

Tiwanaku (Bolivia)

No 567rev

Identification

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| <i>Nomination</i> | Tiwanaku: spiritual and political centre of the Tiwanaku Culture |
| <i>Location</i> | Province of Ingavi, Department of La Paz |
| <i>State Party</i> | Republic of Bolivia |
| <i>Date</i> | 6 April 1991 |

Justification by State Party

Tiwanaku was until the 8th century CE the capital of a vast empire covering some 600,000km². This site represents a key stage in the history and cultural development of the territories of present-day Peru, Chile, Argentina, and Bolivia. Its clearly visible civic and ceremonial centre covers 16ha.

The ruins of the city of Tiwanaku are nowadays a tourist centre of the highest importance for Bolivia and for the whole of South America. At the national level a recent analysis of tourist attractions puts the site of Tiwanaku in first place, alongside Lake Titicaca.

Although the Tiwanaku people cannot lay claim to the domestication of animal and plant species, their mastery of agriculture is unchallenged. Their greatest contribution to humankind is probably the cultivation of the potato. This tuber, known as *choque* in the local language, revolutionized the economy of agricultural production globally once it had been exported into European markets in the 17th century. More than three hundred varieties are now known.

Another important contribution to agriculture using artificial terraces (*camellones*) on the banks of Lake Titicaca made possible a sustained form of farming and consequently the cultural evolution of the Tiwanaku empire. These innovations were subsequently taken up by succeeding civilizations and were extended as far as Cuzco.

[**Note** The State Party does not make any proposals in the nomination dossier concerning the criteria under which it considers the property should be inscribed on the World Heritage List.]

Category of property

In terms of the categories of cultural property set out in the 1972 World Heritage Convention, this is a *site*.

History and Description

History

Tiwanaku began as a small settlement, in what is known as its “village period,” around 1200 BCE. It was self-sufficient, with a non-irrigated form of farming based on frost-resistant crops, essential at this high altitude, producing tubers such as potatoes (*Solanum tuberosum*), oca (*Oxalis tuberosa*) and cereals, notably quinoa (*Chenopodium quinoa*). In more sheltered locations near Lake Titicaca, maize and peaches were also cultivated. The inhabitants lived in rectangular adobe houses that were linked by paved streets.

During the 1st century CE Tiwanaku expanded rapidly into a small town. This may be attributable to the introduction of copper metallurgy and the consequent availability of superior tools and implements. These facilitated the creation of irrigation systems, which resulted in agricultural surpluses, which in turn encouraged the growth of an hierarchical social structure and the rise of specialist craftsmen.

The wealthy upper class, who also controlled the profitable trade in wool from the vast herds of domesticated alpaca in the region, provided the finance for the creation of large public buildings in stone, designed by architects on a monumental scale and lavishly decorated by the skilled masons. Paved roads were built, linking Tiwanaku with other settlements in the region, along which its produce was exported using llamas as beasts of burden. The distribution of artefacts in copper, ceramics, textiles, and stone from the workshops of the Tiwanaku craftsmen shows that by around 550 the city became the capital of a vast empire covering what is now southern Peru, northern Chile, most of Bolivia, and parts of Argentina.

The marshy tracts on the lakeside, where the climatic conditions were more favourable, were brought into cultivation by the creation of terraced raised fields. This was a vast enterprise, estimated to have covered as much as 65km². The *camellones* were 6m wide and could be more than 200m long, and were separated by irrigation canals 3m wide. The canals served not only to bring water and nutrients to the fields but also acted as heat reservoirs during the day, bringing significant improvements to the microclimate of the fields.

The Tiwanaku empire probably entered its most powerful phase in the 8th century AD. Many daughter towns or colonies were set up in the vast region under Tiwanaku rule, the most important of which was Wari in Peru, which was to set itself up as a rival to Tiwanaku. At its apogee Tiwanaku is estimated to have extended over an area of as much as 6km² and to have housed between 70,000 and 125,000 inhabitants.

The political dominance of Tiwanaku began to decline in the 11th century, and its empire collapsed in the first half of the 12th century. The reasons for this collapse are not yet understood. Scholars now reject invasion and conquest and attribute it to climatic change, giving rise to poor harvests and a progressive weakening of the central power to the

point when it yielded to the pressures for autonomy from its components.

Description

Tiwanaku is located near the southern shores of Lake Titicaca on the Altiplano, at an altitude of 3850m. Most of the ancient city, which was largely built of adobe, has been overlaid by the modern town. However, the monumental stone buildings of the ceremonial centre survive in the protected archaeological zones.

The *Kantat Hallita* (unrestored and still in a ruined condition) is a structure 25m long by 14m wide which is characterized by its walls of beaten earth on bases of carefully dressed stone. A stone lintel is decorated with mythical figures, parts of which were originally embellished with golden figures, now disappeared.

The most imposing monument at Tiwanaku is the temple of *Akapana*. It is a pyramid with a base measuring 194m by 194.4m, originally with seven superimposed platforms with stone retaining walls rising to a height of over 18m. Only the lowest of these and part of one of the intermediate walls survive intact. Investigations have shown that it was originally clad in blue stone and surmounted by a temple, as was customary in Mesoamerican pyramids. It is surrounded by very well preserved drainage canals.

The *Small Semi-subterranean Temple (Templete)* measures 26m by 28.47m, its walls being made up of 48 pillars in red sandstone. There are many carved stone heads set into the walls, doubtless symbolizing an earlier practice of exposing the severed heads of defeated enemies in the temple.

To the north of the Akapana is the *Kalასasaya*, a large rectangular open temple measuring 128m by 126m. Because of its orientation it is believed to have been used as an observatory. It is entered by a flight of seven steps in the centre of the eastern wall. The interior contains two carved monoliths and the monumental *Gate of the Sun*, one of the most important specimens of the art of Tiwanaku. It was made from a single slab of andesite (now broken into two pieces) cut to form a large doorway with niches on either side. Above the doorway is an elaborate bas-relief frieze depicting a central deity, standing on a stepped platform, wearing an elaborate head-dress, and holding a staff in each hand. The deity is flanked by rows of anthropomorphic birds and along the bottom of the panel there is a series of human faces. The ensemble has been interpreted as an agricultural calendar.

The Kalასasaya is adjoined by the *Putuni*, also known as the Palace of the Sarcophagus. It is surrounded by massive stone walls and excavations have revealed that the floors were covered with carefully dressed stone flags. Another building considered to have had an administrative rather than a religious function is the *Kheri Q'ala*.

The *Pumapunku* is a ruined temple, similar to but smaller than the Akapana. In the interior there are enormous blocks of stone, some weighing more than 100 tonnes, which formed the base of the temple. Metal clamps were used for fixing the blocks. A small semi-subterranean temple with a flagged internal courtyard has recently been discovered in the centre of the Pumapunku.

The present-day *village of Tiwanaku* dates from the Spanish colonization; it was situated on the *Camino Real* when the

seat of the Viceroyalty was in Lima. Its plan is irregular, with narrow alleys alongside which many worked stones from the ancient centre are to be found, whilst others have been reused in building houses. The church, built between 1580 and 1612, is one of the oldest on the Bolivian Altiplano. It is partly constructed of prehispanic worked stone. The main entrance is flanked by two ancient monoliths, side by side with images of St Peter and St Paul, symbolizing the fusion of the two cultures.

Management and Protection

Legal status

Article 191 of the Bolivian Constitution asserts that all archaeological monuments and objects are the property of the State, and its powers are defined in decrees of 1961 and 1978. Under the Law of 3 October 1906 Tiwanaku (then known as Tiahuanaco) was declared to be the property of the Bolivian State. The monuments at Tiwanaku were formally expropriated by decree in 1933, and in 1945 the village of Tiwanaku and a region of 5km around it was designated as a National Monument. There are penalties for breaches of these statutory instruments.

Management

Overall responsibility for the management of the archaeological remains at Tiwanaku is vested in the Tiwanaku Anthropological and Archaeological Research Centre (*Centro de Investigaciones Antropológicas y Arqueológicas en Tiwanaku*), which is an agency of the National Directorate for Archaeology and Anthropology (*Dirección Nacional de Arqueología y Antropología - DINAAR*). This is in turn part of the National Secretariat for Culture of the Ministry of Education, Culture and Sports.

Ownership of other parts of the nominated area is vested in the Roman Catholic Church and private individuals and organizations.

A "Multiple Use Development Plan for the Tiwanaku Region" (*Plan de uso múltiple para el desarrollo de la región de Tiwanaku*) was prepared in 1995 by the USA-based Development Alternatives Inc in association with Bolivian experts. This has been complemented by the "Master Plan for Tiwanaku" (*Esquema Director de Tiwanaku*) of June 1997, prepared by the National Secretariat for Tourism (*Secretaría Nacional de Turismo - SENATUR*) and financed by the Interamerican Development Bank. This plan concentrates on the infrastructural requirements of the site, including training programmes for technical staff.

The Tiwanaku Master Plan 1999-2009 is a phased approach to the scientific investigation and recording of the entire site, leading to the improved conservation, interpretation, and presentation of the site.

The revised dossier shows three distinct areas that make up the nomination:

Area 1 To the east of the village of Tiwanaku and protected by a chain-link fence, containing the Akapana, Kalასasaya, Small Semi-subterranean Temple, Kantat Hallita, Putuni, Kheri Kala, etc (15ha);

Area 2 To the south-east of Area 1, containing the Pumapunku (5ha);

Area 3 To the south of Area 1 and containing the prehispanic cemetery and the present Regional Museum.

Conservation and Authenticity

Conservation history

Tiwanaku has been studied by visitors and scholars from the 16th century to the present day. Modern studies may be considered to have begun in the early 19th century. However, little, if any, conservation took place: most efforts were directed towards the discovery and removal of significant works of art. It was not until 1957 that systematic archaeological excavation by Bolivian and foreign archaeologists and restoration projects began. These were supervised by the Tiwanaku Archaeological Research Centre (*Centro de Investigaciones Arqueológicas en Tiwanaku - CIAT*). The small subterranean temple and the Kalasasaya have been totally restored and parts of the other major monuments partially.

The scientific team in the Centre has studied and developed techniques to combat the adverse effect of factors such as rain and snow, humidity, salt efflorescence, wind, sun, biodegradation, and human interventions, especially tourism in recent years. However, it is in need of international assistance in a number of projects associated with conservation and restoration.

Authenticity

As with most archaeological sites, Tiwanaku preserves a very high degree of authenticity.

Evaluation

Action by ICOMOS

An ICOMOS expert mission visited Tiwanaku in 1991, when the site was first nominated for inscription on the World Heritage List. A further expert mission visited the site in June 1998. A distinguished specialist in the Andean prehispanic cultures commented on the cultural significance of the site, and also on its conservation and management.

Qualities

Tiwanaku was one of the most important prehispanic cities in the Andean region of South America. It was the capital of a large and powerful empire for several centuries. It owed its supremacy to the innovative use of new materials and techniques in order to improve its agricultural production and hence increase its economic base.

The ruins of the monumental buildings in the religious and administrative centre of Tiwanaku bear powerful witness to the political and economic strength of the city and its empire.

Comparative analysis

There is no prehispanic city in the Andean region that compares directly with Tiwanaku.

ICOMOS comments

When ICOMOS evaluated the nomination in 1998, it recommended deferral, requesting precise delineation of the area or areas proposed for inscription and additional information relating to the protection and management of the site. This was provided by the State Party in January 2000 and has been carefully examined by ICOMOS, which is satisfied that the requirements of the *Operational Guidelines for the Implementation of the World Heritage Convention* have been complied with.

ICOMOS also expressed its concern that there should be legislative provision for the protection of the very large area of the ancient urban complex that is unfenced, lying beneath the modern village of Tiwanaku and farmhouses. The State Party has produced evidence that there is a Regulatory Plan for the village, which ensures the protection and preservation of the cultural heritage in the subsoil of the urban area. This Plan is based on a series of formal agreements reached between the Tiwanaku Municipality and DINAAR.

The Master Plan (see "Management" above) has recently been implemented. Whilst not wishing to delay further the inscription of this property on the World Heritage List, ICOMOS recommends that the State Party should be requested to provide a progress report on the implementation of the Master Plan for consideration by the Bureau at its 25th session in June 2001, and this recommendation was confirmed by the Bureau at its meeting in June 2000.

Brief description

The city of Tiwanaku was the capital of a prehispanic empire that dominated a large area of the southern Andes and beyond and reached its apogee between 500 and 900 BC. Its monumental remains testify to the cultural and political significance of this civilization, which is distinct from any of the other prehispanic empires of the Americas.

Recommendation

That this property be inscribed on the World Heritage List on the basis of *criteria iii and iv*:

Criterion iii The ruins of Tiwanaku bear striking witness to the power of the empire that played a leading role in the development of the Andean prehispanic civilization.

Criterion iv The buildings of Tiwanaku are exceptional examples of the ceremonial and public architecture and art of one of the most important manifestations of the civilizations of the Andean region.

ICOMOS, September 2000