Lecture: High Resolution Digitization of Very Important Cultural Heritage in China

Kyushu National Museum has been closely working with the Institute of Cultural Relics and Archaeology, Inner Mongolia and the Inner Mongolia Museum on academic matters for the last ten years. The Special Exhibition “The Splendor of the Khitan Dynasty” in 2010 was one of the major outcomes of this academic cooperation. DAINOBU is responsible for the three-year study project (Grants-in-aid for Scientific Research) to build a data-base of high-resolution images of detached mural paintings from tombs in Inner Mongolia and develop a virtual model so that museum visitors may manipulate on a PC monitor.

With the help of Dr. IDE Ari (Kyoto University), a data-base of high resolution images (1200 dpi, of RGB and of several IR ones) of mural painting fragments of an imperial tomb was built. Based on the plans after excavation of the tombs as well as photos of the site, high-resolution images are embedded into the virtual space of the tomb. As mural painting fragments have been removed from the original setting, it is not easy for visitors to imagine their original positions in the tomb.

A virtual space model that makes visitors stand in the midst of a tomb space, understand the original placement of the mural fragments, enlarge high-resolution images as much as they like, and compare RGB images against IR images, will be demonstrated.