

UNESCO
WORLD HERITAGE CONVENTION
WORLD HERITAGE COMMITTEE

25th ordinary session
(11 -16 December 2001)
Helsinki (Finland)

EVALUATIONS OF CULTURAL PROPERTIES

-- Addendum --

Prepared by the
International Council on Monuments and Sites
(ICOMOS)

The IUCN and ICOMOS evaluations are made available to members of the Bureau and the World Heritage Committee. A small number of additional copies are also available from the secretariat.
Thank you.



2001

Troodos (Cyprus)

No 351bis

Identification

<i>Nomination</i>	Painted churches in the Troodos region: Palaichori, Church of Ayia Sotira (Church of the Transfiguration of the Saviour) – extension
<i>Location</i>	Troodos Region, Nicosia District
<i>State party</i>	Cyprus
<i>Date</i>	3 July 2000

Justification by State Party

The Church of the Transfiguration of the Saviour (Ayia Sotira) in Palaichori belongs to the architectural type of the steep-pitched wooden roof with flat hooked tiles. This type of roofing over a Byzantine church is not found elsewhere, making the wooden-roofed churches of Cyprus a unique group example of religious architecture.

The wall paintings decorating the walls of the church are also of universal importance, dating back to the 16th century. **Criteria i, ii, iii, iv, and vi**

Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *monument*.

History and Description

History

Although the last line of the inscription indicating the date of construction and decoration of the Church of the Transfiguration of the Saviour (Ayia Sotira) has been erased, research by specialists has enabled it to be dated to the beginning of the 16th century. As regards the wall paintings that decorate the interior of the church, comparative iconographic and stylistic studies with other churches in the region (Churches of the Holy Cross at Agiasmatai, 1494; St Mamas at Louveras, 1495; St Sozomenus, 1513; the Archangel-Panagia Theotokos at Galata, 1514), have dated them to the second decade of the 16th century. At the beginning of the 17th century, a surrounding wall was built on the southern and western sides of the edifice.

Description

The Church of the Transfiguration of the Saviour is a type of construction that is characteristic of the mountainous region of Troodos. It is a small building, rectangular in plan and with a small eastern apse, covered with a shingle roof. Niches have been cut into the side walls.

The church is particularly notable for its very rich wall paintings. On the side walls the paintings are arranged in two rows, while the western wall has three rows plus the gable. The New Testament scenes are arranged on the upper level and the large figures of saints decorate the lower part of the walls.

The New Testament cycle opens with the Annunciation on the eastern wall and continues on the western gable with the Crucifixion before ending with the Descent of the Holy Spirit on the north side.

Several New Testament scenes show the existence of relations between the painting of Cyprus and that of the Christian art of the West from a stylistic and iconographic viewpoint. In the Crucifixion, although the representation of the thieves harks back to the beginning of Byzantine art, some details recall western art. For the Resurrection, the painter uses the western iconography showing Christ emerging from the tomb and the three sleeping soldiers in the foreground. The architectural decoration in the background of several scenes, including the Meal at the House of Abraham reflects a certain Italian influence.

The apse houses the representation of the Last Supper, one of the masterly compositions of the church. Christ appears twice behind the table: on the left he gives bread to the twelve Apostles, and on the right he gives wine, a scene from which Judas is excluded. Although the treatment of the draperies of the figures recalls that of 14th century painters, the unusual treatment of the faces with its diffused lighting effect lends a certain degree of emotion to the scene as a whole. In the Last Supper, the Apostles are usually arranged in two groups of six on either side of Christ, and in Cyprus only two paintings survive in which the twelve Apostles are shown twice, of which this is one. The other is in the Church of St Nicholas at Galataria, which is not in the group of churches already inscribed in the World Heritage List.

The scene of the *Thisia* (Sacrifice) is unusual in that it shows the Christ Child both in the paten and in the chalice under the silk veil supported by two angels. In Byzantine art, the Christ Child usually only appears in one of the two sacred vessels.

The specific style of the wall paintings of the Church of the Transfiguration of the Saviour, which places it at the boundaries of the 16th century Cretan school of painting, as already indicated in case of the Last Supper, emerges more markedly in the figures of the saints in the lower row on the walls. Already at this point, however, the Virgin Mary in the apse vault is portrayed with greater simplicity, particularly as regards the treatment of her vestments, in which the complex and emphasized folds have been abandoned by comparison with paintings of the same subject in other churches in the Troodos region at the end of the 15th century (eg the Church of the Archangel Michael at Pedoulas, 1474). What is most innovative, however, is the treatment of the Virgin's face, where the lighting is emphasized by delicate lines of white paint which radiate so as to create an expression of joy.

The faces of the saints in the lower rows in the church, such as those of St Anthony and St Andrew, are treated with great variety, as though they were portraits, using many white painted highlights.

Management and conservation

Legal status

The Church of the Transfiguration of the Saviour is the property of the Church of Cyprus and the local Church Committee. Although private property, the church proposed for inclusion on the World Heritage List is listed as an Ancient Monument (N2/40) and protected under the provisions of the basic 1931 Law on Antiquities. This law states that any intervention requires approval by the competent authorities (Department of Antiquities, Ministry of Communication and Public Works). Severe penalties are imposed in the event of violation of the law.

Furthermore, the law stipulates that listed monuments must be surrounded by a zone in which the height and architectural style of any new construction is subject to control. The Department of Antiquities and the local authorities have already demolished a recent building in the vicinity of the church.

Management

The management of the nominated property proposed for inclusion is the responsibility of the Department of Antiquities of the Ministry of Communication and Public Works, in conjunction with the Church of Cyprus and the local Church Committee. The Department of Antiquities is responsible for repair work on the church and the preservation of the wall paintings.

Conservation and authenticity

Conservation history

The Church of the Transfiguration of the Saviour has been in the care of the Department of Antiquities since 1935. Structural work has been carried out by the Department in conjunction with the competent religious authorities. Starting in 1963 specialists from the Department cleaned the paintings and undertook their conservation. Since that time other interventions have been carried out when they became necessary.

The church is currently in a good state of conservation. However, protective measures should be taken to cope with the increase in the number of visitors.

The improvement of the immediate environs of the church is covered by a Landscape Plan that is currently being prepared. This includes the development of an information centre, sanitary services, and signs for visitors. Implementation of the Plan will be the responsibility of the Department of Antiquities, the local Church Committee, the Church of Cyprus, and the local authorities.

The church has retained its original use as a place of worship and, although the number of visitors is not very large, protective measures should be taken to cope with an eventual increase.

Authenticity

The Church of the Transfiguration of the Saviour meets the criterion of authenticity in its design, materials, execution, and function. Works needed for conservation of the structure and wall paintings have in no way affected the authenticity of the monument.

Evaluation

Action by ICOMOS

An ICOMOS expert mission from ICOMOS visited Cyprus in April 2001.

Characteristics

The remarkable post-Byzantine wall paintings of the Church of the Transfiguration of the Saviour (Ayia Sotira) at Palaichori form a complete cycle of paintings from the second decade of the 16th century. They embody an iconography, style, and technique which stem from various sources and foreshadow, in certain of their characteristics, the 16th century Cretan school of painting. Through its architecture and its decoration this church forms a whole and completes the set of nine painted churches in the Troodos region already included in the World Heritage List on the basis of criteria ii, iii, and iv.

Comparative analysis

The specialists consulted by ICOMOS about this proposal for an extension of the painted churches of the region of Troodos have confirmed that in the region there is no other church from the start of the 16th century which is comparable with the Church of the Transfiguration of the Saviour at Palaichori.

ICOMOS recommendations for future action

Whilst the quality of this church is undeniable, making it suitable for addition to the existing inscribed group of churches, ICOMOS feels that the State Party should be requested to complete the evaluation of all the other churches of this type and period in the Troodos region and resubmit it as a final extension with others that it considers to be worthy of inscription.

At its meeting in June 2001 the Bureau adopted the recommendation of ICOMOS. On 29 October the State Party reported to UNESCO that "At this stage, there is no intention to submit other extensions of this site in the future. However, if subsequently it was decided to modify this intention, an eventual new submission will be accompanied by a comparative study."

In the opinion of ICOMOS this is a somewhat equivocal response, since the State Party is keeping open the possibility of additional extensions. It feels that the State Party should undertake the proposed comparative study of all the churches in the Troodos region forthwith, so as to provide a firm intellectual and practical basis for a single multiple extension (of which the Church of the Transfiguration would doubtless form part).

ICOMOS Recommendation

That further consideration of this proposal for extension be *deferred* to await the completion of a full evaluation of all the Troodos churches and the identification of a definitive group of churches for nomination as extensions to the existing inscribed property.

Bureau Recommendation

That this nomination be *referred back* to the State Party, asking whether they wish to submit other extensions of this site in the future. In that eventuality, the State Party will be encouraged to provide a comparative study.

ICOMOS, November 2001

Acre (Israel)

No 1042

Identification

<i>Nomination</i>	The Old City of Acre
<i>Location</i>	Western Galilee
<i>State Party</i>	Israel
<i>Date</i>	30 June 2000

Justification by State Party

During its existence, Acre has been a unique example of the symbiosis between different cultures and values. Its geographical position made it a meeting point between east and west. The fact that various cultures struggled for control over the city ensured that all parties were exposed to each other's influence.

Acre's uniqueness becomes apparent when examining the Crusader city. The Crusaders brought European building technology with them to the Holy Land whilst utilizing local materials. They built in accordance with various needs that were dictated by the city's geographical position. Their relationship with the place and the local population led to the development of the hybrid city of its period, of which no comparable example exists in Europe

Crusader Acre evolved for 200 years, reaching the peak of its importance on a world scale at the time when it was the capital city of the Crusaders, and a main entrance for many visitors to the Holy Land. Another example of the city's uniqueness may be found in the way that Crusader Acre eventually played a role in Ottoman plans for building. After the Mamelukes captured the city they attempted to bury the original city. However, during rebuilding in the 18th century, the original Crusader buildings were used as foundations for the new buildings, thus keeping the basic Crusader city plan.

Criterion ii

Acre is a living witness to the existence of two now extinct cultures – those of the Crusaders in the Holy Land and of the Ottomans. A Crusader city for pilgrims such as Acre could only exist in the Holy Land. As things developed in the region, Acre became the second most important city in the country after Jerusalem.

Since Acre was the capital of the second Crusader kingdom it offers today unique evidence of the highly particular lifestyle of the Crusaders, which lasted for a relatively short period in history before disappearing. The crux of this evidence of culture and life style is to be found

in the lower level of the city in the multitude of archaeological remains, preserved in superb condition for hundreds of years.

It is enough to walk around old Acre of today in order to get a constant sense of Ottoman culture because of the unusual degree to which its lifestyle has been preserved within the city walls and due to its geographical location. This happened despite the fact that changes in the socio-economic conditions led the wealthy classes to leave the city.

Criterion iii

Acre demonstrated settlement and utilization of available land by great masses of people by military means, for a specific religious purpose. This was not in fact settlement for its own sake but in order to provide a stepping stone on the way to Jerusalem. Thus the city was a mixture of garrison and way station. This manner of settlement as part of a historical process over a short period of time is unique.

The Crusaders created a new culture in the land which did not seek either to perpetuate its influence on local culture or to absorb the influence of local culture. Thus in a moment Crusader Acre ceased to exist as soon as it was captured by the Mamelukes and the Crusades were over. There was no continuity of the special life style that had existed until that point.

Criterion v

Acre is directly connected with a number of important historical world events, and also to the Baha'i faith.

In 1189 the Crusaders under King Guy de Lusignan laid siege to Acre in a two-year operation that went unparalleled in the tales of medieval wars of both the Christian and Muslim worlds. Salah-A-Din, Richard the Lion Heart, and Philippe II all participated in the war and Acre surrendered to the Crusader forces on 12 July 1191. Acre experienced its golden age as the capital of the Second Crusader kingdom from 1191 to 1291. It stood at a junction of international routes and was a trading centre between Europe and Asia. In 1291 the city was finally captured by the Moslems and systematically destroyed on the orders of Sultan El Ashraf.

In 1799 Acre became world-famous owing to the failure of Napoleon's army to capture the city after laying siege to it for a long time. The city's defenders, with the active aid of the English, managed to repel the French forces, forcing them to withdraw. "Tel Akko," previously called "King Richard Hill," was renamed "Tel Napoleon." The failure of the siege of Acre marked a turning point in Napoleon's career.

In 1868 the Baha'ullah arrived in Acre as a prisoner of the Ottoman Empire. He spent the remaining 24 years of his life in the city, first imprisoned in the city's fortress and later kept under house arrest in a small building in the alleyways of the old city. During his sojourn in Acre, the Baha'ullah wrote his most important work, setting out the laws and precepts to be observed by Baha'i adherents. He was freed towards the end of 1870 and went to live on a nearby estate outside the walls of the city. He died in 1892, his remains were buried on the estate, and to this day his tomb is the holiest shrine of the Baha'i.

During the British mandate in Palestine nine freedom fighters from the resistance were executed in the Gallows Room, part of the British prison occupying the citadel.

Criterion vi

Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *group of buildings*.

History and Description

History

Ancient Acre was situated on Tel Akko (or Tel El Fukhar), about 2.5km to the east of the location of the old city. Settlement at the tell appears to have begun during the Early Bronze Age (c 3000 BCE). Around 1900 BCE the town was fortified by a high earthen rampart with a brick gateway facing the direction of the sea.

Acre was founded on the peninsula during the Hellenistic period (3rd–2nd centuries BCE) and named Ptolemaeus after the name of its founder, Ptolemy II of Egypt. There are still traces of fortifications, a wall, and tower from this period. Acre was a centre for international trade because of its strategic position and its natural port.

The city fell to the Roman conquest of the land of Israel and in the 1st century CE it was granted the status of *colonia*. The first Christian pilgrims passed through Acre on their way to Jerusalem. In 330, during the Byzantine period, the land of Israel passed into the control of the Eastern Roman Empire. This was a time of economic and demographic expansion, when hundreds of churches and monasteries were established all over the Holy Land. The larger cities expanded and were encircled by new fortification systems; Acre retained its status as the principal port of the land of Israel.

During the early Arab period (638–1099), many of the country's cities were abandoned and destroyed. Acre decreased in importance as an international port and the city limits were reduced to include several quarters around the port, where a Moslem naval fleet was stationed. Acre began its economic recovery during the 10th and 11th centuries and the port and city walls were rebuilt.

The Crusader period began for Acre in 1104, some five years after the fall of Jerusalem. Baldwin I, King of Jerusalem, and the Genoese commercial fleet cooperated in laying siege to Acre from land and sea until the city fell to the Crusaders. A new and special model of settlement evolved, characterized by defined and autonomous quarters. The king settled in the northern part of the city, where he built a fortified palace.

Genoese, Venetian, and Pisan merchants built autonomous quarters nearby the port. The military orders installed themselves nearby – the Hospitallers in the north of the city to the west of the palace, the Templars in the south-west of the city, and the German Knights close to the eastern wall of the wall. Other important quarters included those of the Patriarch (in which the Church of the Holy Cross, Acre's main cathedral, was built), the French merchants (the Provençal quarter), and the English merchants. Moslem and Jewish merchants also settled in the city.

Many public buildings were erected – fortified buildings, churches, bathhouses, bakeries, courts and hostels for pilgrims and merchants, covered markets – and also private dwellings. During the two centuries of Crusader rule Acre developed into a wealthy and thriving trading city. It

symbolized the interchange between the eastern and western cultures better than any other city.

In 1187, after the debacle at Hattin and the destruction of the Crusader army, the Moslems captured the whole of the land of Israel and Acre was held for four years. It was not until 1191 that the Third Crusade led by Richard the Lion Heart led to the recapture of Acre and the shores of northern Israel. A second Crusader kingdom was established with Acre as its capital, since the Crusaders were not able to retake Jerusalem.

From 1191 to 1291 the second Crusader Kingdom expanded its borders. New neighbourhoods such as Monmizar to the north were built and Acre was given a new double city wall. More palaces, churches, and public buildings were erected, at a time when styles in the west were changing from Romanesque to Gothic. This change in style was put into practice in Acre and recent excavations have revealed buildings that reflect the transition between styles and the initial establishment of the Gothic style in the 13th century.

The Mameluke period (named after the Moslem rulers of Egypt) began in 1291 with the conquest of Acre and continued until 1517. The city was destroyed and totally abandoned, with only a few buildings remaining around the port.

During the Ottoman period (1517–1917) Acre was described by pilgrims and merchants who visited it in the 16th and 17th centuries as a deserted ghost town, with some structures from the Crusader period still standing, some jutting out of the earth, and others buried. Reconstruction did not begin until the middle of the 18th century, under Daher El Amar, who renewed the port, manned it with officials and merchants, built a palace for himself, and rebuilt the fortifications.

The building of Ottoman Acre in the 18th and 19th centuries buried the remains of the Crusader city, thereby preserving the Crusader remains. In 1799 Acre attained world fame after Napoleon failed to capture the city, under the command of its Turkish ruler Ahmed El Jazar, after a long siege.

Acre enjoyed renewed economic expansion in the 19th century. Mosques, bathhouses, and caravanserais were built. Wealthy merchants settled there, building grand mansions in the eastern Neo-Classical style of the end of the 19th century.

In 1868 Baha'ullah, founder of the Baha'i faith, arrived in Acre as a prisoner of the Ottoman Empire. He spent the remaining 24 years of his life in the city, first imprisoned in the city's fortress and later under house arrest in a small building in the alleyways of the old city. During his sojourn in Acre, the Baha'ullah wrote his most important work, setting out the laws and precepts to be observed by Baha'i adherents. The Baha'ullah was freed towards the end of 1870 and went to live on a nearby estate outside the walls of the city. He died in 1892, his remains were buried on the estate, and to this day his tomb is the holiest shrine of the Baha'i.

After capturing Acre in 1918 and being given control of Palestine by mandate of the League of Nations, the British used the fortress as a prison. Several leading Jewish settlers were imprisoned there, and hangings also took place. The British developed the city outside the boundaries of the

walls, constructing dwellings and administrative buildings. However, they did nothing to alter the fabric of life within the walls of the old city. The port fell into disuse as the nearby modern port of Haifa superseded it.

During Israel's war of independence the Jews captured Acre on 16 May 1948. At first only a few Moslem residents remained in the old city, but after the fighting had died down many Palestinian Arab refugees from other places began to arrive and settle in the old city, whilst many Jews settled in the new sections. At the present time the five thousand inhabitants of the walled city are exclusively Arab and some 80% are migrants from other parts of Israel.

Description

The built city comprises two levels:

The Crusader city, mainly subterranean remains, partly revealed and in a very good state of preservation – wall, quarters (Hospitaller, Genoese, Pisan, Venetian, *Burgus Novos*, etc), open and covered streets, monuments, drainage tunnels, systems of hideaway passages, shops, and dwellings.

The Ottoman city, built over the ruins of the Crusader city, using the earlier structures as foundations and thereby helping in the preservation of the remains of the Crusader city and its outline. The Ottoman city is characterized by its narrow alleyways, monuments, and inhabited dwellings with inner courtyards.

The *system of fortifications* comprises the city walls, gates, towers, and moat. The walls were built in stages between 1750 and 1840. They include the ruins of the Daher-El-Umar's wall (built 1750–51) and its Lion Gate, the El-Jazar wall, and the city gates (the Landward Gate, built by El Jazar, the Seaward Gate, and two entrances in the northern walls opened in 1910).

Two elements of the *water-supply system* survive: the remains of the water aqueduct, built by either Dahar El Umar or El Jazar, which brought water from the Kabri fountain to the city and supplied it to the bathhouses and the public fountain, and a reservoir constructed of five Ottoman barrel vaults.

There are several noteworthy *tombs of sheikhs and cemeteries*, including the Nebi Tzalah Tomb in the cemetery near the eastern wall, the Sheikh Yanis Tomb inside a room in a southern wall of the Jabhanee opposite to the Jazar mosque, the Sheikh Ana'am Tomb built in 1807–08 by Suliman Pecha, the Sheikh Az A-Dean Tomb north of the wall by the sea (traditionally considered to be the tomb of Dahar El-Amar), and three cemeteries – the Muzoleom, a cemetery behind Hann-Shuni, and the cemetery of St George's Church.

Acre has four historic *churches*: St John's Church, built in 1737 by the Franciscans, probably on top of the Crusader St Andrew's Church and now used by the Roman Catholic community; the Maronite Church; St Andrew's Church, apparently built on top of the Crusader St Anne's Church and now used by the Greek Catholic Church; and St George's Church, one of the most ancient in Acre and referred to in 17th century pilgrims' description as St Nicholas's Church (it is constructed on Crusader cross-vaults, which matches the description of St Lawrence's Church).

There are eight *mosques* within the nominated old city of Acre. The El-Jazar mosque, built in 1781 by El-Jazar, on the remains of the Holy Cross Cathedral, is one of the most important mosques in the country. It comprises religious institutions and a famous library. El-Jazar, Suliman Pecha, and their families are buried in the courtyard. The El-Zaituna mosque was built in 1745 by Husain Abed Elhadi. What are believed to be remains of the Hospitallers' Church are incorporated in its structure. The Snan-Basha mosque was built in 1806–7 by Suliman Pecha above the remains of the mosque built by Snan-Basha in the 16th century. The Elmualic mosque was originally a synagogue of the Jewish community in Acre and was converted into a mosque by Dahar El-Amar in 1746. Like most of the mosques in Acre it overlies Crusader remnants: this is also the case of the A-Ramal (1704) and A-Magdala (1710) mosques. The Shazalia mosque was built in 1862 by the Sheikh Ali Nur A-Dean El-Yasruti, founder of the Shazalia cult, whose body and those of his family are buried nearby. Also of importance is the El Burg' mosque, located near the wall at the Lion Gate.

Other fine examples of Moslem architecture in Acre are two *bathhouses*: the large Hammam El-Basha built by El-Jazar in the 18th century, apparently on top of an ancient bathhouse, and the small Hammam built by Dahar El-Amar in the 18th century and in continuous use until the 1940s.

Among the historic *khans* (caravanserai) are Khan El Umdan, built in 1784 by El-Jazar; Khan El-Farang', built in the 16th century by French merchants in the central courtyard of the Crusader-period Venetian quarter; Khan A-Shauardee, built in the 18th century by Dahar El-Amar; Burg' El-Sultan, a Crusader tower, reconstructed for use by the Mamelukes and later incorporated into the khan; the Donkeys Khan, built in 1810 and ruined by an explosion at an ammunition depot; and Khan A-Shune, built in the period of Dahar El-Amar over the remains of the Pisan quarter.

Two *Baha'i holy sites* are also in the area of the old city nominated for inscription: the Jabotinsky Tower and the Abud House.

There are two *markets*: the Turkish Bazaar (El-Jazar Market) and Shuk El-Abyad (the White Market), built by Dahar El-Amar and reconstructed in 1817 by Suliman Pecha after a fire.

The main *Government Building* is the Citadel, which was the Ottoman governors' palace and a prison during the British Mandate. It was built over the citadel of the Hospitallers, which includes the Knights' Halls, the Grand Munier, the Crypt, the "Beautiful Hall," and the courtyard. The Seraya is thought to have functioned as a courthouse during the Ottoman period

The urban structure of contemporary Acre is based on the following fundamental factors:

- Acre's geographical position on a natural bay was a significant reason for its development as a port. Being located on a peninsula with its limits defined by its walls and by the sea that defined its boundaries dictated the need for dense building, a characteristic feature of medieval cities.
- The Crusader city was built in clearly defined quarters.

- The Ottoman city blended with the Crusader remains, using them as foundations. It is characterized by its layout of blocks and buildings set around inner yards.

At first glance, Acre's winding streets and blocks of buildings appear to have grown in an unplanned way: it is difficult to perceive any particular order according to which the city might have been arranged. It was, however, carefully laid out: it is arranged around two complementary hierarchies, the hierarchy of areas of transit and the hierarchy of built areas and blocks of buildings.

The built areas consist of quarters, blocks of buildings, individual buildings, and apartments. Apartment dwellings form blocks set around inner courtyards, the blocks forming larger blocks and quarters.

The boundary of every built component of the city is defined by some kind of wall.

- At city level by fortified walls that surround the old city in its entirety, detaching it and cutting it off from anything outside.
- At block level by uninterrupted stone fascias at ground level which constitute a "wall."
- At larger block level by the formation of inner courtyards.

The urban characteristic of Acre is one of looking inwards and containment, reflecting the role of the home in traditional Moslem society. The facades of buildings serve to separate the home from the street, thereby protecting the inhabitants. Upper floors were built on at a later stage and clearly reflect western influence, with less closure and containment, reflected in large picture windows and balconies.

The areas of transit are also arranged according to hierarchy, following the same hierarchic principle as in built areas – division and gradual passage:

- Main thoroughfares running between the city churches and public centres and the perimeter route running parallel to the city walls.
- Alleyways leading from the main thoroughfares into the built-up masses of dwellings and circular alleyways that encompass the blocks.
- Secondary cul-de-sac alleyways that run into the blocks, usually as far as the inner courtyards and sometimes connecting with another thoroughfare.

The large blocks are set around inner courtyards, giving the impression from outside that they are built very densely and closed. Within, the courtyards form intimate empty spaces that allow access to fresh air and sunlight. Inner courtyards are found in a number of styles: at ground level, open to the sky; at ground level, but covered; set on roofs. They fulfil a number of roles: they may serve a single apartment or dwelling, they may serve as nuclei for a number of buildings grouped together into a block, or they may be located between blocks. The courtyards are part of the typological and morphological characteristics of the city's construction.

Management and Protection

Legal status

The old city of Acre is designated an antiquity site under the provisions of the 1978 Antiquities Law. Article 29.a prohibits any of the following activities without the written approval of the Director of the Israel Antiquities Authority:

- building, paving, the erection of installations, quarrying, mining, drilling, flooding, the clearing away of stones, ploughing, planting, or interment;
- the dumping of earth, manure, waste, or refuse, including the dumping thereof on adjoining property;
- any alteration, repair or addition to an antiquity located on the site;
- the dismantling of an antiquity, the removal of part thereof or the shifting thereof;
- writing, carving, or painting;
- the erection of buildings or walls on adjoining property;
- any other operation designated by the Director in respect of a particular site.

Management

Ownership of the property is divided between three main owners: the Israeli Land Administration (80%), the Muslim *Wakf* and the Christian Churches (15%), and private ownership (5%).

Following the establishment of the Old Acre Development Co Ltd (OADC) in 1983, a steering committee for urban planning drew up a new Master Plan for the old city of Acre for the years 1993–2000. The plan takes into account the international heritage of Acre, and takes account of the requirements of the Building and Urban Planning Law while considering the possibility of turning the city into a tourist attraction.

The main provisions are:

- Preservation of the special character of the old city of Acre – cultural, architectural, and aesthetic values.
- Preservation of the physical fabric whilst adapting to the modern quality of life.
- Provision of a solution to the inhabitants in the fields of residential accommodation, environment, community services, infrastructure, employment, and involvement in the process of developing whilst involving the public in the planning process.
- The development of tourism as a principal economic activity in Acre, Western Galilee, and throughout the State of Israel.
- Determining the permissible type of usage for each plot of land and building.
- Determining priorities and the distribution of resources.
- Provision of general planning whilst providing solutions to suitable specific programmes at the planning and execution stage.
- Provision of a solution for the planning framework of urban systems: ie transportation, infrastructures, sign

posting, maintenance, management and preservation of the environment.

Preparation of the Plan involved a number of studies and surveys. These included a condition survey of the buildings, the development of a traffic plan, a study of the morphology of residential houses, a survey of potential tourist needs, and a survey of infrastructure of services (water, electricity, etc). As a result, areas in need of urgent intervention and priorities were identified.

The agencies with management authority under the terms of the Master Plan are the Acre Municipality, the OADC, the Israel Antiquities Authority (and its Conservation Department), and the Israel Land Administration (National Housing Authority). Site management is the responsibility of the OADC, a wholly state-owned professional body with expertise in management economics and marketing, and it is the OADC which coordinates the activities of the other partners. The Conservation Department of the Israel Antiquities Authority, which has a staff of conservation architects, engineers, archaeologists, and specialized conservators, is responsible for all conservation work.

Monitoring and control activities carried out under the plan are:

- Municipal inspection for enforcing the Building and Urban Planning Law;
- Archaeological inspection under the Antiquities Law (article 29.a);
- Conservation inspection;
- A Conservation Steering Committee composed of representatives of the following bodies: Conservation Department of the Israeli Antiquities Authority, the District Engineer, the Old Acre Development Company Ltd, the National Housing Authority, the Master Plan architect, the District Architect of the Israeli Land Administration, and a representative of the local community.
- A municipal tourist police.

Regular monitoring of the buildings in the old city is shared between the Municipality, the National Housing Authority, and the Conservation Department of the Israel Antiquities Authority, all of which are represented by inspectors on site.

ICOMOS considers that this plan and its implementation fulfil the requirements regarding management planning laid down in paragraph 24.b.ii of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

Conservation and Authenticity

Conservation history

A programmed approach to the conservation of the old city of Acre began in the 1990s. The first buildings survey had been carried out during the British Mandate. An extensive survey was made in 1962, and this served as the basis for the first master plan. From 1993 onwards there was a series of surveys of individual buildings, monuments, and blocks, and these have resulted in a number of technical manuals designed to provide architects, engineers, institutions, and private individuals with field solutions relating to specific

aspects of the conservation and restoration of buildings. Restoration and conservation work on many of the major buildings are accompanied by scientific excavations, which are revealing many facets of the Crusader city.

At the present time the residential areas of the old city show little outward sign of the conservation effort over the past eight years. The facades of many of the buildings are in poor condition and there is substantial evidence of the use of inappropriate materials. The surfaces of many of the smaller streets and open spaces are poorly maintained. There is a profusion of cables and other infrastructural elements on the facades and pavements everywhere.

This appearance is, however, slightly misleading. The initial surveys showed that a large proportion of the housing stock was seriously decayed, to an extent that buildings were at risk and consolidation was urgently needed. This interior structural work has now been completed, as has the provision of underground conduits for electricity, telephone, and other services.

For the next stage of conservation and rehabilitation, a pilot project in a largely traditional residential area was selected. Work is in progress on this neighbourhood, adopting an overall approach rather than a piecemeal one directed to individual structures.

Excavation of the Crusader city beneath the Ottoman city is proceeding steadily. A number of innovative civil engineering solutions have been developed to stabilize cleared areas and permit exploration to continue.

Authenticity and integrity

Two periods in history have contributed to the appearance of contemporary Acre: the Crusader period and the Ottoman period. The special nature of the city's evolution has led to the preservation of its authenticity and the principal values of each of the two periods and of the city in general.

Crusader Acre is today mostly subterranean and has only begun to be uncovered recently. The well preserved remains include large portions of the fabric of urban life and buildings with all parts intact – walls, quarters, streets, alleys, fortresses, public buildings, religious buildings, dwellings, and shops, together with the subterranean infrastructure, architectural details, original plasterwork, and masonry. Building plans are clearly identifiable and building technology and materials can be accurately determined.

The Ottoman city was built on the Crusader city and took the form of an urban system of alleyways, courtyards, and squares, reflecting the values of Moslem society. The geographical conditions that determined its development, together with its socio-economic structure, maintained the integrity of Acre as essentially an Ottoman city, without significant changes in the 19th and 20th centuries.

Acre has retained its character as a port city, with a blend of public buildings, caravanserais (*khans*), and religious buildings alongside markets, small shops, and large residential quarters, together with an active port which is still a source of income and access to the city. The major proportion of Acre's individual buildings have remained largely in the same form as when they were built, with few alterations over the last 150–300 years. Ottoman Acre exists in an architectural/social bubble reflecting the meeting between east and west.

It may therefore be concluded that Acre fulfils all the criteria regarding integrity and reliability of information sources as expressed in the Nara Document and as required by paragraph 24.b.i of the *Operational Guidelines*.

Evaluation

Action by ICOMOS

A ICOMOS expert mission visited Acre in February 2001. A evaluation of the "outstanding universal value" of the nominated property was provided by the ICOMOS International Scientific Committee on Historic Towns and Villages (CIVVIH).

Qualities

Acre is a well preserved example of a walled city of special historical interest. It was of major significance during the Crusader period in the Holy Land, first as its principal port and later as the capital of the second Kingdom of Jerusalem for a century. Following a long period of decline, during which it was still the main entry port for Christian pilgrims visiting Jerusalem, it flourished again in the 18th century as the capital of this part of the Ottoman Empire. Its historical trajectory gives it a unique character, in that the substantial remains of the Crusader city are preserved virtually intact beneath the typical Moslem city of the present day, and have in recent years been revealed by scientific excavation.

Comparative analysis

There are three similar Mediterranean towns with which Acre may justifiably be compared: Rhodes in Greece (already on the World Heritage List), Famagusta (Magussa) in Cyprus, and Sidon in Lebanon. All three towns have long histories, and the relevant periods for comparison are from the Crusader period onwards.

Rhodes was founded after the expulsion of the Crusaders from the Holy Land and was exclusively a city of the Order of St John (Hospitallers). By contrast, Acre was founded during one of the peaks of the Crusader period, it became the capital of the kingdom, and its inhabitants represented the full range of Crusader orders, reflecting the history of the Crusades in the Holy Land.

Contemporary Rhodes is more like a medieval European city than Acre, which is in its present form an Ottoman city. It has also not undergone major restoration projects in the 20th century.

After the capture and partial destruction of Acre, Famagusta inherited its position as the main trading port in the region, although it never attained either Acre's significance or the rate of development that it underwent at its peak. Famagusta essentially represents a city built during the process of withdrawal of the Crusaders. Furthermore, it did not form part of the itinerary of pilgrimages to the Holy Land. At first glance Famagusta seems similar to Acre: it is an example of a walled Ottoman port city that has undergone some changes. The essential difference between the two is that the Crusader city of Famagusta is not preserved in its entirety beneath the Ottoman city: it has instead been blended with Ottoman structures.

Sidon was also an important port city during the Crusader era, but it was one of many port cities whereas Acre was

the capital. There is also far less evidence of the Crusader City in Sidon than in Acre.

ICOMOS recommendations for future action

There is no buffer zone to provide protection of the setting of the old city of Acre defined in the plans provided with the nomination dossier, as required by the World Heritage Committee. This must be defined and appropriate regulations enacted before the property can be inscribed on the World Heritage List.

The most serious problem confronting those responsible for the conservation and maintenance of the old city is a social one. There is an almost total absence of pride of place. Few of the present-day inhabitants have any family ties with the city and so there is a lack of identification with it. Furthermore, many of the inhabitants are unemployed or poorly remunerated and so cannot afford to live elsewhere. If and when their personal fortunes change, they will immediately seek housing outside the walled city. As a result, they do not feel themselves under obligation to respect the appearance of what is to them no more than a transitory place of residence.

The task that confronts the managers of Old Acre is therefore fundamentally one of education, so as to demonstrate to the inhabitants that they live in a city with a long history and a rich heritage. The efforts already made over the past two to three years, since it became known that Acre appeared on the tentative list of Israel, need to be maintained and intensified. The educational programme should be accompanied by an intensified social programme aimed at improving the quality of life of the inhabitants of Acre.

The ICOMOS recommendation, that this nomination be referred back to the State Party, requesting the definition and regulatory protection of an appropriate buffer zone, and also information regarding existing and proposed educational and social projects relating to heritage protection and conservation, was endorsed by the Bureau at its meeting in June 2001.

This material was supplied by the State Party on 28 September and conforms fully with the requirements of the Bureau and ICOMOS.

Brief description

The townscape of the walled port city of Acre is characteristic of Moslem perceptions of urban design, with narrow winding streets and fine public buildings and houses. Beneath it lies almost intact the remains of its predecessor, the Crusader city, which is being revealed by archaeological excavation.

Statement of Significance

Acre is exceptional in that beneath its present-day appearance as a typical Moslem fortified city lie the remains of an almost intact medieval city on the European model. It bears exceptional material testimony to the Crusader kingdom established in the Holy Land in the 12th–14th centuries, and also to the Ottoman Empire in the 18th and 19th centuries.

ICOMOS Recommendation

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

Criterion ii Acre is an exceptional historic town in that it preserves the substantial remains of the its medieval Crusader buildings beneath the existing Moslem fortified town dating from the 18th and 19th centuries.

Criterion iii The remains of the Crusader town of Acre, both above and below the present-day street level, provide an exceptional picture of the layout and structures of the capital of the medieval Crusader Kingdom of Jerusalem.

Criterion v Present-day Acre is an important example of an Ottoman walled town, with typical urban components such as the citadel, mosques, *khans*, and baths well preserved, partly built on top of the underlying Crusader structures.

Bureau Recommendation

That this nomination be *referred back* to the State Party, requesting the definition and regulatory protection of an appropriate buffer zone, and also information regarding existing and proposed educational and social projects relating to heritage protection and conservation.

ICOMOS, November 2001

Middle Adda (Italy)

No 730bis

Identification

<i>Nomination</i>	The Middle Adda Valley [extension to Crespi d'Adda, inscribed 1995]
<i>Location</i>	Provinces of Lecco, Milan, and Bergamo, Region of Lombardy
<i>State Party</i>	Italy
<i>Date</i>	26 June 2000

Justification by State Party

This study makes it possible to confirm without any hesitation that the sites being considered possess in every respect the characteristics of outstanding universal value, discernible in the attitudes adopted unanimously by all experts. The middle Adda valley is an outstanding site, although it might be fairer to describe it as a group of incomparable natural, technological, artistic, and social sites. The loss of this system would deprive the entire world of a group of powerful symbols that are exemplary because of their unique and meaningful character. History, art, nature, and technology here live alongside one another in the short space of some dozen kilometres.

The adjoining areas which enrich this system – the Brivio marshes (Isola della Torre, Isolone del Serraglio), the Paderno ravine, the great sweep of Trezzo sull'Adda, the arch of Cassano – do not detract from the system. Quite the opposite: they enrich it by furnishing additional depths and treasures.

It is possible to leave the isolated river system and to reach adjoining areas to follow a specific thematic itinerary - historic towns, historic industrial installations, religious architecture, or rural farming architecture, as well as natural areas, natural areas, or human landscapes, historic trackways, and so on in a crescendo of legitimate, plausible, defensible implications and derivations.

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

Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. It is also a *cultural landscape*, as defined in paragraph

39 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

History and Description

History

Water management underlies the history and development of this region – for transport, for irrigation, for drainage. This began during the Roman period, as early as the 2nd century AD, when the first efforts were made to make the minor rivers crossing the often difficult terrain navigable so as to facilitate trade between the Western and Eastern Empires.

In the medieval period there was intense political and commercial rivalry between the city states of Lombardy. Towards the end of the 12th century Milan began the construction of the first of numerous canals, the Naviglio Grande, on which a busy trade in all kinds of goods developed. An important component of this system of waterways was the Martesana Canal, built between 1457 and 1463 to the plans of the engineer Bertoli de Novate in the Adda valley. By the end of the 15th century 90km of canals made trade possible from the Adriatic to Milan.

However, some physical obstacles remained to be circumvented. Notable among these were the Paderno rapids, between Paderno d'Adda and Trezzo d'Adda, where the Martesana Canal began. In the early 16th century Francis I of France financed a commission to carry out a study for a new navigable canal, which recommended the opening-up of the water routes between Lake Como and Milan. In 1518 the Milanese Senate approved a project for improving navigation in the middle Adda between Brivio and Trezzo by constructing a canal to bypass the most difficult parts of this stretch of the river.

Work began on the Paderno Canal immediately under the control of the architect and painter Giuseppe Meda. It was abandoned in 1599 on the death of Meda, and did not start up again until 1773, when Lombardy was under Austrian rule. The Canal was formally opened in 1777, but a technical problem delayed its coming into full operation for a further two years.

The coming of the railways (the first was built in Lombardy in 1840) saw a decline in the use of canals, as was the case everywhere in Europe. There was a rally at the end of the century, when the canals of Lombardy were used to bring coal into Italy for electric power generation. However, the potential for producing electricity of water was recognized around this time. In 1898 the Italian Edison Company began using the Paderno Canal for its Bertini hydroelectric power station, followed between 1901 and 1920 by others (Taccani, Esterle, and Semenza). The electric power produced in the Adda valley played a very important role in the economic expansion of Italy in the years leading up to the outbreak of World War I.

The 20th century saw a steady decline in the use of the canals for navigation. Maintenance became so expensive that in 1953 the Martesana Canal had been removed from the navigable system. They supplied water for irrigation and to drive some industrial plants such as mills and presses. This had been a factor in the installation of the Crespi textile mill and workers' village in the valley in 1878.

Description

The area proposed for inscription follows the course of the river Adda from the Olginate dam (and just slightly further north, into Lake Garlate, to include the Silk Museum there) down to Cassano d'Adda, where the Muzza irrigation canal joins the river. It covers 1874.2ha and is surrounded by a buffer zone (the Northern Adda Park) of 7115ha.

From Lake Olginate (77ha) the Adda follows a winding course through a marshy area that constitutes the Isola della Torre (Tower Island) and the Isolone del Serraglio (Menagerie Island). This area is uncontaminated and supports a rich biota.

On the left bank lies the Sonna valley with a now abandoned system of water mills. A plan is currently being studied for a footpath between Volpino, on the slopes of Mount Canto, and Crespi d'Adda.

The main town on this stretch of the river is Brivio, at a point where a major Roman road from Milan to Bergamo and Aquileia crossed the Adda (hence its name, which derives from the Celtic word for "bridge"). It became an important trading centre and also a border stronghold.

The water management system hinges on the Paderno ravine, between Robbiate and Cornate. This is an exceptional natural environment of steep eroded rocks; it comes as no surprise to learn that it was selected by Leonardo da Vinci as the background for one of his most famous paintings, *The Virgin of the Rocks*. The Canal itself is an outstanding example of a stepped canal. It is a monument to the hydrological genius of Leonardo combined with the expertise of the architect Giuseppe Meda and the mathematician Paolo Frisi. Safe navigation at the Paderno rapids is ensured by a system of basins on the da Vinci principle. There is also a series of hydroelectric power stations along the canal.

The river then follows a less violent course around the large meander at Trezzo sull'Adda, where the dam for the Taccani power station has created a dramatic landscape, dominated by the power station and by the 14th century Visconti castle.

Below Trezzo the river is joined by the Brembo, to form the Capriate San Gervasio peninsula, where the World Heritage site of Crespi d'Adda is located. Further downstream is the picturesque landscape of Vaprio d'Adda, with its villas, small towns, and proto-industrial works.

The Little Martesana Canal runs alongside this stretch of the river, from the hamlet of Concesa just south of Trezzo to La Volta (Cassano d'Adda), where it makes an abrupt right-angled turn to the west, on its way to Milan. On the opposite (eastern) bank, between Vaprio and Cassano, is the industrial settlement of Fara Gera d'Adda, built alongside a short industrial canal.

Cassano is the last town in the nominated area, which is notable for a complex system of irrigation canals. The oldest of these, the Muzza Canal, was constructed in 1220; its confluence with the Adda marks the southernmost boundary of the nominated area.

There is a number of protected historic buildings along the Adda and within the nominated area or the buffer zone. These include castles, churches, abbeys, domestic buildings, farms, and industrial sites.

Management and Protection

Legal status

More than forty buildings and monuments along the course of the Adda in the nominated area are protected as historic monuments under the provisions of the basic Italian monuments protection law, No 1089 of 1 June 1939. Nineteen landscapes are similarly protected under the complementary nature-protection law, No 1497 of 29 June 1939. Under both statutes any changes to the appearance or ownership of the designated properties may only be carried out with the permission of the relevant national authority.

At regional level, the statutory Territorial Coordination and Control Plan for the North Adda Park, adopted by the Regional Council for Lombardy on 8 January 1993, imposes strict constraints on activities that may adversely impact settlements, buildings, and landscapes within the Park.

Management

Ownership of individual properties within the nominated area is diverse, including national agencies, regional and local authorities, the Roman Catholic Church, private business and industry, and private landowners.

Overall management is the responsibility of the regional autonomous agency, the North Adda Park authority (Parco Adda Nord), which was set up (as the North Adda Natural Park) in 1983. The broad lines of its management policies are defined in a series of land-use planning regulations with statutory force at different administrative levels. These include the Regional Plan for Protected Areas (30 November 1983) and the Territorial Plan of January 1983 (see above).

As part of its basic structure the Park has an overall strategy for environmental protection and cultural promotion. The document supplied with the nomination lists several international projects with which the Park is collaborating, including a joint project with national parks in Catalonia and France on energy conservation in nature reserves and the European "Historic Canals" project. Several internal research projects are also in progress, studying *inter alia* aspects of the ecosystem of the Brivio marshes and the rehabilitation of traditional trackways.

There is a number of programmed ongoing activities within this strategy. They include a policy of acquisition of properties of high natural value, the rehabilitation of degraded areas and environmental restoration, and water quality control. The Park has a policy of working closely with agricultural and forestry enterprises to develop a sense of stewardship. It also has a programme aimed at the development of a new approach and way of thinking, with the traditional industrial base being superseded by the use of the area's cultural and natural resources for tourism.

Whilst the document referred to is not a management plan *sensu stricto*, it is in keeping with the Italian concept of a national park. It is not prescriptive, since the necessary sanctions against transgression are provided under the national and regional legislation. Instead, it concentrates on the study and recording of the cultural values, on education, and on economic and social rehabilitation and development.

Conservation and Authenticity

Conservation history

Conservation of the area covered by the nomination has only become a living issue since the creation of the Park in 1983. Even at that time, the emphasis was largely on the natural values. The protected buildings were subject to monitoring by the relevant agencies at national and regional level, and the planning legislation, including the plans at the lowest administrative level (*Piani Regolatori Generali*) ensured some measure of control over urban and sub-urban development. The coordination resulting from the creation of the Park and its strategic programme represents a more systematic approach to the conservation of a somewhat complex and diversified landscape.

Authenticity and integrity

Because of its heterogeneous nature it is difficult to apply the test of authenticity to this landscape, much of which has been subject to change as technology has developed over the past centuries. It is probably more valid to look at its integrity, as is the case with most cultural landscapes.

The unifying feature of the landscape is, of course, the river Adda and its waters. The landscape that is visible today provides excellent testimony to its political and technical significance and the way in this has changed since the 13th century. The commercial importance of the waterborne trade route across northern Italy is well illustrated by the hydrological works inspired by Leonardo da Vinci. The importance of water to industry and hence to economic development, first providing direct mechanical power by means of water-wheels and then indirectly by harnessing the river to generate electricity, is equally well demonstrated. Its role in the improvement of agricultural yields through irrigation is also demonstrated.

Evaluation

Action by ICOMOS

An ICOMOS-TICCIH expert mission visited the property in February 2001. ICOMOS also consulted TICCIH on the cultural importance of this property.

Qualities

The central stretch of the river Adda provides an interesting insight into human exploitation of water, first for commercial traffic and later for the direct benefit of industry by providing mechanical power by means of water-wheels and then generating electricity in hydroelectric power stations.

Comparative analysis

The very diverse qualities of the middle Adda valley make it difficult to find precise *comparanda*. The canal design and construction are of value in that they utilize the designs of Leonardo da Vinci. However, as navigations (simple canals running alongside rivers) they are not outstanding: there are better examples in Europe – and, indeed, elsewhere in Italy (eg the Naviglio Grande).

Similarly, the concentration of industry along a river is interesting, but hardly unique. The Adda complex does not stand comparison in terms of historical significance with the Derwent Valley in England (nominated for the World Heritage List in 2001), which is notable for the pioneer work

of Richard Arkwright and the birthplace of the modern factory. In any case, the most significant industrial site in the valley, Crespi d'Adda, is already on the World Heritage List.

When the overall valley is considered as a cultural landscape, it is once again possible to point to numerous other river valleys that show similar characteristics and have similar historical trajectories.

In its meeting in June 2001 the Bureau decided that this nomination should be referred back to the State Party, to allow it time to supply additional information. Supplementary documentation was promptly provided and studied by ICOMOS. This took the form of a detailed and somewhat forcefully worded rebuttal of the arguments of ICOMOS for recommending rejection of the nomination. It is the work of a single author, Professor Edo Brichetti. Among the points made in this document it is asserted that the ICOMOS evaluation lacked scientific foundation, demonstrated an inadequate knowledge of the site, was internally inconsistent, was in contradiction to the main European canal experts (including the President of TICCIH), failed to take full account of the cultural and historical development of the industrial heritage in this area, cursorily dismissed the importance of Leonardo da Vinci, and ran counter to the most recent recognition by the World Heritage Committee of the importance of the industrial heritage. Professor Brichetti's report ends by recapitulating the justification for the inscription of this property on the World Heritage List

This documentation was studied with great care by ICOMOS. It remains, nevertheless, of the opinion that a convincing case for this landscape having "outstanding universal value" has not been made. Most of the supplementary documentation is simply a recapitulation of the material in the nomination dossier, expressed in more vigorous and emphatic terms. The strongest argument is related to the application here for the first time of the principles of water management developed originally by Leonardo da Vinci. It is relevant to mention that the Medio Adda system does not appear in the International Canals Study, prepared for ICOMOS by TICCIH.

ICOMOS Recommendation

That this extension should not be approved.

Bureau Recommendation

That this nomination should be *referred back* to the State Party to allow it time to supply additional information, so that the extension may be reviewed at the Extraordinary Bureau of the World Heritage Committee in Helsinki.

ICOMOS, November 2001

Alto Douro (Portugal)

No 1046

Identification

<i>Nomination</i>	Alto Douro Wine Region
<i>Location</i>	Douro Region, Trás-os-Montes e Alto Douro
<i>State Party</i>	Portugal
<i>Date</i>	30 June 2000

Justification by State Party

The Alto Douro represents a unique example of people's relationship with the natural environment: it is a monumental combined work of nature and man. First, the river dug deeply into the mountains to form its bed. Then people adapted the steep hillsides for the cultivation of the vine. Using methods and means acquired over the ages, they scarified the land and built terraces supported by hundreds of kilometres of drystone walls. With great acumen and creative genius they mastered the physical constraints of the natural environment and exploited the opportunities presented by the climate and the nature of the soil. Thus was born one of the most ancient winemaking regions in the world, one that produces a universally acclaimed wine designated "Porto."

The justifications for the inscription that we feel are most relevant, are:

Natural elements: the narrow valleys, the steep slopes; the paucity of water, the scant rainfall; the diversity of natural habitats, the transition from the Atlantic to the Mediterranean; select Mediterranean crops: grapes, olives, and almonds; the ephemeral: light and colour, sound and silence and smells

Cultural elements: land-use: the structure of the landscape, the dominant vineyards, the human settlements and the fabricated soil, or anthroposoil; access (the river Douro and the railway); cultural landmarks (the *quintas* and the *casais*); religious structures; and the walls.

The boundaries of the nominated property define the exact territory that is simultaneously 1. truly representative of the nature of the Demarcated Douro Region and its three sub-regions, from the most Atlantic to the most Mediterranean, 2. most consistently enclosed the majority of the most significant assets, and 3. best preserved overall.

The Alto Douro's claim of outstanding international value is further supported by three of the six cultural criteria:

Alto Douro exhibits an important interchange of human values over a span of time within a specific cultural area. The property is a continuing, organically evolved cultural landscape, truly representative of the Demarcated Douro Region. It reflects specific techniques of sustainable land-use, those of both the past and the present, alongside a set of significant natural habitats typical of a Mediterranean environment.

Criterion ii

Alto Douro is an outstanding example of a technological landscape that illustrates several significant stages in human history. Here, in spite of nature's hostility to human settlement, man adapted Mediterranean crops, particularly vines and olive and almond trees, and planted them on terraces fashioned from the steep rocky slopes. Changes in the several methods employed over the centuries are evident in the landscape.

Criterion iv

Alto Douro is an outstanding example of a traditional human settlement and land-use that has become vulnerable under the impact of irreversible change. Although its geomorphological nature and its climate do not invite human settlement, the vine – as well as the olive, the almond, other fruits and cereals – has sustained a dynamic economic activity.

Criterion v

Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the definition in the *Operational Guidelines for the Implementation of the World Heritage Convention*, para. 39, it is also a *cultural landscape*.

History and Description

History

Recent archaeological discoveries have revealed the presence of very ancient human settlements in the more sheltered valleys of the Douro and its tributaries and in neighbouring mountains. The great many Palaeolithic rock carvings found in the extreme eastern area of the Demarcated Douro Region between the valleys of the rivers Côa and Águeda and Douro represent a cultural aggregate that itself is of outstanding universal value.

Seeds of *Vitis vinifera* have recently been found at the 3–4 thousand year old Buraco da Pala Chalcolithic archaeological site near Mirandela. However, the more significant relics of viticulture and winemaking that have been uncovered date to the Roman occupation and particularly to the end of the Western Empire (3rd and 4th centuries AD). At the beginning of the Christian era, the Romans redefined all the land-use and restructured the economic activities in the entire valley of the Douro. From the 1st century onwards, they either introduced or promoted cultivation of vines, olive trees and cereals (the "cultural trilogy of Mediterranean agriculture"), exploited the numerous sources of mineral water, mined minerals and ore, and built roads and bridges. One of the most important rural sanctuaries in Europe (Panóias, near Vila Real) shows traces of native, Roman, and oriental religious cults.

From the beginning of the Middle Ages, until just before the birth of Portugal as a nation in the 12th century, the valley of the Douro was ruled in turn by the Suevi (5th

century), the Visigoths (6th century), and the Moors (8th–11th centuries). This opening of the region to a communion of assorted, continuously overlapping, cultures is reflected in the traditional collective imagination. The victory of the Christians over the Moors in Iberia does not appear to have interrupted the Douro valley's long-standing tradition of interracial cross-breeding and cultural acceptance.

The valley continued to be occupied. Viticulture increased during a period of the establishment and growth of several religious communities whose importance to the economy was especially noteworthy from the mid-12th century onwards, namely the Cistercian monasteries of Salzedas, São João de Tarouca, and São Pedro das Águias. They invested in extensive vineyards in the best areas and created many notable *quintas*. The end of the Middle Ages saw an increase in population, agriculture, and commercial exchange as towns and cities grew, particularly walled towns such as Miranda and Porto. Long-distance trade flourished, namely the shipping of products from the region down river to the city of Porto, linked with the major European trading routes. The rising demand for strong wine to supply the armadas led to a new expansion of the regional vineyards, particularly in those areas that were rapidly becoming famous for the quality of their wine.

From the 16th century onwards, the making of quality wines for commercial purposes assumed an increasing importance. Viticulture continued to expand throughout the 17th century, accompanied by advances in the techniques for producing wines and increased involvement in European markets for wine. The first reference to "Port Wine," in a shipping document of wine for Holland, dates to 1675. This period marked the onset of a great volume of trade with England that benefited greatly from the wars between Britain and France. Port rapidly dominated the British market for wine, overtaking those from France, Spain, and Italy. The 1703 Treaty of Methuen between Portugal and England set the diplomatic seal of approval on this trade and granted preferential rights to Portuguese wines. Throughout the 18th century, the fact that the sale of fortified wines from the Douro depended on the British market was reflected by adapting the product to the taste of this market and, at the same time, by a rapid increase in the number of British wine merchants. The British Factory House was founded in Porto in 1727.

Conflicts arose between these commercial interests and the Douro farmers. The latter were forced to accept continuously lower prices, together with the demand for darker, stronger, sweeter wines with a higher alcohol content. The State therefore regulated the production and trade of this vital economic product, initially with the creation, by Royal Charter on 10 September 1756, of the *Companhia Geral da Agricultura das Vinhas do Alto Douro*. The productive region was formally marked out. Its entire perimeter around the vineyards was carefully demarcated by 335 large rectangular, flat, or semi-circular granite markers. The word *FEITORIA* and the date on which each was placed *in situ* (usually 1758, occasionally 1761), was carved on the side facing the road.

This first demarcation represents an early manifestation of unmistakably contemporary practices. It included making an inventory and classifying the vineyards and their respective wines according to the complexity of the region. It created institutional mechanisms for controlling and

certifying the product, supported by a vast legislative framework.

The first demarcation enveloped the traditional wine-growing area, mainly in the Lower Corgo. Not until 1788–92 did the vineyards expand to the Upper Douro. The surge of commercial vineyards eastwards of the gorge, however, only occurred following epidemics of diseases of the vines (especially oidium in 1852 and phylloxera in 1863) that devastated the vines in the traditional wine-growing areas. The regime that relaxed control over production and trade (1865–1907) and the construction of the Douro railway line (1873–87) encouraged this expansion. When in 1907 the State undertook a profound revision of the legislation regulating the winemaking sector, the new demarcation covered the entire area under vines, including the Upper Douro, as far as the Spanish border.

Concurrently, in 1876, Douro farmers began to recover the vineyards that had been damaged by phylloxera. As throughout Europe, the definitive solution only appeared with the introduction of American rootstock on which domestic varieties of vines were grafted. Recovery of Douro viticulture and the introduction of new techniques for planting and training the vines has had a significant impact on the landscape due to the construction of wider *socalcos* with taller and more geometric walls that are distinctly different from the narrow pre-phylloxera terraces and their lower, tortuous walls.

Throughout the 20th century the Demarcated Douro Region has been subject to several regulatory models. The Interprofessional Committee for the Demarcated Douro Region (CIRDD) was instituted in 1995. The principal regulatory mechanism for production continues to be the system for distributing the *benefício*, according to which the amount of must that is authorized for making port wine is allocated according to the characteristics and quality of the respective vines. Mechanization was introduced, somewhat hesitantly, in the 1970s to help with some of the more arduous tasks in the vineyard such as the scarifying of the land and bringing with it new wide, earth-banked vineyards and "vertical planting" along steeper hillsides that no longer require building walls to shore up the terraces. The aesthetic impact of these new vineyards on the landscape varies, yet the mountain viticulture of the Douro continues to be carried out almost totally by hand. The rocky nature of the soil, the steep hillsides, and the existing terraces themselves are extremely difficult to adapt to the use of machines, though the product, port wine, is today mostly made in modern, totally mechanized wineries.

Description

Protected from the harsh Atlantic winds by the Marão and Montemuro mountains, the nominated property is located in the north-east of Portugal, between Barqueiros and Mazouco, on the Spanish border. The Mediterranean climate in this landscape of schist and steep hills far from the sea, adds a unique flavour to the feeling of *genius loci*. The popular saying about it is: "Nine months of winter and three months of hell."

The terraces, by blending into infinity with the curves of the countryside, endow this property with its unique character. Seen from above, the vineyards look like a series of Aztec pyramids.

The Douro and its principal tributaries, the Varosa, Corgo, Távora, Torto, and Pinhão, form the backbone of the nominated property, itself defined by a succession of watersheds. The Douro itself is dammed, so its valley through the property now contains a long reservoir 100–200m wide. However, although this change is important from the ecological and visual points of view, the flooded part of the valley was neither occupied nor cultivated. The boundaries correspond to identifiable natural features of the landscape – watercourses, mountain ridges, roads, and paths.

The area of nominated property is:

Alto Douro Wine Region	24,600ha
Buffer zone	225,400ha
Demarcated Douro Region	250,000ha

The landscape in the Demarcated Region of the Douro is formed by steep hills and boxed-in valleys that flatten out into plateaux above 400m. The Douro valley is now water-filled behind dams. Valley sides slope at over 15%, particularly in the Lower and the Upper Corgo. Soil is almost non-existent, which is why walls were built to retain the manufactured soil on the steep hillsides. It has been created literally by breaking up rocks and is known as “anthroposoil.”

The most dominant feature of the landscape is the terraced vineyards that blanket the countryside. Throughout the centuries, row upon row of terraces have been built according to different techniques. The earliest, employed during the pre-phylloxera era (pre-1860), was that of the *socalcos*, narrow and irregular terraces buttressed by walls of schistous stone that were regularly taken down and rebuilt, on which only one or two rows of vines could be planted.

The long lines of continuous, regularly shaped terraces date mainly from the end of the 19th century when the Douro vineyards were rebuilt, following the phylloxera attack. The new terraces altered the landscape, not only because of the monumental walls that were built but also owing to the fact that they were wider and slightly sloping to ensure that the vines would be better exposed to the sun. Furthermore, these terraces were planted with a greater number of rows of vines, set more widely apart, in order to favour the use of more technical equipment such as mule-drawn ploughs. The great majority of the hundreds of kilometres of walls that cover the riverbanks today date from that late 19th/early 20th century stage in the evolution of the Douro landscape. In the Lower and Upper Corgo a great many post-phylloxera terraced vineyards represent up to 50% of all the area under vine in each parish. Transforming the natural environment, clearing the land, and restructuring the hillsides required a great of labour that was brought in from outside.

The more recent terracing techniques, the *patamares*, and the vertical planting that began in the 1970s have greatly altered the appearance of this built landscape. Large plots of slightly sloping earth-banked land, usually planted with two rows of vines, were laid out to facilitate mechanization of the vineyard. Trials of other systems are continuing with a view to finding alternatives to the *patamares* and to minimize the impact of the new methods on the landscape. Among the expanse of vineyards remain areas, nevertheless, which have survived untouched since the days of the phylloxera, abandoned *socalcos* known as

mortórios. These have become overrun with native scrub or olive trees. More continuous, regular olive groves have been planted on either side of the land under vine. In the Upper Douro, olive and almond trees represent the dominant crops, although these are slowly being replaced by vines. Along the lower banks of the Douro or on the edges of watercourses on the hillsides are groves of orange trees, sometimes walled. On the heights, beyond that altitude at which vines can grow, the land is covered with brushwood and scrub and, here and there, a coppice of trees. Woods are still to be found in places on the ridges and amongst the crags.

During the long, hot, dry summers that afflict the region, water used to be collected in underground catchments located on the hills or even within a vineyard. From there it was channelled along stone gutters to storage tanks, usually made of granite, scattered throughout the *quinta*. In contrast, the winter rain gushes down the hills in torrents, so underground conduits and drainpipes attached to the top of retaining walls try to prevent it destroying the *socalcos*.

Grain-mills stood next to the watercourses but there are few settlements in such a disease-ridden location. Above, characteristically white-walled villages, medieval in origin, and *casais* are usually located midway up the valley sides. Around an often imposing 18th century parish church, rows of houses opening directly on to the street to form a web of narrow, twisty roads with notable examples of vernacular architecture, now occasionally tarnished by inappropriate recent building. The Douro *quintas* are major landmarks, easily identified by the groups of farm buildings and wineries that crowd around the main house. Although notably present throughout the region, they are particularly evident in the Upper Corgo and the Upper Douro.

No churches or shrines of any significant value lie in the nominated property, although the landscape is dotted with small chapels located high on the hills or next to manor houses. Some chapels and shrines were erected on the site of ancient settlements, usually hillforts. Furthermore, Douro folklore is a compendium of tales and legends that associate elements of Celtic, Arab, and Christian culture.

Management and Protection

Legal status

The cultural landscape of the Alto Douro is community property. The various elements that make up this landscape, however, are generally privately owned by a great many individuals, mostly local residents. Today, 48,000ha of vines are distributed over more than 100,000 plots, as well as many tens of thousands of hectares of olive groves and other crops.

The region does not enjoy a specific juridical protective statute, as Portuguese jurisprudence makes no mention of cultural landscapes. The instruments governing the land-use and protection of the landscape are the Municipal Master Plans, created under the terms of Decree-Law No 69 of 1990. All such Plans for all the townships in the municipalities in the Demarcated Douro Region are fully in force. These plans consist of three essential sections: the general cartographic map, the updated map of restrictions, and the regulations. It is now up to the Intermunicipal Plan for the Alto Douro Wine Region to integrate the various plans.

Management

Management interventions in the Demarcated Douro Region have rapidly increased over the past few years as it has come to be realized that increasing pressures require active management to preserve and safeguard the landscape over and above its function of producing wine. The regime currently regulating the region, as fine-tuned over the centuries, is centred on regulating, licensing, and controlling planting and cultivation of the vineyards. The process of progressively regulating local supervision and management of the land has culminated with the approval, during the 1990s, of the Municipal Master Plans. These are centralized and uniform instruments for regulating and managing the use and occupation of the land, at the county level.

Key elements are:

- The Intermunicipal Plan for the Alto Douro Wine Region (PIOT), directed at conserving and improving the living, evolving cultural landscape;
- Alto Douro Bureau, consisting of a technical management assistance staff, who will act in close co-operation with an Association to Promote the Alto Douro World Heritage;
- The Association to Promote the Alto Douro World Heritage, an entity devoted to encouraging private and public entities interested and/or involved in the ownership of assets, in preserving, safeguarding, improving, and promoting the Alto Douro.

Responsibility for the management of the territory and the management and protection of its territorial assets and local infrastructures rests with the municipalities. The proposed property covers thirteen municipalities, plus an additional eight that are part of the buffer zone. Responsibility for the management of the vineyards and all agricultural and forestry land, as well as private buildings, rests with their owners.

When it is created, the Alto Douro Bureau will undertake to safeguard and protect the cultural landscape of the Alto Douro by co-ordinating the technical management assistance that is given at a local level, in direct collaboration with the municipalities and the Association to Promote the Alto Douro World Heritage.

Several EU-based plans currently in force directly address the Alto Douro landscape. Municipal Master Plans exist for each of the eight municipalities in the buffer zone and several Urban Plans, namely for the county seats. Furthermore, three major Plans are currently in the final stages of their preparation: the Plans for the Carrapatelo Reservoir, the Bagaúste Reservoir, and the River Douro River Basin. The Intermunicipal Plan for the Alto Douro Wine Region is expected to be concluded by the end of 2001.

Finance, and the resources funding makes available, come from a mixture of European, state, and local sources. It is anticipated that current programmes will be completed and similar funding will enable similar programmes to continue in future. The PRODOURO Programme (1996–99), for example, will continue from 2000 to 2006 through the Third Community Support Framework. Similarly, the Operational Economic Programme will undoubtedly, as part of the section for tourism, aim to strengthen the Douro's position as an alternative tourist destination.

The process involved in nominating the Alto Douro for the List of World Properties has itself stimulated interest in developing facilities for tourism. This will most probably result in the creation of an Integrated Structural Programme for Regional Tourism in the Alto Douro that will supply a structure for the many private and public projects for tourism to be developed in the region over the next few years. In effect, some of these projects have already been put into practice, such as the Port Wine Route, Medieval Routes, and the Route of the Romanesque, Tourist and Historic Trains of the Douro, among others. The flow of visitors to the region, although significant, is attenuated by the size of the property and, according to the nomination, has so far not created any major problems (though four are incidentally explicit and others well known elsewhere are implicit), but there is no serious discussion of the likely nature of an expanded tourism or of its long-term impact on the character of the area and on management requirements.

The Alto Douro already offers some facilities for visitors, such as Municipal Tourist Bureaux. It is, however, essential that the Alto Douro Wine Region Landscape Management Programme address the creation of an integrated network of all these services. From the viewpoint of the tourist market, the Douro has gradually acquired a degree of national and international fame as a new destination, and the number of visitors is consistently rising at 10–20 % per annum. Cruises to the Douro Valley, for example, are attracting 100,000 users annually; Mateus Palace is attracting 40,000 visitors/year; the Festival of Our Lady of Remedy, Lamego, attracts 10,000 visitors. Local promoters have substantially increased the local hotel facilities, especially at the top of the range. Existing structures can, however, support a sustained growth in tourism if all-year-round use is promoted.

The principal objectives of the Alto Douro Wine Region Landscape Management Programme are to improve the landscape and its patrimonial assets, minimize all interference with the landscape, and raise the quality of the environment and the standard of living in the area. It includes schemes, for example, to improve features of the landscape such as walls and terraces, to survey the heritage, to stimulate rural activities such as crafts, to facilitate the reception of visitors, to organize festivals and country fairs, and, under "Research and Development, Education, Training and Support," to provide local courses on how to interpret the landscape. The Plan also entails the Alto Douro Bureau's implementation of more specific management and conservation tasks, including monitoring. The Intermunicipal Plan for the Alto Douro Wine Region will reveal and formulate a series of relevant steps to monitor the state of conservation of the landscape. Amongst the principal indicators, the physical ones are the most noteworthy: the walls and their state of conservation, the methods for creating vineyards, the associated planing of other crops, the trees that are used to edge properties with vertical vines, the elimination or reduction of intrusions on the landscape, and the registration and conservation of the vernacular heritage.

Conservation and Authenticity

Conservation history

Conservation as a "heritage concept" has scarcely been carried out in this area until recently. With everything

subordinate to wine-growing, functional need has driven maintenance. As a result, the state of conservation of the Alto Douro, in particular of the majority of supporting walls, is remarkably good, and clearly superior to that of the buffer zone. There, although a considerable amount of land under vine in *quintas* and *casais* and considerable vernacular heritage exist, the settlements in particular have suffered the loss of much of their original character.

Authenticity and integrity

The cultural landscape of the Alto Douro is an outstanding example of humankind's unique relationship with the natural environment. Its nature is determined by wise management of limited land and water resources on extremely steep slopes. It is the outcome of permanent and intense observation, of local testing, and of the profound knowledge of how to adapt the culture of the vine to such extremely unfavourable conditions. The landscape is an expression of people's courage and determination, of their acumen and creative genius in understanding the cycle of the water and the materials, and of their intense, and almost passionate, attachment to the vine. The setting, in the landscape of several forms of training the vines, is an outstanding example of human ability to master physical constraints, here actually creating the soil and building an immense and extensive construct of buttressed *socalcos*. It is this acumen that enabled a multitude of anonymous artists to create a collective work of land art.

This landscape, however, is a whole and it is in constant evolution, now with new terrace-forms reflecting the availability of new technology. It is a diverse mosaic of crops, groves, watercourses, settlements, and agricultural buildings, arranged as *quintas* (large estates) or *casais* (small landholdings). Today they maintain the landscape's active social role in perpetuating a prosperous and sustainable economy. Popular identification with the Region is reinforced by the congruence between its area now and that of the original demarcation.

The Alto Douro Wine Region has, and undoubtedly always had, a different meaning according to the perspective of each interest group. It is not looked at in the same manner by the parishioner who lives in the middle of the vineyard that has shaped his horizon since birth and which provides his sole source of income, or by the man from the mountain who remembers the days when the *roga* joyfully descended the hills to the *Terra Quente* to spend a few weeks working for the vintage. The Douro equally belongs to the small shopkeepers and middlemen in the region, to the owners of the *quintas* – both Portuguese and foreign – who stay there at different times in the year, to the shippers in the Douro and in Vila Nova de Gaia who are engaged in the wine trade, and to all those people in Portugal and the world over who have learnt to celebrate each great moment in their lives or in the destiny of nations with a glass of port wine.

Yet the man-made landscape of so many significances is visibly there, a series of impressive views but also a seriously complex machine, still working. The Alto Douro is of outstanding universal value both as a monumental construct in a demanding environment and as the unique setting for an exceptional product. The general state of preservation of this historic landscape is good. Alterations do exist, but they do not seem of sufficient importance to impair its integrity. Some terraces suffered badly during torrential rain in the later part of January 2001, and a

special effort will be needed to restore parts of vineyards to working order.

Evaluation

Action by ICOMOS

An ICOMOS expert mission visited Alto Douro in February 2001. ICOMOS also consulted the ICOMOS-IFLA International Scientific Committee on Historic Gardens and Landscapes.

Qualities

The landscape is visually dramatic, a very unnatural creation. It is witness to the huge efforts of many generations of almost entirely anonymous farmers and winemakers to master the physical constraints of a natural environment in order to create conditions favourable to the production of wines (and other crops) whose quality and distinctive characteristics have enjoyed worldwide acclaim since the 17th century. Specialization in the making of quality wines and the early assimilation of Douro wines by international circuits exposed, early on, the Douro valley to a cosmopolitan system of relations.

Wine from the Douro, especially port wine, represents a collective cultural creation. For countless generations, the inhabitants of the Alto Douro developed specific techniques for cultivating the vine and making wine, many of which were introduced in Roman times and had been perfected by the Middle Ages by religious communities. From the Middle Ages onwards the Douro valley has attracted huge numbers of outside workers, and it is in part very much their monument. The role of the Douro valley as both destination and corridor of peoples and cultures endures to this day, not least in the traditional visual and oral manner of expression of its people.

Comparative analysis

The Demarcated Douro Region is one of the oldest of all the historic winemaking regions in the world. It was the very first institutional model for organizing and controlling a winemaking region. Contrary to that which occurred following earlier demarcations of other winemaking regions (Chianti 1716, Tokay 1737), demarcation of the Alto Douro was accompanied by mechanisms for controlling the quality of the product supported by a legislative framework and a system for classifying and qualifying the wines. In many ways, the winemaking legislation of this region led the way for the modern legislation adopted by many wine-producing countries.

All the major mountain winemaking regions of the world, including the Demarcated Douro Region, are members of the *Centre de Recherches pour la Viticulture de Montagne et/ou en Forte Pente* (CERVIM). In comparison with them, Alto Douro is the most extensive, the most historical, and the one with the greatest continuity and the greatest biological variety in terms of the vines that have been perfected there.

Of all the historic mountain vineyards in Europe, the Alto Douro with its 36,000ha of steeply sloping vineyards is the most significant example of this type of viticulture. It represents about 18% of all European mountain vineyards registered with CERVIM.

Other winemaking regions already inscribed on the World Heritage List are Cinque Terre (Italy), Saint-Émilion (France), and the Wachau in Austria, all cultural landscapes. Future likely nominations are the Pico Wine Region in the Azores (Portugal) and Le Vignoble Champenois (France).

The Alto Douro demonstrates, particularly as regards the *socalcos*, its original formula for terracing to create vineyards. Motivation was functional but, particularly in this case, the resultant landscape, as at Cinque Terre, can be seen as the expression of a centuries-old toil transforming an inhospitable land of rock and shrubs into a fertile winemaking region.

All the CERVIM vineyard areas share – Alto Douro dramatically – the guideline for quality winemaking rooted in Roman viticulture and best-expressed in the saying "Bacchus loves rugged hillsides." The Douro valley is in fact universally acclaimed as the source of one of the finest fortified wines on earth, port wine.

Yet, while wine-production has contributed significantly to the national and regional economy, paradoxically the locality only benefits from one-fourth of the added value generated by this product. This, as compared to the majority of other winemaking regions, explains the marked dissimilarity between the opulence of the landscape and the humble buildings in the settlements.

As an agricultural landscape, Alto Douro demonstrates its own unique process for optimizing the ecological conditions under which water resources are very carefully controlled to produce a crop. In that sense, it is comparable to another World Heritage cultural landscape, the rice-growing terraces of Banaue in the Philippines, a masterpiece of simple montane hydrology producing a dramatic landscape.

ICOMOS comments and recommendations for future action

ICOMOS considers that the Alto Douro does not particularly exhibit "an important interchange of human values" (criterion ii). Much more appropriate is criterion iii, for it very much provides an exceptional testimony to a living cultural tradition. While undoubtedly an outstanding example of a type of landscape, it does not, however, illustrate particularly well "significant stages in human history" (criterion iv) because, despite the length of history which has passed in this area, much of the visible physical landscape is of late 19th/20th century date. On the other hand, it could still qualify under criterion iv if the phrase 'technological landscape' is allowed from the wording of the criterion, for that is exactly what it is, a landscape reflecting responses to changing technology in the context of an evolving relationship between man and the natural elements. ICOMOS therefore recommends that this nomination should be considered, as was that of the closely comparable St Emilion, under criteria iii, iv, and v.

ICOMOS appreciates the attractions of promoting tourism as a relatively new phenomenon in the area, and would encourage the authorities to be proactive as well as well informed and as sensitive as possible about the range of possible consequences arising from such promotion. Critical are such concepts as, for example, Planning Control and "appropriateness" in terms of scale, design, and materials for the various new facilities like hotels and visitor centres envisaged as necessary in the visually dramatic and sensitive landscape of this nomination.

However, as many other areas have experienced, tourism can bring far more than ugliness to a landscape; it can also erode the social fabric, something of great concern when a cultural landscape such as this needs large numbers of local residents, together with their skills and dedication, to keep the landscape working. Without a firm grasp of such consequences of tourism in a poor, deeply rural area, and a well informed management sensitivity about, in effect, sociology and the aesthetics of landscape development, experience suggests that this area might well be seriously compromised in 25 years' time. That the process, of both degradation and management reaction has started is acknowledged in the nomination, and it is crucial that, should this nomination be approved, local awareness and resources are ready to deal with the extra pressures.

No management plan specific to the nominated area accompanied the nomination nor was one proposed in the nomination but the ICOMOS mission found that one was in active preparation. ICOMOS recommended that this address the issues of controlling development in the buffer zone and maintaining the characteristic features of the infrastructure of the landscape, notably the narrow, stone-paved local roads, the vernacular architecture, and, above all, the ability to maintain and rebuild the stone revetments of the terraces. So far the changes in viticultural practice, including making fields up and down rather than always along the contours, have not affected the landscape adversely; indeed, they have added to its time-depth and visual variety. It is crucial that the further development of this "continuing landscape," for example in response to technical change, occurs in the same mode.

At its meeting in June 2001 the Bureau recommended that this nomination be referred back to the State Party, to allow ICOMOS an opportunity to review the recently received integrated management plan. This review has been carried out and ICOMOS is very impressed by the care that has been taken over its preparation, which takes into account the points raised above. The Alto Douro Plan, which is very similar to that for the Côa Valley National Park, establishes regulatory mechanisms for the municipalities concerned and coordinates their individual local plans. It also includes a well devised action programme and a financial plan.

There is one element, however, that is missing. The plan refers only to the core zone nominated for inscription and makes no provision for protection and management of the buffer zone. Whilst ICOMOS does not wish to make this a reason for recommending deferral of this nomination, it suggests that the Committee request the State Party to provide a situation report for its meeting in 2003, commenting on the implementation of the plan and its effectiveness and also setting out details of the measures applied in the buffer zone.

Brief description

The Alto Douro wine region produces a world commodity, port, a wine of a quality defined and regulated since 1756. Centred on the valley of the River Douro, now flooded, the region is characterized topographically by sloping vineyards arranged in various terraced configurations. Most date from after the phylloxera disease of the mid-19th century, but some are earlier – wine-growing here goes back at least to Roman times – and the 20th century added to the range of types of vineyard and terrace in response to changing

technology and the constant needs to control water and prevent erosion. The result is a visually dramatic landscape still profitably farmed in traditional ways by traditional landholders.

Statement of Significance

Wine has been produced in the Alto Douro for some two thousand years, and since the 18th century its main product, port wine, has been famous for its quality throughout the world. This long tradition has produced a cultural landscape of outstanding beauty that is at the same time a reflection of its technological, social, and economic evolution.

ICOMOS Recommendation

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

Criterion iii The Alto Douro Region has been producing wine for nearly two thousand years and its landscape has been moulded by human activities.

Criterion iv The components of the Alto Douro landscape are representative of the full range of activities associated with winemaking – terraces, *quintas* (wine-producing farm complexes), villages, chapels, and roads

Criterion v The cultural landscape of the Alto Douro is an outstanding example of a traditional European wine-producing region, reflecting the evolution of this human activity over time.

It is suggested that the Committee request the State Party to provide a situation report for its meeting in 2003, commenting on the implementation of the plan and its effectiveness and also setting out details of the measures applied in the buffer zone.

Bureau Recommendation

That this nomination be *referred back* to the State Party, to allow ICOMOS an opportunity to review the recently received integrated management plan for the Alto Douro Wine Region.

ICOMOS, November 2001

Falun (Sweden)

No 1027

Identification

<i>Nomination</i>	The historic cultural landscape of the Great Copper Mountain in Falun
<i>Location</i>	Dalarna
<i>State Party</i>	Sweden
<i>Date</i>	26 June 2000

Justification by State Party

The Great Copper Mountain in Falun and its cultural landscape are an outstanding example of a technological ensemble with an historical industrial landscape and unique type of buildings and settlements.

The Falun Copper Mine, otherwise known as the Great Copper Mountain (*Stora Kopparberget*) is the oldest and most important mine working in Sweden and the world, and of great international significance. It is one of the world's most remarkable industrial monuments. The manmade landscape surrounding the mine is very remarkable and unique by Swedish and international standards. The Falun mine has developed and influenced international mining technology and played a very important part in the world economy.

Criterion iv

Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. It is also a *cultural landscape* as defined in paragraph 39 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

History and Description

History

The oldest surviving document relating to the Great Copper Mountain was issued in 1288, but scientific studies suggest that its origins date back to the 8th or 9th century. This was a period when there was considerable trade between Germany and Sweden and Germans settled in Sweden, and so it is likely that the Swedish industry was upgraded at this time under German influence. There is considerable evidence of this in the form of the technology being applied, such as fire-

setting and mine drainage, the origins of which can be traced to continental sources such as the Harz Mountains.

A charter of 1347 led to the creation of a distinctive manmade landscape. Miners were granted the right to establish new settlements in the forests without paying any compensation to the landowners. At the same time they were exempted from land or forest taxes and their properties could pass to their children.

The 15th century was a period of unrest and armed conflict. The "free miners" of the Great Copper Mountain played their full part in this, protesting against trade restrictions and taxation. This culminated in a major rising in 1531–34, as a result of which several distinguished citizens of Falun were executed on the orders of Gustavus Vasa.

During the 16th and 17th centuries the Great Copper Mountain was the mainstay of Sweden's economy, enabling it to become one of the leading European powers. By the mid 17th century Falun was producing 70% of the world's output of copper. It was exported all over the world – for the roofs of the Palace of Versailles or for Spanish coinage, for example. The revenue from copper financed the disastrous involvement of Sweden in the Thirty Years' War (1618–48).

The Great Copper Mountain was organized as a corporate operation, with free miners (*bergsmän*) owning shares (*fjärdeparter*) proportional to their interests in copper smelters. The 1347 charter covered, *inter alia*, ore extraction, settlement, and trade within the region. It may justifiably be considered to be the precursor of the later joint stock companies, and it is often referred to as "the oldest company in the world."

A cultural region known as Kopparbergslagen developed around Falun which is unique to Sweden. There were no fewer than 140 copper smelting furnaces in the region at this time, and the free miners had their estates and manor-houses close to the furnaces. The agrarian landscape was dominated by grazing land and wooded pastures. A crop-rotation system with a five-year cycle, known as *lindbruk* or the Falun method, was developed here in the 17th and 18th centuries.

Despite the high level of technology developed and applied in and around the Great Copper Mountain, there were inevitably accidents, and especially in the 17th century, when production was at its most intensive. The most dramatic was that in 1687, when a massive landslide led to the creation of the Great Pit (*Stora Stöten*) there.

The town of Falun was founded in the 17th century: its population of some six thousand people made it the second largest city in Sweden at that time. The formal 1646 layout survives in the three districts of Gamla Herrgården, Östanfors, and Elsborg.

The copper furnaces were water-powered from as early as the 13th century, and the earliest water-powered hoisting gear was built in 1555 at Blankstöten, one of the open-cast mines. Ponds, dikes, and canals were constructed to supply the furnaces and the mines; the oldest surviving dam dates from the 14th century.

Many foreign scientists and businessmen visited Falun in the 17th, 18th, and 19th centuries, and all were very impressed by the enormous size of the mine, the smoke from the furnaces, and the remarkable structures related to the copper industry. The Great Copper Mountain became Sweden's first

tourist attraction: the first recorded use of the word "tourist" is from 1824.

This was a leading centre of technological progress from the 16th century onwards. Among those who worked there and developed their research were the mechanical engineer Christopher Polhem and the chemist Jöns Jacob Berzelius.

As the demand for copper receded in the 18th and 19th centuries, production was extended to other mineral resources of the Great Copper Mountain, including sulphur, lead, zinc, silver, and gold. In 1888 the old company was reconstituted as a modern limited company, Stora Kopparbergs Bergslags AB. The old copper furnaces were abandoned and large new factories built. Outside Falun itself the company had been acquiring iron mines and setting up iron and steelworks, and it became one of the major Swedish enterprises in this field. Another area was that of forestry, producing paper and sawn timber.

The company celebrated its seventh centenary in 1988. However, by 1992 all the viable ore deposits had been extracted and so mining ceased: the last round of shots was fired on 8 December 1998. The only industrial activity remaining is the production of the traditional and very distinctive Falun (Swedish) red paint, used for the protection of the wooden buildings of Sweden and other parts of Scandinavia.

Description

The property proposed for inscription consists of the Great Copper Mountain and several areas around it which make up Kopparbergslagen. The core area is the historic mine at Falun with associated facilities above and below ground. The other areas contain many furnace sites, waterways, ponds, canals, and ancient mining settlements. There is a specific landscape of slagheaps and furnace remains to the north of the mine. To this should be added the town of Falun with its 1646 gridiron street plan and the three districts of wooden houses (Gamla Herrgården, Östanfors, and Elsborg). Four of the areas are free miner landscapes: the area north of Lake Varpan between Österå and Bergsgården, the area surrounding Lake Hosjö, the Sundsbornsån valley, and the Knivaån valley from Staberg to Marieberg. Also included is Linnévägen, the well preserved ancient bridle path and cart track leading to the mining town of Röros in Norway and named after the famous Swedish naturalist Carl von Linné (Linnaeus), who travelled along it in 1734.

- The Great Copper Mountain

This consists of the underground mine itself, where operations ceased in 1992, and the enormous pit (Stora Stöten), measuring 300m x 350m by c 90m deep, resulting from a colossal cave-in in 1687. There is visitor access to some of the older parts of the mine, notably the impressive Creutz's Shaft, which is 208m deep and partitioned by what is often called "the highest timber structure in the world." A vast open chamber known as *Allmänna Freden* (Universal Peace) houses a display of historic working equipment.

Above ground the historic mining landscape comprises mine spoilheaps and heaps of "Swedish red," together with historic buildings from the 17th–19th centuries. As mining operations expanded a number of these wooden buildings were moved around.

They include mining installations such as headframes, wheelhouses, powder magazines, tally chambers, administrative offices, workshops, stores, mills, and living

quarters. They date from the late 17th century (Bergmästaregården) to the 20th century. Several have been adapted for alternative use: thus the former administrative building (*Stora Gruvstugan*), built in the 1770s, has been the Mining Museum since 1922. The 20th century Paint Factory is still in use, producing "Swedish red" paint. The most recent building is the Berget Auditorium, designed by Bo Wederfors and awarded the prize for timber architecture of the National Association of Swedish Architects in 1988.

- The furnace landscape

This consists of three large slag heaps lying to the north of the core area: Ingarvshyttan, Sjöfabriksågen, and Hyttberget. Between them are to be found the remains of historic industrial installations such as furnaces, roasting houses and early tracks. Archaeological excavations have been carried out on several of these sites.

- The town of Falun

The oldest surviving building in this planned town, laid out in 1646, is Stora Kopparberg Church, part of which dates from the 14th century. The main square (Stora Torget) is the site of the Kristine Church (1642–60), the Town Courthouse (1647–53), and the head office of the Stora Kopparberg Bergslag Company (1766). Following a major fire in 1761 there was considerable rebuilding, and there is some particularly fine late 17th century buildings along Åsgatan.

Falun also has a number of well preserved old workers' houses at Elsborg, Gamla Herrgården, and Östanfors. The Villastaden district, as its name implies, has some fine early 20th century villa architecture.

- The free miner landscapes

Bergsmanslandskapet, the first of these landscapes, lies to the west of the core area. It consists of spoilheaps, furnace sites, and well preserved early settlements. There is a network of waterways, canals, dikes, ponds, and dam buildings stretching from Igeltjärn in the north-west to the Crown Dikes and the mine in the south-east.

The Österå-Bergsgården landscape to the north-west of the mine, on the western and northern sides of Lake Varpan, contains these two free miner settlements, each of which had some ten copper-smelting furnaces and more than 25 ore-roasting furnaces in the 17th century. This heyday is represented today by enormous slagheaps, furnace chambers, workers' houses, and manor houses. There are some particularly well preserved free miners' homesteads in this area.

Copper furnaces were first recorded (in 1357) in the third area, that of Hosjö. There are many well preserved miners' homesteads, and Linnaeus was married in 1739 at one of these (Sveden), the home of the famous bishop and author Jesper Swedberg and his world-renowned son, the philosopher Emmanuel Swedenborg.

The Sundsbornsån valley, running along the waterways joining Lakes Runn and Toftan to the north of the Hosjö area, is a manmade landscape containing many archaeological remains from the Neolithic period and the Iron Age. There were many copper furnaces here from medieval times until the early 19th century. Once again, there are many fine miners' homesteads of the 18th and 19th centuries.

The fourth area is the Knivaån Valley, on the eastern side of Lake Runn. There is abundant evidence of its mining past.

Staberg is particularly noteworthy for its slagheaps and smelting remains. Of particular importance is Gamla Staberg, a free miner's homestead from around 1700 with a fine Baroque garden that is currently being restored.

Management and Protection

Legal status

The monuments, sites, and landscapes that make up this nominated area are all protected under the comprehensive and interlocking Swedish legislation for cultural and environmental protection. The relevant measures are the following:

- The Cultural Monuments (etc) Act (1988: 950) with Amendments up to and including SFS (1996:529)

All archaeological sites and monuments are given full legal protection. Listed historic buildings are given similar protection, as are ecclesiastical buildings of the established Church of Sweden. Any interventions must receive authorization from the National Heritage Board (*Riksantikvarieämbetet*) in the case of archaeological monuments or the relevant County Administration in the case of built heritage.

- The Environmental Code (1997)

The Code lays down general rules relating to the protection and conservation of the environment. There are two provisions relating to cultural values. First, it specifies fundamental requirements for the use of land and water areas, designed to maintain their cultural values. These are applicable to public authorities as well as private individuals or enterprises. Secondly, it introduces the concept of the cultural reserve. There are considerable restrictions over use and construction in these areas. The Code is regulated by County Administrations. It interacts with the Building and Planning Act 1987 and the associated Ordinance.

- The Planning and Building Act (1987: 10)

This Act (supported by the Planning and Building Ordinance, last updated in February 1997) gives local authorities considerable autonomy in regulating planning and developments within their respective districts. However, the State is given powers to intervene in matters considered to be of national importance where it is adjudged that the Environmental Code has not been properly implemented. So far as cultural heritage is concerned, general requirements are laid down for buildings, sites, and public open spaces. Alterations to existing buildings must take account of structural, historical, environmental, and architectural values. The special characteristics of buildings of historical and architectural importance must be preserved. Local authorities are required to produce and implement comprehensive plans, which are made binding through detailed development plans and/or area regulations.

The entire area covered by the nomination was classified as a series of areas of national interest in 1987 under the provisions of Chapter 3 of the Environmental Code. The Great Pit was protected under the Cultural Monuments Act as a heritage site in 1995 under a resolution of the County Administrative Board. There are currently thirteen archaeological sites and monuments and historic buildings in the nominated area which are also protected as heritage sites

under this Act and four more are being considered for this level of protection. In addition, substantial areas are also protected under the Planning and Building Act. All the areas in the nomination are covered by local authority development plans and area regulations.

Relevant authorities are Dalarna County Administration (*Länsstyrelsen Dalarna*), Falun Municipality, and the Church of Sweden, through the Falun Ecclesiastical Congregation (*Falu Kyrkliga Samfällighet*). Overall supervision of all cultural property is exercised by the National Heritage Board (*Riksantikvarieämbetet*).

Management

Ownership of properties included in the nomination and their management is distributed between Stora Kopparbergs Bergslags AB (the Falun mine, managed by the Dalarnas Museum located in Falun), the Falun Municipality, and individuals (homesteads, town buildings).

Under the terms of the Environmental Code and the Planning and Building Ordinance, a comprehensive plan for the centre of Falun was adopted in 1998, and this is supported by detailed development plans in the other areas, with specific provisions for the protection of buildings and settlements of historical interest. Detailed development plans are also in force for substantial areas outside the nominated area. These are covered by a cultural environment plan for the entire municipality, also dating from 1998. Since 1998 work has been in progress to develop the Falun Mine and Kopparbergslagen as an ecomuseum. This is a joint enterprise of the Municipality of Falun, the Dalarnas Museum, and Stora Kopparbergs Bergslags AB (hereafter referred to as Stora), working with voluntary bodies.

Although mining ceased at Falun in 1992, Stora has respected its obligations vis-à-vis the industrial heritage by maintaining the buildings and the mining environment adjoining the Great Pit, as well as the giant timber wall in Creutz's Shaft. The company has a long-term management plan for all its heritage sites in Sweden, of which Falun is unquestionably the most important.

Although the development plans and those of Stora cover virtually every aspect of the future maintenance and development requirements of the entire area covered in the nomination, there is no overall management plan *sensu stricto*.

Conservation and Authenticity

Conservation history

Swedish industrial companies have long been conscious of the importance of their industrial heritage, and the country probably possesses the largest number of industrial monuments and museums anywhere in the world, covering mining, metallurgy, paper and board production, and engineering. Since 1973 there has been a series of surveys and inventories of cultural properties of all kinds in the area covered by the nomination. The most comprehensive of these was probably the total inventory and documentation of the mine itself and the associated buildings carried out by the company before mining operations ceased. Other important survey and inventory projects have been carried out by the National Heritage Board and the Dalarnas Museum.

In exercising their statutory functions the relevant national and local authorities have ensured that the heritage sites and monuments have maintained a high level of conservation.

Stora has ensured that all the properties in its ownership have conformed with statutory requirements in this respect.

Authenticity and integrity

The authenticity of individual buildings and monuments within the nominated area is high. This is the result of the stringent conditions laid down in the relevant legislation regarding maintenance and the selection of materials for restoration and implemented by the national, county, and municipal agencies involved.

The integrity of both the Great Pit and its associated buildings and the urban fabric of the old part of Falun has been sedulously maintained by the application of statutory regulations, reinforced by a strong resolution on the part of the residents to ensure the survival of the evidence of Falun's great industrial heritage.

Evaluation

Action by ICOMOS

An ICOMOS-TICCIH expert mission visited Falun in January 2001. ICOMOS consulted TICCIH experts on the cultural significance of this property.

Qualities

The Great Copper Mountain and its cultural landscape at Falun is one of the most outstanding industrial monuments in the world. Copper was mined there from at least the 13th century, and probably much earlier, until the end of the 20th century. It claims, with some justification, to be the oldest joint-stock company in the world. Many important developments in the extraction of copper ores and their refining took place at this site, and the cultural landscape bears abundant witness to its long and distinguished technological history. The dominance of Sweden as the major producer of copper in the 17th century had a profound impact on that country's economic and political development, and hence of that of the whole of Europe.

The landscape is noteworthy not only for its technological heritage but also for the abundant evidence of the social structure of the mining community over time. It contains many small mining settlements and miners' dwellings, as well as a planned town of the 17th century, which graphically illustrate the special socio-economic framework of much of European mining up to the late 19th century.

Comparative analysis

There are several World Heritage sites associated with mining: Kutná Hora (Czech Republic), the Rammelsberg/Goslar site (Germany), Røros (Norway), Banská Štiavnica (Slovakia), and Blaenavon (United Kingdom) in Europe, and Guanajuato (Mexico), Potosí (Bolivia), and Zacatecas (Mexico).

Of the European sites, the nomination of Kutná Hora extends only to the historic centre, omitting the early mines. The significance of Banská Štiavnica also lies in its historic town centre, together with its significance in mining research and education: the industrial remains do not compare with those of Falun. The cultural landscape of Blaenavon developed around coal and iron-ore mining and iron production, but it is significantly different in many respects from Falun. Røros is a very well preserved wooden town that developed around its copper mining activities in the

17th century. Whilst it is comparable with Falun, it lacks the extensive industrial heritage of Falun. The Rammelsberg silver mining area and the fine associated medieval and Baroque town of Goslar is comparable in time-scale with Falun, but its visible industrial heritage is considerably less prominent than that of Falun.

Of the three Latin American sites, only Guanajuato possesses significant industrial monuments, but this are different in scale, nature, and period of exploitation from those of Falun.

It is justifiable to assert, therefore, that the Great Copper Mountain and its associated cultural landscape around Falun is exceptional as being one of the most enduring and complete monuments of the world's industrial heritage.

ICOMOS recommendations for future action

The properties covered by the nomination are protected by a number of statutory instruments and regulations. They are also included in land-use plans at several levels. There is also a general plan for the improvement and management of all the Stora industrial heritage sites. There is, however, no overall coordinating management mechanism. ICOMOS and TICCIH consider that it is essential for these diverse measures to be coordinated by means of a comprehensive management plan (to include a special plan relating to tourism).

In response to the Bureau referral of this nomination back to the State Party, requesting the provision of a coordinating management plan (as recommended by ICOMOS), a detailed plan was supplied by the State Party. This was found on examination to be fully in accordance with the requirements of the Committee and ICOMOS.

Brief description

The enormous mining excavation known as the Great Pit at Falun is the most striking feature of a landscape that illustrates the survival of copper production in this region since at least the 13th century. The 17th century planned town of Falun with its many fine historic buildings and the industrial and domestic remains at a number of settlements spread over a wide area of Dalarna provide a vivid picture of what was for centuries one of the world's most important mining areas.

Statement of Significance

The Great Copper Mountain and its cultural landscape at Falun graphically illustrate one of the most significant areas of mining and metals production. Mining ceased at the end of the 20th century, but over many centuries it had exerted a strong influence on the technological, economic, social, and political development of Sweden and Europe. The history of the mining industry can be seen in the abundant industrial and domestic remains characteristic of this industry that still survive in the natural landscape around Falun which has been moulded and transformed by human ingenuity and resourcefulness.

ICOMOS Recommendation

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

Criterion ii Copper mining at Falun was influenced by German technology, but this was to become the major producer of copper in the 17th century and exercised a profound influence on mining technology in all parts of the world for two centuries.

Criterion iii The entire Falun landscape is dominated by the remains of copper mining and production, which began as early as the 9th century and came to an end in the closing years of the 20th century.

Criterion v The successive stages in the economic and social evolution of the copper industry in the Falun region, from a form of “cottage industry” to full industrial production, can be seen in the abundant industrial, urban, and domestic remains characteristic of this industry that still survive.

Bureau Recommendation

That this nomination be *referred back* to the State Party, requesting the provision of a coordinating management plan.

ICOMOS, November 2001

Fertő-Neusiedler Lake (Austria/Hungary)

No 772rev

Identification

<i>Nomination</i>	Natural Site and Cultural Landscape of Fertő-Neusiedler Lake
<i>Location</i>	Burgenland, Austria Győr-Moson-Sopron County, Hungary
<i>State Party</i>	Republic of Austria and Republic of Hungary
<i>Date</i>	7 June 2000

Justification by State Party

The Fertő-Neusiedler Lake and its surroundings are an outstanding example of a traditional human settlement and land-use representative of a culture. The present character of the landscape is the result of millennia-old land-use forms based on stock-raising and viticulture to an extent not found in other European lake areas. The historic centre of the medieval free town of Rust constitutes an outstanding example of a traditional human settlement representative of the area. The town exhibits the special building mode of a society and culture within which the lifestyles of townspeople and farmers form a united whole.

Criterion v

Notes

- Other elements under criterion v were advanced by the States Parties but are excluded here because they lie outside the nominated area.
- This property is nominated as a *mixed* site; the natural significance has been assessed by IUCN, whose recommendation that it should not be inscribed under the natural criteria was accepted by the Bureau at its 25th Session in June 2001 .

Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. Under paragraph 39 of the *Operational Guidelines for*

the Implementation of the World Heritage Convention, it is also a *cultural landscape*.

History and Description

History

Two broad periods can be discerned: from *c* 6000 BC until the establishment of the Hungarian state in the 11th century AD and from the 11th century until the present. The nomination lies in a region that was Hungarian territory from the 10th century until World War I.

The landscape began to be developed from at least the 6th millennium BC. Then, early Neolithic communities lived in large permanent villages: a row of such settlements follows the southern shore of the Lake. Cultural and trading connections with neighbouring areas are characteristics of a later Neolithic phase. Distinct cultural attributes distinguish a phase at the beginning of the 4th millennium when settlements were on different sites and cattle-raising was the basis of the economy. Metallurgy was introduced around 2000 BC, and thereafter this area shared in what appears to be a general European prosperity in the 2nd millennium BC. One of its manifestations was the dispersal of amber: the Amber Route connecting the Baltic and the Adriatic passed near the Lake.

From the 7th century BC onwards the shore of the Lake was densely populated, initially by people of the Early Iron Age Hallstatt culture and on through late prehistoric and Roman times. In the fields of almost every village around the Lake there are remains of Roman villas. Two in Fertőrákos are accompanied by a 3rd century AD Mithraic temple which is open to visitors. The Roman hegemony was ended in the late 4th century AD, however, by the first of numerous invasions, beginning a phase of continual change and bewildering replacement of one people by another until the Avar Empire in the 9th century. Hungarians occupied the Carpathian Basin and became the overlords of the Lake area around AD 900.

A new state and public administration system was established in the 11th century. Sopron, a place with prehistoric and Roman origins, became the seat of the bailiff and centre of the county named after it. The basis of the current network of towns and villages was formed in the 12th and 13th centuries, their markets flourishing from 1277 onwards, when they were effectively relieved of many fiscal duties. A migration of German settlers started in the 13th century and continued throughout the Middle Ages. The mid-13th century Tatar invasion left this area unharmed, and it enjoyed uninterrupted development throughout medieval times until the Turkish conquest in the late 16th century. The economic basis throughout was the export of animals and wine.

Rust in particular prospered on the wine trade. Its refortification in the early 16th century as a response to the then emerging Ottoman threat marked the beginning of a phase of construction in the area, first with fortifications and then, during the 17th–19th centuries, with the erection and adaptation of domestic buildings. The liberation of the peasants after 1848 and the political situation after 1867 promoted development and building activity was renewed. The most important events locally in the second half of the 19th century were the construction of railways and the completion of the water management facilities.

In the 20th century, the Austro-Hungarian frontier created after World War I divided the area into two, but true isolation started only with the establishment of the Iron Curtain between the Communist world and the rest of Europe after World War II. It was at Fertőrákos, "the place where the first brick was knocked out of the Berlin wall," that participants at a Pan-European Picnic tore down the barbed wire and re-opened the frontier which still crosses the Lake.

Description

The site lies between the Alps, 70km distant, and the lowlands in the territory of two states, Austria and Hungary. The Lake itself is in an advanced state of sedimentation, with extensive reed stands. It has existed for 500 years within an active water management regime. In the 19th century canalization of Hanság shut the Lake off from its freshwater marshland. Since 1912 completion of a circular dam ending at Hegykő to the south has prevented flooding.

The Lake is surrounded by an inner ring of sixteen settlements and an outer ring of twenty other settlements. However, only three – Podersdorf, Illmitz, and Apetion – are entirely within the nominated area, with parts of Rust and Fertőrákos also included. The Palace of the township of Nagyecnk is included as a detached part of the core zone; Fertőd Palace is also included, though in a detached area of core zone outside the buffer zone.

Among the three dozen or so settlements within the buffer zone, several are picked out by the nomination as being particularly noteworthy: Rust above all, but also Mörbisch, with its typical narrow lanes, Donnerkirchen, with its homogeneous settlement structure, walled Purbach, Breitenbrunn with its peel tower, and Fertőrákos, formerly a lakeside settlement but now left high and dry as the Lake has shrunk. It must be stressed, however, that, except for parts of the first and last in that list, none are within the nominated area, and so they are not further described here.

Two palaces are both within detached portions of core area. Széchenyi Palace, Nagyecnk, lies at the southern end of the Lake, associated above all with one of the greatest personalities in modern Hungarian history, Earl Széchenyi István (1791–1860). The settlement itself was created by merging several smaller medieval villages. The Palace is a detached ensemble of buildings in the centre of a large park, initially built in the mid-18th century on the site of a former manor house. It acquired some of its present form and appearance around 1800. An addition in the 1830s, based on English models, was accompanied by sanitary novelties, while on the east were the stables for some twenty stallions and sixty mares bought by Earl Széchenyi in England as a basis for renewed horse-breeding in Hungary. The Baroque Palace garden originated in the 17th century. Its main avenue runs for 2.6km to the lake-shore. In the late 18th century an English-style landscape garden was laid out. Following fashion, major trees were added in the 1860s. They and other plants survived World War II but the building was much damaged.

Between 1769 and 1790 Josef Haydn's compositions were first heard in the Fertőd Esterházy Palace. It was the most important 18th century palace of Hungary, built after the model of Versailles. The plan of the palace, garden, and park was on geometrical lines which extended to the new village of Esterháza. There, outside the palace settlement, were public buildings, industrial premises, and residential

quarters. The Palace itself is laid out around a square with rounded internal corners. To the south is an enormous French Baroque garden; the main avenue is more than 1km long. The garden itself has been changed several times, the present layout being essentially that of 1762. The garden was reconstructed in 1904 after a long period of disuse and the Baroque composition, though many of its elements require restoration, remains almost intact.

Management and Protection

Legal status

Ownership is complex: in the Austrian part of the nomination less than 1% lies with the State, the bulk of the 41,590ha belonging to private owners and communities. In the Hungarian part, within the Fertő-Hanság National Park the State owns 10,790ha (86%), with other owners there and elsewhere in the nominated areas being local government, the Church, and private individuals.

Cultural property, including outstanding monuments, groups of buildings, and objects, is protected by the Austrian Monument Protection Act 1923, subsequently amended several times. The entire historic centre of the free town of Rust is under a preservation order. In Hungary, the legal situation continues to evolve. The Fertő-Hanság National Park was created in 1994, and now the nationalization of National Park land formerly owned by co-operatives should soon be completed. New laws replacing the object-and-monument-centred approach are in train. Law No 65 of 1990 made the protection of the built environment a task of both the communities and county-level local government. Law No 54 of 1997 endeavours to promote the interests of monument preservation within a holistic concept of protecting the built environment with due consideration to numerous other factors, including the promotion of public awareness of the cultural heritage. The Széchenyi Palace, Nagyecnk, and the whole assembly of historic monuments come under this Law; the same applies to the Fertőd Esterházy Palace as well as the former Bishop's Palace and its garden in the protected area of Fertőrákos. Law No 78 of 1997 defines as an objective the protection of village-scapes and landscapes.

The Hungarian part of the nomination is covered by the National Land Use Plan, which recognizes the Fertő-Hanság National Park as a priority area and extremely sensitive in terms of cultural heritage. The Park has recently been successful in attracting significant foreign funding for infrastructural development. Overall, the objective is to preserve the entire heritage as a single entity.

Management

For conserving the existing cultural properties on both sides of the frontier, responsibilities are distributed between Federal, provincial, and local levels. In Austria the combined effects of the Monument Protection Act and village renewal regulation within a tourist context encourage sustainable tourism. In practice, work and resources are in the hands of the cultural office of the provincial government, the Burgenland tourist association, provincial museums, and village renewal advisory boards. The last produce binding village renewal plans which provide the framework for management and development.

Management is designed to supervise and monitor the state of preservation. A complete inventory of monuments and sites compiled at State level is available for conservation and management. Arrangements are similar on the Hungarian side.

Conservation and Authenticity

Conservation history

The whole area has been a nature and landscape protection area since 1965, and the protection area has been classified as a reserve under the Ramsar Convention since 1983. The Fertő-Neusiedler Lake is a MAB Biosphere Reserve. In Austria, Neusiedler See-Seewinkel National Park (1993) is within the Ramsar area. The southern (Hungarian) end of the proposed site has been a landscape protection area since 1977 and the Fertő-Hanság National Park since 1992.

The traditional architectural monuments within the property and buffer zone are well preserved as regards the original fabric, appearance, and artistic effect. The continuing preservation and maintenance of the historic building material is guaranteed. Rust was declared a "model town" as a fully preserved vintners' town by the Council of Europe in 1975.

The provincial government of Burgenland recognizes the principle of sustainable tourism and the special needs of a region characterized by comprehensive landscape, nature, and monument conservation programmes. Since 1976 it has tried to reduce mass tourism in favour of individual travellers. Policies and programmes designed to present and promote the area are in place in a number of towns and villages and throughout the National Park. Nevertheless, especially in the Austrian part of the buffer zone, changes to the fabric of several settlements and in the appearance of numerous buildings, both as a result of unsympathetic modernization over the last decades of the 20th century, have cumulatively detracted from the historicity of an important element in the landscape. Tourism grew during the same period and the authorities nevertheless recognize that properly preserved houses and townscapes are among the area's main tourist attractions. The Hungarian National Park maintains a separate department responsible for "soft" or sustainable tourism in an area visited by c 500,000 people per year.

Authenticity and integrity

- Authenticity

The landscape overall and the scale as well as the internal structure and characteristically rural architecture of the towns and villages bear witness to an agricultural land-use and way of life uninterrupted since medieval times. The nomination dossier claims that "Both the area proposed for inscription and the buffer zone are characterized by a continuing settlement history dating back to the Middle Ages"; the settlement pattern, and indeed the occupation, of several present-day village sites actually go back to Roman times and earlier. Buildings, walls, and vistas have been preserved in such places as Donnerskirchen and Purbach, both nevertheless carefully excluded from the core zone of the nomination.

A varied ownership pattern is exemplified by the remarkable rural architecture of the very small villages situated in the buffer zone and by the Fertőd Esterhazy and Nagycenk

Széchenyi Palaces, outstanding examples of the nobility's architecture of the 18th and 19th centuries.

- Integrity

The landscape of the Fertő-Neusiedler Lake area has advantageous natural and climatic conditions which have made it suitable for agricultural cultivation and stock-raising for thousands of years. The water, the reed-beds with their labyrinth of channels, the saline fields once flooded by salt water, the row of hills enclosing the lake from the west with forests and vineyards on top represent not only the natural-geographical component features but also hundreds of years of identical land-use, making the area a unique example of humans living in harmony with nature. The Leitha limestone, west of the Lake and quarried from Roman times until the mid-20th century, provided building stone to Sopron and Vienna as well as local settlements.

Evaluation

Action by ICOMOS

A joint ICOMOS-IUCN expert mission visited the site in March 2001

Qualities

The area in general is of considerable cultural interest, though much of the landscape containing and expressing that interest lies in the buffer zone. The nominated area is primarily concerned with the Lake itself and its shores, and does not of itself constitute a cultural landscape. The Lake is changing and affecting its environs, yet much of the cultural value of the area lies in its genuinely unchanging qualities of way of life and landscape based upon a traditional and sustainable exploitation of a limited range of resources – particular habitats for reed-production, cattle-raising, fishing, and viticulture. Though tourism is both a change and a bringer of change, as a phenomenon it was recognized early and has been quite successfully controlled and modified to suit the area. As a result, and largely concerning the buffer zone, the insertion of the intrusively modern has been largely confined to some of the main settlements and is not generally apparent in either the wider landscape or individual farms. Much of the vernacular architecture is well preserved and is considered by many to be outstandingly attractive. One of the great palaces of Europe, with a smaller one of great national interest, stand in the core zone at the Lake's southern edge, both related, like everything else here, to the Lake itself.

Comparative analysis

The area is characterized by a long tradition of viticulture – strong red wines on the low-level lime-based rock and light white wines on the eastern river bank since Roman times. A similar viticultural area occurs on the Balaton hills, Hungary, but they are on slopes and open straight on to the water without the intervention of reed beds. The cattle-raised beside the Lake, on the Aföld meadows, were driven to the Austrian and German markets. That they were raised here at all, however, results from the creation by natural forces of excellent pastures, which has permitted a particular type of economic activity otherwise more characteristic of Eastern Europe and Asian grassy biospheres, unknown to the west of Fertő-Neusiedler Lake.

Under "Comparative analysis" the nomination dossier asserts that "The geographical position of the Lake has

contributed to an uninterrupted evolutionary process involving diverse civilizations across two thousand years. Such an organic evolution, interaction and close association between the Lake and the local population cannot be found in any of the comparable lakes." However, no further comparative analysis of cultural matters is offered there, though elsewhere it is stated that "The organic, historical and diverse associations of humans with the ecological environment in the Fertő-Neusiedler Lake area is unique among the salty, saline lakes of the world." However, the comparative analysis of cultural matters offered by the States Parties is weak: two assertions do not constitute a compelling argument. On a comparative basis, the nominated area of the Fertő-Neusiedler Lake and its immediate surroundings are not presented as at all exceptional in terms of cultural quality or history.

In fact, lakeside settlement by humans involving fishing and stock-raising is common throughout Europe and has been since the advent of people with domesticated animals c 6000 BC. It flourished in particular around, for example, Swiss lakes in the 2nd millennium BC, the Somerset marshes in England in the 1st millennium BC, and Scottish and Irish lakes in the 1st millennium AD. A combination of stock-raising and fishing with viticulture beside a lake, as distinct from other crops and watersides, is, however, less common and obviously confined to the wine-growing zone. Analogues should therefore probably be sought in the Mediterranean region or, for example, in the Rhône or Rhine/Moselle drainage basins. A further qualification is added in this case, however, because the Lake is saline, which makes the combination of qualities rare. This is perhaps emphasized by the obviously comparable saline lakes in, for example, Israel whose shores support neither viticulture nor cattle-breeding. IUCN has prepared from the point of view of natural interest a comparative analysis of saline lakes in the world for its report.

In comparable terms, a strong argument for a rare combination of factors occurring at Fertő-Neusiedler Lake can probably be advanced, including interactions between people and nature. However, more thought needs to be given to the expression of that cultural and cultural/natural dimension in the landscape, both on the ground in terms of what exactly needs to be nominated, and why, and on paper to develop whatever line of argument proves most appropriate for World Heritage cultural landscape purposes..

ICOMOS comments and recommendations for future action

i The documentation specifies only one *cultural criterion* (v) to justify this nomination. The whole area does indeed clearly constitute an "example of a traditional human settlement and land-use," and one criterion may well be sufficient; but most of the human settlement is excluded from the nominated area and discussion of land-use is conducted by simplistic reiteration. ICOMOS strongly advises that it is essential to demonstrate by the production of good cultural evidence (for example from documentary research) and by cogent argument, that an area is a cultural landscape in World Heritage terms.

ii ICOMOS notes in particular that the nomination is over-reliant on its reiteration throughout of the importance of the string of lake-side settlements which are – judging by the care with which the boundary of the core zone avoids them – nevertheless deliberately excluded from the nominated area. This discordance between perception and text/graphics is nowhere explained. Furthermore, not one settlement is

illustrated with a plan, nor are either of the two palaces which are within the nomination. The section on "Cultural property," which is mainly about the villages excluded from the core zone, is therefore in a sense largely irrelevant, unnecessarily long, and difficult to follow.

iii The absence of plans is a serious impediment to understanding the detail and nuances of this nomination. It also suggests an absence of realization that settlement-form and settlement pattern are "cultural." There is no serious spatial/historical analysis of the settlements, though clearly this could contribute much to the interest of the nomination, especially if at least some settlements, carefully selected by clearly stated criteria, were included in the nomination. They are an integral part of the cultural landscape physically and should also be integral both conceptually and, in practice, in the way the nomination is defined and presented. ICOMOS advises that it regards this matter as central to a successful nomination in this case and would encourage the nominees to address it.

iv In addition to the major query about the line of the boundary of the core zone, there are several queries about detail of boundaries as they stand at present.

v ICOMOS notes that this property is nominated as a mixed site, the cultural aspect being defined as a cultural landscape. It recommends that, if the Fertő-Neusiedler Lake area is to be considered as such, the nomination requires significant reconsideration of the boundaries of the core area and of the concepts within which they are redefined. In particular, the States Parties should be invited to clarify their thinking about and presentation of the lakeside villages and about fields and field systems, preferably in conjunction with their villages.

These recommendations were accepted by the Bureau, which referred the nomination back to the two States Parties, requesting them to revise it as proposed by ICOMOS.

Supplementary documentation was prepared jointly by the Bundesdenkmalamt (Vienna) and VÁTI KHT (Budapest) and submitted to UNESCO. This was reviewed by ICOMOS, which considers that the States Parties have given serious consideration to its comments and complied with its recommendations. It therefore recommends that the property should be inscribed without further delay on the World Heritage List. It suggests, however, that the States Parties should within two years of inscription provide a revised management plan for the enlarged area resulting from the revision of the boundaries of the cultural landscape.

Statement of Significance

The Fertő-Neusiedler Lake area is the meeting place of peoples arriving as migrants or conquerors. The dynamism of the Lake itself has presented people with both challenges to face and a resource to exploit since their arrival here some eight thousand years ago. The diverse cultural landscape of which it is the core has been created by an organic process of evolution, by the work of man living in symbiosis with the natural environment.

ICOMOS Recommendation

That this property be inscribed on the World Heritage List on the basis of *criterion v*:

Criterion v The Fertő-Neusiedler Lake has been the meeting place of different cultures for eight millennia, and this is graphically demonstrated by its varied landscape, the result of an evolutionary and symbiotic process of human interaction with the physical environment.

The States Parties should within two years of inscription provide a revised management plan for the enlarged area resulting from the revision of the boundaries of the cultural landscape.

Bureau Recommendation

That this nomination be *referred back* to the two States Parties, requesting them to revise it as proposed in the ICOMOS recommendations.

ICOMOS, November 2001