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Kyoto University
Culture, landscape and monuments in the city of Kyoto 
The restoration of the Imperial Gateway at Nijo Castle (2012-2013)

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Since its establishment in 794, Kyoto, the ancient capital of Japan, has set the cultural tone for the nobility, the Imperial court and eventually the nation at large. The cradle of Japanese culture, Kyoto has a brilliant history of more than 1200 years beginning with the establishment of the Heian-kyo capital and is characterized by a perfect combination of culture, architecture, landscape and ancient traditions. The varied components that form the attractive landscape of Kyoto are the mountains, temples and shrines, gardens, residential areas and the configuration of the ancient city. In December 1994 several historical monuments of the city of Kyoto were included in the list of the UNESCO World Heritage Sites. In addition, Kyoto was recognized to be an outstanding example of traditional human settlement and land-use, represented by the culture and relationship with the environment. In addition as the centre of Japanese culture for more than 1000 years, Kyoto illustrates the development of Japanese wooden architecture from the Heian period (794-1185) to the Edo period (1603-1867) as seen in the religious architecture and the art of Japanese gardens, which has influenced landscape gardening all over the world.

How has the cultural program of Kyoto changed after being added to the list of World Heritage Sites? We had an interesting meeting (June 14, 2013) with Kozo Hiratake, General Director of the Culture of the Municipality of Kyoto regarding this issue. Director Hiratake explained that at the beginning the citizens did not understand the importance of its inclusion on the list and it was only later that they recognised the value of this acknowledgment. The results have been evident in the architectural restoration works as well as in the new constructions which have been built in relation with the heights of the ancient buildings following a public debate in the 1964’s about the height of a panoramic tower and in the 1980’s about the volume of a large hotel in the city center. This experience has shown a strong interest of the citizens and they have also had a strong influence in the preservation of the ancient architecture and of the landscape. Meanwhile, important works of contemporary architecture have also been realized outside the old town centre, such as the new railway station which was designed by the Japanese architect Hiroshi Hara and opened in 1997. In particular after 2007 the new political of the landscape in the city of Kyoto has provided more controls about the following five points:

1. the height of buildings; 2. panoramic views; 3. subsidies for conservation of the urban landscape; 4. restoration of architecture; 5. restoration of urban skyline. Following these main points today the city of Kyoto is an interesting example of harmonious dialogue between ancient and contemporary culture.

Director Hiratake then presented the cultural program of Kyoto, a city with a rich tangible and intangible heritage. This concept of intangible heritage was first introduced by the new national law of 1950. The city has important laws to protect this heritage but relies rather on concrete actions with the direct participation of citizens. The Municipality of Kyoto does not intend to force the projects with limitations but contrary it intends to promote an active and participatory conservation of the city.

Whilst the city promotes the protection of heritage there are also many
local community initiative projects. The schools also play a very important role in the gathering and dissemination of knowledge and for the valorization of the cultural heritage with young students studying and visiting the city's monuments and museums as well as participating in cultural activities.

The ancient architecture, intangible heritage and nature comprise the cultural landscape of Kyoto. This city is surrounded by mountains and crossed by two major rivers: Kamo in the East and Katsura in the West. The citizens, whose lives are harmonically related to this landscape, know and appreciate this environment. This relationship is an ancient one which is part of the traditions that they have handed down for generations. The citizens have also utilized all major natural resources (in particular wood) from the mountains in the building and architectural restoration of temples, shrines, and houses.

Kyoto pays attention also to the protection of the Japanese National Heritage property. There are many examples of which the most important is the restoration of the Imperial Gateway of the Nijo Castle. The restoration began in February 2012 and was completed in July 2013. With the support of the General Director Kozo Hiratake, we were fortunate enough to visit the restoration site of the imperial gateway in Nijo Castle on June 25, 2013.

The restoration of Imperial Gateway (Kara-mon) at Nijo Castle

The World Heritage Site of Nijo Castle in Kyoto, an architectural treasure not only for Japan but the world as a whole, was built in 1603 by Tokugawa, the most notable member of the Tokugawa clan and founder of its shogunate. Built as Tokugawa’s residential palace, the castle was completed in 1626 by the third Tokugawa shogun, Iemitsu, with the addition of structures transferred from Fushimi Castle. Nijo Castle is one of the finest examples of architecture of the Azuchi-Momoyama Period (1573-1603) and Edo Period (1603-1867) in Japan, as it makes wonderful use of early Edo period building designs (shoin-zukuri architectural style), and lavish paintings and carvings that Iemitsu generously commissioned. In 1884 the Castle became the property of the Imperial family. It was donated to the City of Kyoto and renamed Nijo Castle in 1939. In 1994 the castle was designated as an UNESCO World Heritage Site. The Honmaru Palace was destroyed in a large-scale fire in 1788. During the fire of 1788 the Imperial gateway to the palace, built in 1626 for an Imperial visit, and Ninomaru Palace were saved. This gateway (Kara-mon) or Shiyaku-mon gate serves as the entrance to the Ninomaru Palace. The gateway and the Ninomaru Palace are authentic of the year 1626. With the collaboration of the Architect Tamaki Goto, Director of the architectural restoration of the gateway, we
visited the site. This gateway has four important characteristics:
1. hiwadabuki, a roof covered with layers of Japanese cypress hinoki;
2. shikyaku-mon, structure composed of two large, main pillars, centered in line with the roof and of four pillars of support, two in the front and two in the rear;
3. zengonokikarahafutsuki, two main sides with similar formal characteristics;
4. kirzuma-tsukuri, construction with gable roof.

The Kara-mon is characterized by a particularly configured curve called kara-hafu that we find in many temples in Japan. The outer panels of the gate have carved cranes, butterflies and flowers, while the inner panels offer Chinese lions, tigers and a dragon. These panels are bas-reliefs in wood and they are painted with typical colors.

The natural properties of materials require a restoration every 30 years. This time cycle is strongly linked to the nature and to the transmission of ancient building traditions. This time cycle is a fundamental part of the culture of restoration in Japan and its cultural roots are very deep and not always easily explained. The restoration of the National Heritage property of Japan is done according to the transmission of ancient knowledge and the establishment of a harmonious dialogue between tangible and intangible heritage, a common characteristic of the Japanese culture of the restoration. The direct observation of the restoration work has made it possible to evaluate many cultural aspects that are the basis of the architectural conservation in Japan: in particular the ancient techniques of execution and
the carpentry of wood. With the last major restoration of Kara-mon in Nijo Castle carried out in 1975, the works planned between 2012 and 2013 have primarily concerned the restoration of the painted wooden parts, the copper decorations and the wooden sculptures in accordance to an ancient Japanese technique. After careful analysis of the state of conservation of the cypress bark roof, the works management has established a partial restoration of the roof.

The Scientific Committee, appointed by the Ministry of Culture, has also approved the partial restoration; which effectively restored only the most damaged areas leaving visible the parts of the roof that have been restored and those that have been conserved. This methodology of restoration was applied to the gateway only after assessing the conservation status of the materials. Only the degraded materials have been replaced. It is fundamental to note that the choice of the restoration method is evaluated on case-by-case.

The architect Goto explained the difficulties in finding the natural materials and the technique for extracting the bark from the cypress tree. Today in Japan there are only 10 companies working in the specific field of finding, removing and correctly working with the wood and bark of the cypress for the restoration of ancient architectures. Subsequently we have analyzed the technical execution of the restoration and we have observed the excellent state of conservation of wooden structures that are original to the seventeenth century.

The decorative parts in copper and the wooden sculptures were disassembled and restored in the laboratory. On the restoration site it is possible to observe drawings showing the assembly stages of these works of art.

The restoration work will be inaugurated September 30, 2013.