

Monument Restoration Practices in Southeast Asia and the Angkor Charter

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Abstract

The restoration of historic monuments in particular geographic regions differs in both theory and practice. In order to implement such projects, it is necessary to understand the context of their original build, their cultural significance, and apply scientifically proven methods which may require the experience and research of foreign specialists and international specialized organisations. Major projects may also become the basis of new research and practices, benefitting from transboundary and interdisciplinary collaborations. Spanning more than a century of conservation practice, the Angkor Wat temple complex has inspired numerous studies in the fields of history, archaeology, conservation and restoration. The Angkor Charter aims to collect this experience and synthesize it into a series of guidelines for the benefit of cultural heritage, which has inspired work in this field for more than a decade now.

Keywords: *stone conservation, restoration, monuments, Southeast Asia, Angkor*

Monument restoration in Southeast Asia represents an important measure to preserve and protect the region's rich cultural and historical heritage. Southeast Asia is home to a wide range of ancient monuments of different eras, including temples, palaces, statues, and archaeological sites, many of which are significant for various religious and cultural traditions, such as Hinduism, Buddhism, and other indigenous beliefs. Restoration projects in this region have aimed to maintain the integrity of these monuments while balancing modern needs with the preservation of their historical and cultural value.

While many of the countries in this region have a very long tradition of building craftsmanship and artistic skills, implementing major projects often requires substantial financial investment and access to specialized materials. Many Southeast Asian countries struggle with limited budgets for heritage conservation, relying on international funding or NGOs. Other issues include political and social priorities. For example, in regions with ongoing conflict, cultural heritage may be neglected or intentionally damaged.

Another issue is the rapid urbanization and infrastructure development that can sometimes threaten heritage sites. In some cases, construction projects encroach on historical sites, or new buildings disrupt the visual or cultural context of the monuments – a situation commonly found in Western countries as well. And while tourism can provide funding for restoration and maintenance, it can

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also exacerbate wear and tear on fragile monuments. Overcrowding and high visitor numbers can lead to physical damage, such as erosion of stone surfaces.

However, there are other factors unrelated to human habitation. Southeast Asia's tropical climate, with high humidity, rainfall, and fluctuating temperatures, accelerates the deterioration of monuments. The growth of vegetation, erosion, and damage from natural disasters like earthquakes, floods, and storms are common challenges.

Blending national with international approaches to restoration

The restoration process often involves using modern techniques and materials to repair and stabilize original structures. This may include reinforcing foundations, replacing eroded stonework, or protecting surfaces with consolidants. However, the emphasis is generally on using materials that are consistent with the original building practices. Before any work is carried out, extensive research and documentation are essential. This can include archival research, analysis of historical records, and even using technology like 3D scanning to create precise digital models of monuments. For these purposes, many Southeast Asian countries collaborate with international organisations, such as UNESCO, to gain technical expertise, funding, and support. Programs like UNESCO's World Heritage Site initiatives are key in preserving both cultural monuments and the surrounding environment. Collaborative efforts also help to create regional standards for restoration. The involvement of local communities plays a central role in restoration projects, both as keepers of cultural heritage and as participants in the restoration process. Local knowledge about traditional materials and building techniques can be crucial for the success of restoration efforts.

Some notable examples of monument restoration in Southeast Asia include:

- **Borobudur, Indonesia:** Borobudur, a massive Buddhist temple compound in central Java, has undergone significant restoration work to stabilize its structure and prevent further erosion. The restoration process in the 1970s involved international cooperation and focused on both preserving the monument and improving accessibility for tourists.
- **Bagan, Myanmar:** The ancient city of Bagan, home to thousands of temples and stupas, suffered significant damage in the 2016 earthquake. Restoration work is ongoing, and it has raised debates about whether and how to maintain the authenticity of the site while repairing earthquake damage.
- **Wat Phra That Doi Suthep, Thailand:** This temple, located on a mountain in northern Thailand, has undergone various restoration efforts throughout the years to preserve its cultural and religious significance, including repairs to the golden stupa and murals.

The Angkor Wat temple complex

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Angkor Wat, located in today's Siem Reap, Cambodia, is one of Southeast Asia's most famous monuments. The site was extensively studied beginning with the 19th century and conservation was initiated in the early 1900s when the region was still known as French Indochina. The work was first carried out by École Française d'Extrême-Orient (EFEO). Over the years, the restoration of the Angkor complex has faced challenges due to political contexts, environmental damage and the vulnerability of delicate bas-reliefs and carvings. Several institutions and organisations from Germany, Japan, South Korea and India have also participated, most notably the Archaeological Survey of India (ASI) from the mid-1980s until today. Since 1995, the site is administered by APSARA National Authority, a Cambodian institution which now has its own stone conservation unit.

One of the international collaborations involved in this project is also ICC-Angkor, a committee presided by France and Japan which has published numerous materials for guidance on restoration practice and ethics. This includes The Angkor Charter.

The Angkor Charter can be considered a landmark in the development of heritage conservation. This important document resulted from the 1993 Angkor Conference which was held in Siem Reap. It would then be drafted in 2002 and revised and refined over the course of a decade until its final form in 2012. The charter asserts the international recognition of the imperative of the preservation of the Angkor Archaeological Park and of its surrounding areas. It combines international, regional, and local work meant to ensure the sustainability, protection, and preservation of the Angkor heritage site. The Angkor Charter amounts to a joint commitment undertaken for the safeguarding of not just physical structures but also the cultural, historical, and social significance of Angkor. It underlines the worth of Angkor as a living heritage. It is integral to the identity of Cambodia and to the global understanding of Southeast Asia's history.

In the broader context, the Angkor Charter emerged as a response to the threats facing the site: natural wear, looting, urban encroachment, and the need for better governance. The Angkor Archaeological Park, which includes the famed Angkor Wat and other monumental temples, has long been recognized as one of the most important cultural and historical heritage sites in the world, and it was designated a UNESCO World Heritage Site in 1992. This recognition set in motion a series of international efforts to conserve the site, culminating in the development of the Angkor Charter as a framework for collaboration and sustainable preservation.

Historical and cultural context of Angkor

Angkor was the heart of the Khmer Empire, which flourished between the 9th and 15th centuries. The Khmer Empire, at its peak, controlled a vast territory in Southeast Asia, and Angkor served as its capital. The Angkor complex consists of an extensive array of temples, bas-reliefs, reservoirs, and urban infrastructure that represent one of the greatest architectural and artistic achievements in human history. At the center of this complex is Angkor Wat, the largest religious monument in

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the world, originally dedicated to the Hindu god Vishnu, and later transformed into a Buddhist temple.

The Angkor region is not only significant for its architectural and artistic achievements but also for its role in the development of Southeast Asian civilization. Angkor was an epicenter of political, religious, economic, and cultural life, and its influence extended far beyond its immediate borders. The temples, hydraulic systems, and urban planning of Angkor provide valuable insights into the engineering, organization, and spiritual beliefs of the Khmer people.

The decline of the Khmer Empire in the 15th century, compounded by environmental factors, internal political strife, and external invasions, led to the eventual abandonment of the Angkor site. For centuries, the temples remained largely forgotten by the outside world, overtaken by jungle, until French explorers rediscovered them in the 19th century.

In the 20th and 21st centuries, Angkor became a focal point for international archaeological research, tourism, and cultural heritage preservation. However, the pressures of modernization, uncontrolled tourism, looting, and the impact of natural disasters have threatened the integrity of the site. In response, the Angkor Charter was developed to set out principles and guidelines for managing, conserving, and sustaining this irreplaceable heritage.

Principles of the Angkor Charter

The Angkor Charter articulates several key principles and guidelines for the protection and management of the Angkor site, which can be summarized as follows:

1. **Comprehensive and integrated management:** The preservation of Angkor must be approached through an integrated management framework that combines historical, cultural, environmental, and social factors. The conservation efforts should not only focus on the physical restoration of the temples but also on the surrounding landscape, water systems, and communities that have long been connected to the site.
2. **Respect for local traditions and communities:** One of the most significant aspects of the Angkor Charter is its emphasis on the involvement of local communities in the preservation process. It recognizes that Angkor is not just a set of isolated monuments but a living cultural landscape that remains integral to the lives of local people. The Charter advocates for the active participation of local populations in conservation efforts, recognizing their role as stewards of the heritage site.
3. **Sustainability and development:** The Charter calls for the promotion of sustainable tourism that balances the economic benefits of visitation with the need for conservation. Overcrowding and unregulated development pose significant risks to the integrity of the site. The document advocates for tourism management strategies that ensure the protection of Angkor's heritage while enabling local communities to benefit economically from tourism activities.

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4. **Collaboration and international cooperation:** The Angkor Charter stresses the importance of cooperation between the Cambodian government, local authorities, international organizations, and conservation experts. It emphasizes that preserving Angkor is a collective responsibility that requires the commitment and expertise of both local and global stakeholders. UNESCO, ICOMOS (International Council on Monuments and Sites), and other international conservation bodies are key partners in this effort.
5. **Scientific research and documentation:** The Charter calls for continuous research, monitoring, and documentation of the Angkor site. This includes archaeological excavation, conservation science, and the use of modern technology to monitor changes to the site and identify threats. Understanding the historical, architectural, and environmental context of the site is critical for making informed decisions about its conservation.
6. **Cultural and educational value:** The Charter emphasizes that Angkor is not only a symbol of national pride for Cambodia but also an important asset for humanity as a whole. The preservation of Angkor, according to the Charter, contributes to global cultural understanding and intercultural dialogue. Education and public awareness about the historical and cultural significance of Angkor are essential components of the preservation effort.

Strictly referring to restoration and conservation, the Charter lists a number of 19 principles:

- Applying multidisciplinary research.
- Assessing the value of built heritage according to its specific cultural context.
- Using methodical and precise measures to document and intervene on heritage structures, similar to methodology in the medical field.
- Employing solid preliminary research regarding material composition, building techniques and degradation processes.
- Assessing the causes of failure and decay before proceeding to structural interventions.
- Establishing a maintenance program to prevent future damage and limit the necessity of restoration.
- Undertaking only proven indispensable action.
- Understanding the present as well as future causes for degradation before any remedial work.
- Choosing between traditional and modern techniques by taking into account their durability while prioritizing the least invasive and most compatible.
- Favoring minimal intervention with the possibility of later correction.
- Rigorously testing any new material for sufficient time before applying it in practice.
- Bringing no alteration to original and distinguishing features.
- Respecting the original concept, building technique and historical value in any restoration work.
- Favoring repairs over replacement.

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- Maintaining any imperfections that have become characteristic for the monument, provided it does not pose safety issues.
- Resorting to dismantling and reassembly only when it can't be avoided without greater damage.
- Prohibiting unpredictable and untested methods and monitoring at all times works in progress.
- Documenting and archiving all monitoring and control activities.
- Undertaking preventive archeological studies and impact assessment before any conservation activities.

Challenges and future development

The implementation of the Angkor Charter has faced various challenges, both technical and socio-political. One of the most pressing issues is the need for adequate funding to support long-term conservation efforts. Despite the involvement of international organizations, the Cambodian government has faced difficulties in securing the necessary financial resources to manage the site sustainably.

Another challenge is the rapid growth of tourism. While tourism is a major source of income for the local economy, the high volume of visitors poses a threat to the integrity of the site. Efforts to limit the impact of tourism, such as visitor management strategies and the development of sustainable tourism infrastructure, have been implemented, but these efforts remain a work in progress.

Additionally, the need to balance the preservation of ancient monuments with the needs of the local population continues to be a delicate issue. As urbanization and modern development expand around Angkor, there is a growing tension between maintaining the integrity of the site and accommodating the needs of the surrounding communities. The Angkor Charter advocates for careful planning and development to ensure that local communities can thrive without compromising the heritage site.

Conclusion

The Angkor Charter represents a comprehensive framework for the preservation and management of one of the world's most significant cultural heritage sites. By integrating principles of sustainable development, community involvement, scientific research, and international cooperation, the Charter provides a roadmap for ensuring that Angkor remains protected for future generations. While challenges remain, the commitment to preserving Angkor as both a cultural and living heritage reflects the global importance of this remarkable site. Through collaborative efforts and careful management, the Angkor Charter offers hope that Angkor's legacy can continue to inspire and enrich the world for centuries to come.

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