, research carried out by the Athens Observatory in collaboration with NASA has shown that climatic change can lead to changes in soil humidity and an increase in the frequency of thunderbolts. The combination of these phenomena with other factors, such as the disturbance of water levels, can lead to an increase in the number of fires.

Climatic change cannot be seen simply as a future scenario in Greece

We saw signs of this in the winter and experienced a terrible summer. Three drawn-out and severe heat waves struck Greece in the summer of 2007. The first data provided by the Hellenic National Meteorological Service have indicated that 2007's three summer months were the hottest of the last 50 years. At the same time, this increase in Greece constitutes a link in the chain of temperature increases that have been observed over the last thirty years. The greenhouse effect has already arrived at our doorstep.

The first heat wave (19-28 June 2007) mostly affected eastern and southern Greece, with extremely high temperatures reached in Athens and the eastern Peloponnese. The Athens Observatory registered 44.8 degrees Celsius, the highest temperature since the end of the 19th century. The second heat wave (18-25 July 2007) mostly affected western and northern Greece, with record-breaking temperatures in several towns (Serres, Thessaloniki, Corfu). The third heat wave (21-26 August 2007) mostly affected western Greece and clearly contributed to the increase in intensity of the destructive fires in the western Peloponnese. The descending strong northeast winds led to an increase in temperatures above 40 degrees Celsius. However, it is not just the three heat waves that have caused alarm. The average maximum temperature was also very high in the summer of 2007. This is not an isolated phenomenon. In total over the last ten years, the average maximum temperature in Athens exceeded 34 degrees Celsius six times, something that would have been rarer in the past.

The hot summer that we experienced in 2007 was one of the worst in the last decades and had a terrible outcome: millions of stremmas of forest and agricultural land were burnt, villages destroyed and lives lost. According to the data provided by the Forest Authority of Greece, approximately 2.300.000 stremmas were burnt in the Peloponnese. The greatest catastrophe took place in Ileia where 950,000 stremmas and more than 4,500,000 olive trees were burnt.



Summer fires in Olympia (www.viewimages.com)

The summer fires in Greece have destroyed communities and cultural landscapes, have cost the lives of at least 64 people and have angered Greek citizens. A whole population – not just those affected by the fires in the specific areas – gradually became aware of a threatening and doubtful future, and summers in Greece will no longer be as carefree as they used to be.

A recent study by the Athens Observatory presents a very bleak picture in terms of the consequences of climate change. Scientists estimate that, despite efforts by the European Union to limit the increase in temperature by two degrees Celsius, the average increase will be at least 3.5 degrees Celsius over the next few years. The consequences of climate change for Greece in four different fields – energy, agriculture, water sources and coastal areas – was explored by the Team for Energy Planning, Climate Change and Sustainable Development in the context of research conducted by the Athens Observatory. The results of the study are extremely worrying. There will be insufficient energy levels, agricultural production will vary tremendously with a possible reduction by 40%, substantial coastal areas will be flooded as a result of a rise in sea level by at least 60 cm, whereas our capital, Athens, will face severe water shortages, as water reserves will be 40% less than today's requirements. Scientists stress that these observations confirm the urgency for measures that slow down the phenomenon of climate change and address its consequences. It is not only the heat wave and the high temperatures that indicate that the climate has changed, but the frequency with which these extreme phenomena occur.

However, climate change is not the only cause of fires

Fires break out in many parts of the world, but the fires in Greece are unique in that they are the result of an amalgamation of other factors, including bio-natural, political, social and cultural.

In the course of the 20th century, poverty, war and financial politics led to the abandonment of the countryside by many of the people that knew how to manage the land; they had grown up in the countryside and had a sound knowledge of the methods with which to control their often rocky and precipitous terrain. Mass successive migrations led to the abandonment of a large part of the Greek countryside. Young people left the fields, the animals, the olive groves and the vegetable gardens for a better future abroad or in Greek urban centres. Certain of these abandoned areas have been overtaken by forests. However, there are also many areas where olive and citrus groves remain abandoned and vulnerable to fire.

The local populations have lived with fires for millennia, but now their traditions and their knowledge regarding the control and protection of the land are threatened by a combination of inappropriate political decisions and methods, and uncontrollable climatic consequences.

Following the fires of the 1990s, Greece has increased its fire fighting forces over the last nine years. However, it is a tragic fact that the intensity and extent of the 2007 fires exceeded the ability of firemen to protect the population, let alone our cultural heritage and ecosystems.

Addressing the problem; suggestions by scientific bodies

On a general level, scientists are proposing that there should be a 20-year plan, since they estimate that climate change will intensify over the next few years. An important series of suggestions for the restructuring of the areas affected by the fires was put forward by seven technical and social bodies on 3 September 2007. They point out that the consequences of climate change and floods will intensify over the following years and, therefore, measures should be incorporated into a 20-year framework and should not only address problems of the immediate future.

In addition, the Technical Chamber of Greece in collaboration with ICOMOS Hellenic, the Economic Chamber of Greece, the Plenum of Law Associations in Greece, the Greek Medical Association, the Geotechnical Chamber of Greece, the Union of Legal Workers of the Council of State, and the National Technical University of Athens stressed the need for a long-term plan to restructure the areas affected by the fires, based on the history of each area, the needs of the inhabitants, the existing economy and the presentation of the cultural heritage. New scientific methods should be proposed, whereas a speedy tourist development of the burnt areas should be avoided at all costs.

General view of Olympia" (Credit: Hellenic Ministry of Culture – General Directorate of Antiquities & Cultural Heritage, Directorate of Prehistoric and Classical Antiquities, Department of Greek and Foreign Scientific Institutions, Organizations and International issues)



Olympia: a heart wrenching cry for our cultural heritage

From 23 August 2007, the fires threatened to burn our most precious assets, our cultural heritage in the Peloponnese. This included the Arcadian landscape, Byzantine churches and monasteries, Apollo Epicurius at Bassae (a World Heritage Site), the Antiquities in Ilieia and especially the archaeological site of Olympia (also a World Heritage Site²).

There was damage to the area surrounding the Olympia archaeological site. The Kladeos stream, a tributary of the Alpheios River, was burnt to a great extent, whereas the Kronios Hill was burnt entirely. The park and the surroundings of the International Olympic Academy were destroyed. Furthermore, some slopes near the ancient stadium were also burnt.

However, in the context of this overall disaster it is important that there was no damage to the archaeological museum of Olympia, nor to the rest of the buildings, stadium or the ancient monuments, which were a priority. Thus, the archaeological site of Olympia has remained intact. Furthermore, there was no damage to the buildings of the Academy which belong to the International Olympic Committee, with the exception of the fire in the park.

The automatic fire extinguishing system 100 m north and north-east of the museum, which worked – even in high temperatures – to keep the area around the museum damp, enabled fire-fighters, volunteers and archaeologists to contain the fire and stop it from reaching the museum and from destroying one of the most important monuments of humanity. But, unfortunately, the fire was of such intensity that the electronic fire protection system that had been installed for the 2004 Olympic Games was not sufficient to combat all of the fire alone.

The fires are now followed by another, equally immense danger: the flooding of the Alpheios River and its tributaries (Kladeos, Altis, Neda, etc.). This is a danger that affects the entire archaeological park which is located in the burnt areas of the Ilieia Prefecture. This park is home to many important antiquities.

Immediate restoration measures for ancient Olympia

The Hellenic Ministry of Culture announced immediately the measures for the restoration, protection and further enhancement of the archaeological site of Ancient Olympia. The following measures are in progress or completed:

- The cleaning of the low burnt vegetation in the area surrounding the perimeter of the archaeological site has proceeded – wherever this was required – and the burnt lawn in the perimeter of the stadium is also being replaced. The cleaning and removal of the low burnt vegetation between the architectural members, which originate from excavations conducted by the German Archaeological Institute and which are being stored south of the stadium, is now complete.
- The conservation of the architectural members that were damaged in the fire is well advanced by the Directorate of Conservation of Ancient and Modern Monuments with the participation of permanent staff of the 7th Ephorate of Prehistoric and Classical Antiquities. New, temporary conservator positions became available. In order for this to be carried out, the conservation works are

scheduled for completion in December 2007.

- The cleaning of the covered storage area of the German Archaeological Institute is now complete. Following discussions with the German Archaeological Institute, it has been agreed that a new, larger storage area will be constructed in the same location.
- The National Agricultural Research Foundation shall function the technical consultant for the restoration of the landscape and the reforestation of the Kronios, Zouni and Kalosaka Hills and the Park of the International Olympic Academy.

In collaboration with the Ministry of Culture and the Ministry for the Environment, Physical Planning and Public Works, a project is under construction to provide anti-flooding and anti-erosion measures in areas of archaeological interest that have been affected by the recent fires. For the further protection of the archaeological site, the Hellenic Ministry of Culture had implemented the following:

- Construction works for the procurement of water (boreholes, technical works on a flat section of the adjacent river for water collection, construction of water reservoirs in suitable locations).
- Monitoring of the area via satellite (Athens Observatory).
- Creation of a PUP-UP system³ in areas of low vegetation (stadium slopes).
- Expansion of the existing fire protection system in the complex around building perimeters.

The Nymphaion (taken from Greece – Prehistoric and Classical Monuments, edited by the Hellenic Ministry of Culture)



Concerning the enhancement of the archaeological site and the restructuring of the surrounding area, the following decisions were taken:

- The establishment of a committee within the Credit Management Fund for the Execution of Archaeological Projects for the further restoration of the Temple of Olympian Zeus, the restoration of the monument of Ptolemy, as well as the enhancement of monuments affected by the fires in the wider region. The issue was submitted to the Central Archaeological Council on 4 September 2007.
- Construction of a modern sports centre in the Municipality of Ancient Olympia.

In regard to the inspection of the remaining areas of archaeological interest that were affected by the fires, the following decisions were made:

- As a first step, the Hellenic Ministry of Culture is taking immediate measures for the protection of the affected sites and monuments (immediate replacement of supports). The 6th Ephorate of Byzantine Antiquities in Ilieia has already been provided with guidelines and funding for the immediate restoration of Panagia Church at Anilio in Zacharo and the monastery of Isova, monuments in the upper region of the Prefecture that were greatly damaged.
- Within this context, proposals for the formulation of basic prin-

ciples for the restoration of affected monuments and archaeological sites and for the establishment of necessary teams for the implementation of the aforementioned works will be submitted to the Central Archaeological Council for discussion and assessment.

International solidarity

While visitors are once again able, since 28 August 2007, to admire the ancient stadium and the sculptures in the Olympia museum, there are crews that are undertaking restorations and anti-flooding measures.

The ancient spirit remains alive; it was not extinguished on Kronios Hill, but in fact it was rekindled by the moving offers of solidarity from ICOMOS International and the concerned countries: Turkey, Israel, Russia, Germany, Italy, France, Spain, Portugal, USA, Canada, distant Japan, and China where the Olympic Games of 2008 are due to take place. We are truly grateful.

Sofia Avgerinou Kolonia
ICOMOS Hellenic

¹ 1 stremma is equivalent to 1,000 square meters.

² THE ARCHAEOLOGICAL SITE OF OLYMPIA
WH Inscribed in 1989 (Criteria I, II, III, IV, VI)

The archaeological site of Olympia extends over the valley of the rivers Alpheios and Kladeos in a natural environment of outstanding beauty and harmony. It is a site endowed with a rich intangible heritage and evidence of human activity starting in the 4th millennium c. BC. On it developed the Panhellenic sanctuary of Olympian Zeus. In the Altis, the sacred grove that began to take shape in the 10th-9th c. BC, masterpieces of sculpture have been discovered in a good state of preservation, amongst them the famous Hermes of Praxiteles and the Nike of Paionios, as well as outstanding architectural monuments like the Palaestra. These buildings served cult, athletic, administrative and social purposes, and attest to the scale of influence of the sanctuary and its prestige throughout the entire ancient world. Today, they are reference points in the history of art. The Olympic Games were instituted here, making Olympia a unique universal symbol of Peace and Competition at the service of Virtue. Here, too, prominence was given to the ideals of physical and mental harmony, of noble

contest, of how to compete well, of the Sacred Truce. In modern times, the Olympic flame is lit every four years in the area of the temple of Hera, in a ceremony that provides an ideological basis for the modern Olympic Games. On the buildings in the sanctuary are imprinted some of the most important steps in the history of art, particularly regarding the Doric order which was to evolve into a worldwide symbol of monumental expression. The early history of Doric temple-building can be traced in the Heraion, while the temple of Zeus, with its famous pedimental sculptures, is the most perfect example of the Severe Style. In this tranquil natural and cultural landscape can still be heard the echoes of myths in which leading roles are played by Zeus, Herakles and Pelops, which have been a source of inspiration and provided iconographic models for world art.

Hellenic Ministry of Culture, General Directorate of Antiquities, Directorate of Prehistoric and Classical Antiquities, Department of Greek and Foreign Scientific Institutions, Organizations and International Issues, Greece, World Heritage Sites, UNESCO, Melissa Publishing House, Athens, 2007.

³ A type of fire suppressant system.

New Orleans, Hurricane Katrina, and Global Climate Change

The effects of Hurricane Katrina in New Orleans represent an interesting case study of the complexities of global climate change and our built heritage.

Introduction

More than any other weather event, Hurricane Katrina has caused Americans to seriously consider the human role in global climate change. Though it is not possible to link any specific meteorological event with climatological change that takes place over decades or centuries, climate change has become a familiar topic of speculation with friends and colleagues when discussing the weather. Most Americans, regardless of political persuasion, now acknowledge that human activity is accelerating this phenomenon.

In unveiling its 2008 *World Monuments Watch List* of the world's 100 most endangered heritage sites (which includes New Orleans) the World Monuments Fund states that "human activity has become the greatest threat to our cultural heritage." Human activity has been understood in the heritage community as the wear and tear our presence takes in the form of construction, traffic, our wastes, etc. - on our built heritage. But if human activity melts the polar ice caps thus raising the sea level and warms the oceans making hurricanes stronger and more frequent, then the two are linked. But to frame the discussion of Hurricane Katrina and New Orleans only in the context of climate change oversimplifies the story. This discussion must also include why we choose to live where we do and how we try to shape our environment.

Fig. 1 One month after Hurricane Katrina the Tremé Historic District was still deserted. Water marks show that the flooding was approximately 30 cm above the first floor. Though devastated the decayed charm of the neighborhood and its vernacular Caribbean character is still easily discernible.

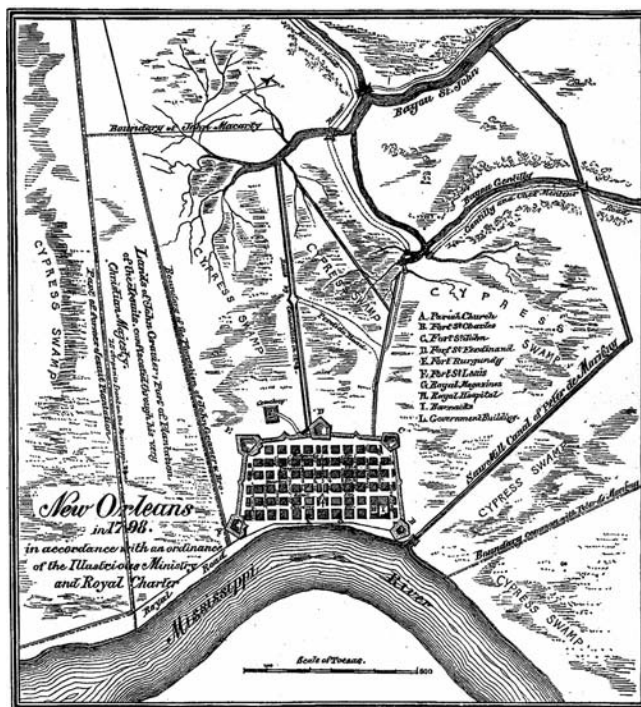


Fig. 2 Map prepared in 1798 shows the Vieux Carré surrounded by cypress swamp. Canals had been provided at this early date to drain water northward into Bayou St. John and ultimately Lake Pontchartrain.

New Orleans and its Fight with the Mississippi

New Orleans, located on America's Gulf Coast, has been described by local scholar Peirce F. Lewis as the "inevitable city on an impossible site." The city is also one of America's greatest outdoor museums and boasts a treasury of architectural styles of local origin as well as magnificent examples imported from other parts of the world and adapted to the subtropical climate, unique geographical conditions, and culture. However New Orleans' charming qualities are not defined by specific building examples but by their collection into evocative streetscapes and neighborhoods as shown in Figure 1.

For Jean Baptiste Le Moyne de Bienville, the area between Lake Pontchartrain and the bend in the Mississippi River seemed ideal for *Nouvelle-Orléans* in 1718. It was a rare bit of natural high ground along the flood-prone banks of the lower Mississippi. This location was picked because the River did not have a mouth into the ocean but simply disappeared into a great swamp. Ships heading down river would unload their goods in New Orleans to be trans-shipped across Lake Pontchartrain to the sea.

The high ground had been formed by natural levees adjacent to the river. These slight ridges are composed of coarse sand and silt (deposited during annual floods) and became the site of the old New Orleans' *Vieux Carré* ("Old Square", better known as the French Quarter) as shown in Figure 2. Finer silts were carried farther northward into the cypress swamps adjacent to Lake Pontchartrain. These northern soils were soft and wet, with alternating layers of sand, silt, soft clays, and organic decaying matter.

It would be difficult to find a location where the natural drainage is worse than New Orleans, owing to a lack of slope in the land and the poor soil. As early as 1725, initial plans emerged to control New Orleans' frequent flooding. The French governor Étienne Périer ordered each property owner along the river bank to construct and maintain a levee two feet (60 cm) high. This plan may have offered protection from water coming into the city but revealed the problem with levees – they prevented rainwater from naturally running off into the Mississippi and would also eventually have to incorporate drainage canals and pumps.

In 1763 the Louisiana Territory was ceded to Spanish control. The territory reverted back to French control by 1801, and was sold to the United States in 1803 bringing an end to the colonial era. New Orleans and the Mississippi Coast cities grew rapidly with influxes of Americans, French and Creoles. New Orleans had a leading role in the slave trade, while at the same time having a prosperous community of francophone *gens de couleur libres* (free persons of color) who had arrived principally from the West Indies. This mix of black and white; slave and free; rich and poor; and English, French and Iberian cultures would give New Orleans its distinct character.

Antebellum Era

The period between 1830 and the American Civil War was the most glamorous and prosperous era for New Orleans. The area hosted wealthy cotton and sugar cane planters, and all related commerce was centered on New Orleans. At this time the practice of erecting structures on masonry piers became prevalent in the region. By raising houses slightly, insect problems were greatly curtailed, chronic dampness was abated, and frequent flooding of the ground after rainstorms was not as great a concern. Flooding was inadequately controlled by levees and a series of drainage canals into which flood waters were pumped and diverted to the northern cypress swamp and Lake Pontchartrain.

Victorian Era

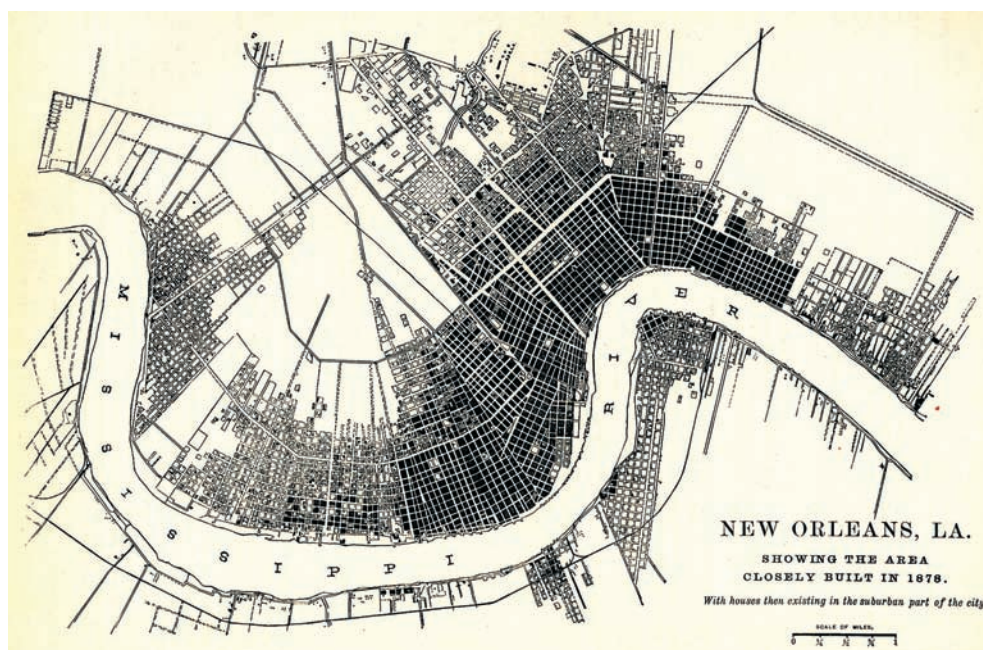
Improvement of the mouth of the Mississippi River for seagoing navigation was first undertaken by Congress in 1837, but the venture proved elusive and costly. Dredging begun by the 1850s had been halted by the American Civil War. It was not until 1867 that dredging operations were resumed. In 1879 a channel to the sea constructed by the renowned construction engineer, James B. Eads, was opened, and direct shipping was open to the sea. This would affect the future pattern of silt deposition along the Mississippi delta.

Though it continued to grow, New Orleans had begun its decline – the advent of the US Railways had removed its trade monopoly between the Northeast and Midwest. Wood-framed construction that supported the Victorian building era following the American Civil War is what makes up most of New Orleans' remaining built heritage. Improvement of the levees along the Mississippi River, and construction of levees along the shores of Lake Pontchartrain began in 1879. However, development of the city was still restricted to the natural levees along the river earning New Orleans the moniker, “the crescent city”, as shown in Figure 3. In what would prove to be a chronic pattern, the city's poorest citizens settled along the fringes of the lowland swamp, in what was referred to as the “back of town.”

The Twentieth Century

In 1882 one of the most disastrous floods ever known devastated the entire delta area. Major floods again occurred in 1912 and 1913. But methods of pumping ground water into canals had greatly improved by the early twentieth century. The bulk of the city's northern boundaries opened for development with the introduction of A. Baldwin Wood's revolutionary centrifugal pump, as shown in Figure 4. Wood's pumps with their mechanisms raised above the water level for ease of maintenance allowed the drainage and con-

Fig. 3 Map prepared in 1878 shows the growth of the “crescent city” along the northern shores of the Mississippi River. The Vieux Carré is north of the tight bend in the river. Though the city's growth now encroaches upon the swamp-lands, these areas were populated by the poor.



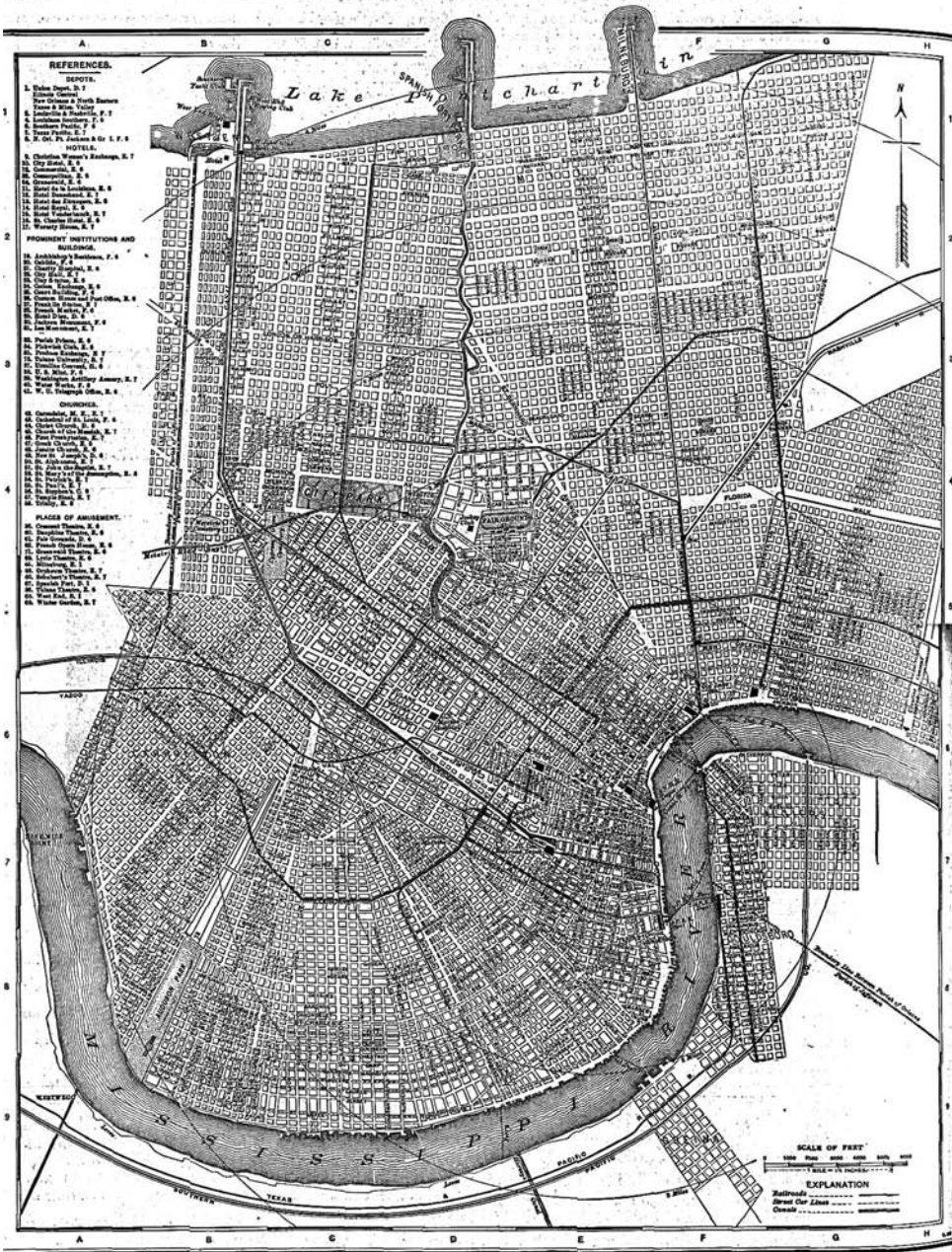


Fig. 4 Map prepared in 1909 shows the growth of New Orleans that now reaches the shores of Lake Pontchartrain. Development in the former swamp areas was realized only after the use of the A Baldwin Wood pumps that proved powerful enough to drain these areas.

sequent development of the city's vast swamps. By 1913, some 17 large pumps generated by eight pumping stations managed 2,810 cubic feet of water per second. Finally, it seemed that New Orleans had won its battle with the river.

Yet the Mississippi River posed another challenge for New Orleans – it had been on the verge of jumping courses in the nineteenth century and again in the twentieth. The second diversion threatened above Baton Rouge along the Atchafalaya River in 1951 and would have left New Orleans aside a swampy, stagnant channel. The Army Corps of Engineers intervened in both instances forcing the river to stay in its present channel and protecting New Orleans' status as an important shipping center. This control of the river would also affect future deposition patterns of the delta.

The control of the Mississippi River and existence of a functioning water management system had led to complacency on the part of local government concerning the habitation of many of its citizens below sea level. The faith in the flood-protection system can

be seen in the evolution of building standards which abandoned residential structures on piers and allowed for slab-on-grade construction. Complacency of the state and federal governments is evidenced by the lack of maintenance of the levee system in the time leading up to Hurricane Katrina.

Present Day

By the post-World War II era it was understood that New Orleans' seeming victory over its chronic flooding problems had come at a cost: the city was sinking. After the flooding of New Orleans caused by Hurricane Betsy in 1965, the US Army Corps of Engineers embarked upon another project to once again strengthen and raise the height of the levees. However the sinking of New Orleans along with its levee system is principally caused by three man-made factors:

- Soil subsidence of the silty Delta soil that was partly natural but was exacerbated by the overburden of building construction and levee systems;
- Pumping the northern swamps dry caused significant subsidence. Such soil is highly susceptible to decreases in volume, when it is dewatered. Newly dried areas of town were soon as much as 10 feet below sea level and continue to sink;
- Construction of levees surrounding New Orleans had prevented the natural deposition of silt from the yearly floods in New Orleans. In effect, areas outside of the levees were becoming higher in comparison as layers of muck and silt collected.

Further consequences of this human activity were seen regionally – loss of coast-line from hurricane storms due to weak depositions, deeper penetration of surges inland from numerous canals to the sea that were dug to facilitate the petrochemical industry, and soil deposition from the pumping of oil from beneath the soil.

The Effects of Hurricane Katrina

Hurricane Katrina was the fourth hurricane of the 2005 Atlantic hurricane season and the third-strongest hurricane on record to strike the United States. It made landfall near New Orleans on 29 August 2005. Its storm surge as high as nine meters devastated the Gulf Coast of Mississippi to the east of New Orleans. However, neither the surge or wind speeds were as great in New Orleans and the damage was principally caused by failure of the levee system. Heritage streetscapes – collections of wood-framed residential structures raised on masonry piers – suffered more from flood than wind damage, as shown in Figure 5.

Three major breaches occurred on the Industrial Canal, one along the 17th Street Canal, and two along the London Avenue Canal. Flooding from the breaches put 80 percent of the city under

water for days and, in the lower Ninth Ward, for weeks. The failure mechanisms investigated by engineers following the flooding included overtopping of levees by the storm surge, consequential undermining of levee foundations or other weakening of the levees by water, and the storm surge pressures exceeding the strength of the levees. Debate over the actual causes – technical, political, and sociological – will undoubtedly continue for many years.

Conclusion

The 1878 map of New Orleans, drawn by T. S. Hardee, shows a city whose populated area is confined to a strip of the east bank of the Mississippi River. This is the area that stayed at or above water during the flooding from Hurricane Katrina. It is a sad reminder that New Orleans is totally dependent on its pumps and levees to survive and much of its land is nothing more than reclaimed swamp.

Models predict that the process of climate change in the form of global warming may continue for decades or centuries even if we stabilize the factors that are causing this problem today. Figuring out how to live with climate change is more urgent than determining how to prevent it. New Orleans' historic districts must now struggle to restore homes while preparing for future challenges posed by rising sea levels and the likelihood of stronger storms.

New Orleans, with its displaced citizens who are primarily poor, is a microcosm of what can be expected in the future from the effects of climate change. Rajendra Pachauri, chairman of the Intergovernmental Panel on Climate Change, the scientific body that shared the 2007 Nobel Peace Prize with Al Gore, stated "It's the poorest of the poor in the world, and this includes poor people even in prosperous societies, who are going to be the worst-hit."

Stephen J. Kelley, AIA, SE



Fig. 5 Image inside of a church in the Ninth Ward after the flood had subsided. Wind damage can be seen on the roof and sediment from the flood has "raised" the level of the ground by about 3 cm.

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