

# Tokyo University of the Arts COI Site



Mural reproductions made by the  
TUA COI Site were exhibited  
at 'G7 2016 Ise-Shima Summit'



"Terrorism and Cultural  
Property - Countermessage  
against destruction and illicit  
trade of cultural property by  
terrorists"

On 26 May, G7 Ise-Shima Summit meetings' Side-event on "Terrorism and Cultural Property - Countermessage against destruction and illicit trade of cultural property by terrorists" was held.

At the beginning of the event, Professor of the Tokyo University of the Arts, Mr. Masaaki Miyasako explained to the participants about the exhibits; "Cloned" reproductions of the ceiling mural of the Buddha in Bamiyan (Afghanistan) destroyed by the Taliban and the mural of the Buddha in the Temple "Horyuji" (Japan) burnt down and damaged, which demonstrated Japan's state-of-the-art techniques of reproducing lost cultural heritage.

Mr. Shinzo Abe, the Prime Minister of Japan stated that destroying cultural property was tantamount to eradicating the shared history and culture of all man-kind, such an act was impermissible and, that the illicit trade of cultural property was said to be a source of funding for terrorists, and that we must work together as governments and through international organizations, including by making better use of the INTERPOL database on Stolen Works of Art, and also that we need cooperation by the private sector marketing cultural artifacts.

# HYOJUNRE

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## The Cultural Springboard that is Open to Society

Kosaku Maeda Special Advisor

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A Special Exhibition on Afghanistan, "SOSin Afghanistan" (in the Chinretsukan Gallery) was put together by the Eurasian Cultural Exchange Center in cooperation with COI. This exhibition attracts many visitors every day, and it always seems lively. Many large media outlets such as NHK and the Asahi and Yomiuri newspapers have been very interested in this exhibition, and they have reported on the special exhibition from their own perspective. However, what we are most grateful for is that the people who have finished seeing the exhibition have expressed the sentiment that they were quite moved.

One of the goals of this project was to bring to Tokyo University of the Arts a new powerful springboard to promote cooperation through preservation and creation, by shedding some light on the cultural intersections between West and East. The conservation of cultural property is something that incurs large expenses itself, and for this anticipated burdens, it tends to be held at a distance. However, the world's perspective on the preservation of cultural property has been drastically changing.

Cultural property is no longer private property. The world is starting to share the awareness that it transcends borders and is something that should be handed down to future generations as common human cultural heritage.

With this change in mind, we must uncover the multiple layers of culture and combine conservation techniques (techné) with artistic skills to represent the spirit in the form of beauty. In order for us to make cultural heritage open to the world, we must collaborate with one another by taking steps forward out of respective fields, while sharing the idea of making new leaps forward off our springboard for the future.

It is not possible to traverse the turbulent world with only one wing.



Reproduction of the Lost "Sun God Soaring in the Sky"



In the workshop to experience instrumental performance, approximately 20 children, who were divided into two groups, appeared on stage. The first group imitated the rhythm that the leader produced (3-4 rhythm patterns) on the conga drums or small taiko drums. Then the second group had each person hold a tone chime, and they created chords by producing sounds in order. Additionally, the guest seating had percussion instruments set out in them that were made of film cases with beads inside of them, and this allowed the audience to participate with the ensemble's rhythm. Finally, the concert progressed to have both groups and the audience work together to perform one song. The children with hearing disability had a sparkle in their eyes when they participated in the ensemble.

The deaf and blind pianist Tetsuo Tsukada gave an incredibly beautiful performance of the Liszt's work "Liebesträume No. 3," a piece that requires a transcendent technique on the piano. What type of "musical image" is being envisaged by the pianist while he is playing the piece is an extremely inspirational topic to consider. After this, the marimba player Takeshi Futenma who has a cochlea implant performed a marimba piece by a modern composer. He fascinated the audience with delicate tones that do not seem to come from a person with hearing difficulty.

Thus, this event was a valuable opportunity to realize that "hearing sound" and "enjoying sound" are two different things that occur on totally different levels of perception.

Until now, COI's synesthesia media research group has set up the Arts & Science LAB. dome theater. The establishment of this theater was greatly accelerated when the group received a budgetary provision for the construction of a projection system from Japan Science and Technology (JST). Moreover, in 2015 the group created footage to show at places other than the dome theater such as the Sogakudo Concert Hall. On March 31, 2016, a presentation was held to commemorate the completion of the dome theater and share the footage that was produced during the previous academic year.

In the first part, the "spherical theater," a test film directed by project researchers including Noriko Koshida was showed utilizing the hemispherical screen. Moreover, Nahomi Maki's "Fossil Tears" was played, and it was verified that the sense of immersion could be obtained even when existing footage that was converted through a conversion program was projected on the spherical dome. In the second part, the "film installation," a piano performance of Debussy's "En Bateau" was given by Ooko Arai, the group leader of

COI's disability and expression research group and the project researcher Sachiyo Takahashi. Additionally, footage created by Ryoya Usuha was shown in synchronization with the piano performance. The two performers appeared in the film wearing the same clothing as during their performance. The performers who had been filmed beforehand were made 3D using photogrammetry. After this, Shota Yamauchi's work "The Flying Condor" that made use of photogrammetry was shown. Furthermore, the interactive animation "The Wolf and the Owl's Cradle" by Teruyo Uehira was projected onto a black wall, and this showed how animation changes in response to the audience. In the third part, the "exchange of ideas about research tasks," there was a recreation by Toshiyuki Kuwabara, the project research assistant, of the "magic lantern" exhibition. Additionally, there was a display of digitally designed holography put together by the researcher Koki Wakunami and the head of the ultra-realistic video laboratory Kenji Yamamoto at the National Institute of Information and Communication Technology (NICT). The display currently is 10cm square in size, but they are aiming to make it 20cm square in the next academic year. If this size is reached, an actual size human face could be depicted; this is expected to greatly broaden the range of its application.

Piano and film performances (the Synesensory Media Research Group + the Disability and Expression Research Group)  
Hearing impairment and sound ~ Implementing the concert of <Touching sound>

On March 27, COI's disability and expression group and the Senzoku Gakuen Music College's Music Sensitivity Research Institute (research on hearing impairment) jointly held a concert and workshop primarily for people with hearing loss called <Touching sound> at the Tokyo University of Arts' 6th Music Hall. Approximately 180 people came to this event, and they ranged from children to adults and the elderly with cochlea implants or hearing aids. These attendees enjoyed the program consisting of a collaboration between video footage and music, experience of performing percussion instruments, and original works that combined music with recitation of picture books. Moreover, a variety of means of communication were introduced such as a "system for a bodily experience of sound" (it picks up the music in the assembly hall using a microphone and sends sonic vibrations to the red cushions on the seats) supplied by Pioneer Co., Ltd., and the subtitles of the summaries of words that were uttered by the program presenter and those that were recited. Thus, this was a concert where people could "touch sound" from a variety of different angles as the title implies.

The concert was started with a collaboration of video footage created by the synesensory media research group and a duet on the piano. A 3D scan that was taken of the performers beforehand was animated and was shown in combination with the live piano duet performance.



world tour that is being planned.

The soloists in these performances are a Japanese person (Mihoko Fujimura who studied at Tokyo University of the Arts), an American, a Dane, a Polish person and an Ukrainian who recently received German citizenship. There are also no Germans in the main staff for this production. However, the atmosphere is such that this is not a problem in the slightest. The role of Germany's publicly owned opera house is to create as many works that will be remembered by history as possible, and of course, this does not create any problems with citizenship or ethnicity.

As was previously mentioned, the opera house made the request for a piece with the "subject of Fukushima." This is because one of the missions of public theaters in Europe is to continue to create works that can become the subjects of debates about contemporary problems that society faces. Fortunately, "Stilles Meer" turned out to be a piece that fulfilled these expectations.



them to the government of Afghanistan. Ultimately, it was determined that these 102 pieces of cultural property would be returned in 2016. At a special exhibition that was held in accordance with Hirayama's dying wishes, "cloned cultural properties" created by COI's culture sharing group were presented alongside of the dispersed cultural properties that were set to be returned.

The cloned mural painting of the "Sun God Soaring in the Sky" is 6m in width, 7m in depth and 3m in height. It is an actual size reconstruction of the mural painting that was on the ceiling of the niche for the East Great Buddha in Bamiyan that was destroyed along with the statue in 2001 by the Taliban, an Islamic fundamentalist group that prohibited idol worship. The center of this ceiling mural depicts a sun god riding on a chariot and acolytes that have wings like angels as well as wind gods. Around these figures, there is a Buddha and donors. These images prove that Bamiyan was a crossroads between the eastern and western civilizations where a variety of different religions coexisted. When faced with this situation where such symbolic cultural properties were destroyed, this reconstruction project was started to restore many of Bamiyan's cultural properties including the lost mural. This project is very important in demonstrating how Japan should promote cultural diplomacy to convey its intent for realizing peace to the world.

### Opera "Stilles Meer" (Silent Sea)

Since December of 2015, I have spent almost two months in Hamburg, Germany producing the new Opera "Stilles Meer." Three years ago, I was commissioned to write the new work about the Great East Japan Earthquake, particularly Fukushima, by the Hamburgische Staatsoper (Hamburg State Opera House). Thus, I wrote the original work and it was translated into German. This translation was revised into an Opera style known as libretto by a specialist. Songs by Toshio Hosokawa, an alumnus of Tokyo University of the Arts, were then added. This sequence of events has led to the extremely rare (even in Europe) experience of creating and producing a new Opera.

Moreover, this work is the world's first opera where a full-fledged robot makes an appearance. This was not the initial plan, but because of the strong request made by the opera house's musical director Kent Nagano, it was decided one year ago that a robot would make an appearance.

The performance of this opera earned a good reputation, and it not only made the local paper but also received favorable reviews from almost every major German paper. All five performances were almost completely filled to capacity. Furthermore, it has been decided that this piece will be performed again in January of 2018, and after this performance, there is also a



### World's First Reproduction of the Lost "Sun God Soaring in the Sky" Mural Painting on the Ceiling of the East Great Buddha in Bamiyan

Amidst the chaos of the civil war in Afghanistan, many pieces of valuable cultural property were illegally dispersed outside of the country. Headed by Ikuo Hirayama, the Japanese Committee for the Protection from Dispersement of Cultural Properties that was established in 2001 stored and repaired these cultural properties as "cultural property refugees" in Japan. The committee maintained these cultural assets in order to return



This cloned mural painting allows the viewers to stand above the head of the Great Buddha that no longer exists and have the virtual experience of

looking up the ceiling mural painting that was once painted above the giant statute. In front of the mural is the projection of a 4K image that recreated a scene of the Bamiyan valley; this image was created using the newest CG techniques, which is a recreation of the scenery that the East Giant Buddha was overlooking.

Also, among the cultural properties that have been dispersed, there are three fragments with "seated Buddha" that comprised a portion of the wall in the Bamiyan cave. These fragments have been cloned and exhibited in two different ways. The first way is by cloning the previous state of the fragments before they suffered any partial damage; the second way is by cloning the current state to provide a realistic experience to appreciate the cloned fragments as "cultural properties" that can be touched.

The term "cloned cultural property" carries a connotation that our reproduction works are not simply copies or replicas but those that are created in accordance with the Japanese spirit of reproducing the creativity, spirituality, or finesse that can be gleaned from the original works. This way, the best traits of the original works are inherited from the past and will be conveyed in turn to future generations. By combining this type of artistic sensitivity and excellent handiwork with 2D and 3D printing techniques, the latest digital photographic technology, and editing techniques, it has become possible to create realistic reproductions in a small amount of time (patented technology). By further applying these cutting edge technologies, we hope to restore murals and arts and crafts from other parts of the world and expose many more people to them.



## Takashi Inoue

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### Establishment of the Eurasia Cultural Exchange Center to create a base for cultural diplomacy and exchange

The Eurasian Cultural Exchange Center is part of Tokyo University of the Arts' plan to cooperate with society. It was started in July of last year to take on the role of creating an international project network to restore and preserve Eurasian cultural heritage, produce reproductions and utilize this heritage.

We strongly feel that it is important to respond with Japan's technological strengths to nations in need of the preservation or restoration of their cultural properties that have been lost due to deterioration or war damage. Tokyo University of the Arts that houses this center has Japan's leading digital technologies and cultural property reproduction skills. There are large hopes that this project will contribute to the world in the form of "culture" and that the university will apply the cutting edge technologies and technical skills that have been cultivated up to this point.

This brings to mind the words of Japanese painter and former President of Tokyo University of the Arts the late Ikuo Hirayama, which he mentioned during a field work on the Silk Road. He always said that even if governments create barriers that block diplomacy, "culture" can overcome these barriers.

Of course, occasionally it is necessary for the Japanese government to take a strong stance in its diplomacy. However, cultivating relationships that are tied together by cultural exchanges like preserving historic ruins can play a large role when tensions in international relations are relieved.

### Please know more about Afghanistan Please don't forget about the country

"SOS in Afghanistan," a special exhibition on Afghanistan, was held from April 12 through June 19, 2016, at the Chinretsukan Gallery of Tokyo University of the Arts. The first floor displayed a statue of the chest part of Zeus that was reproduced by the university based on the Left Foot of Zeus, a relic found in the Ai-Khanoum archaeological site in Afghanistan, along with fragments of the mural above the East Giant Buddha statue in Bamiyan that were rescued and video footage. The second floor displayed panels and mural fragments as well as footage that was filmed in Afghanistan. So far, we have received encouraging comments from the visitors that the exhibition left them a positive impression with a strong message.

Previously, we organized a project where a group of students was invited from Afghanistan to hold a debate with Japanese students. During this debate, one of the Afghan students said "Please know more about Afghanistan. Please don't forget about the country." We were very impressed with these words.

We hope that this special exhibition leaves many of its visitors with a deeper interest in the current state and future of Afghanistan.

Wind gods are depicted on the ceiling mural that is displayed on the second floor of the exhibition gallery. As was painted by Tawaraya Sōtatsu, the motif of the wind god is something that the Japanese people have long been familiar with. The motif, however, is considered to have originated in Greece. It is believed that it made its way to Japan via the Silk Road, and Afghanistan is located at a stopping point on the Silk Road.

Fifteen years ago (in 2001), this ceiling mural was destroyed by the Taliban. The work that is being displayed is a painstaking achievement of as detailed reconstruction as was possible that was done by COI's culture sharing group under the leadership of Masaaki Miyasako, a graduate faculty member at Tokyo University of the Arts.

### Photographic data of 15,000 pieces used to restore the ceiling mural

The protection of cultural properties has once placed emphasis on passing down historic ruins or the cultural properties themselves that have been inherited. However, such protection is becoming increasingly difficult.

The desire to pass on cultural properties to future generations is unfortunately not a desire that terrorists share. Thus, in this kind of situation, creating and leaving behind virtual or photographic records of cultural properties has become a pressing task.

The reconstruction of the ceiling mural that was displayed at the special exhibition on Afghanistan would not have been possible without 15,000 medium-sized positive film images that were preserved by Kyoto University's Institute for Research in Humanities. The photographic data of the images on this ceiling mural were recorded and stored by the research group led by Takayasu Higuchi from Kyoto University during the 1970s. If there was a modern high resolution digital record, it would have been possible to recreate an even more detailed depiction.

Using this photographic data to combine traditional reconstruction techniques that have been cultivated for repairing Buddha statues and other cultural properties with the new cutting edge 3D technology that Tokyo University of the Arts possesses is an intrinsic part of this "reconstruction of the ceiling mural." Many hopes have been pinned on our techniques and technologies for projects to preserve and conserve cultural properties.

On the other hand, Tokyo University of the Arts needs to show society even more results than this. Because we are a university and not a private organization, being able to do these types of projects will become one of our strong points. We get the strong feeling that our university needs to use its full strength to further elevate the status by working on projects that make a contribution to society.

### Aiming to be a hospital-like organization to return restored assets after their repair in Japan

In 2006, the "Act on the Promotion of International Cooperation for Protection of Cultural Heritage Abroad" was enacted in Japan. However, currently, the situation is such that Japan needs to quickly handle requests from abroad for the restoration of cultural properties, and in this setting, there are quite a few instances of falling behind multinational preservation projects. Thus, in order for Japan to make the most of the technologies they are proud of, there is a need to establish hospital like organizations that would serve as places to return the items to the country that made the request after the cultural properties have been repaired in Japan.

We hope that the Eurasian Cultural Exchange Center will make rapid progress so that Japan does not retreat from its stance of international cooperation and that these efforts also increase the level of international recognition for Japan's technologies in the field of preserving and conserving cultural heritage.

The Lecture by Mr. Masoudi,  
the Previous Head of the National Museum of Afghanistan

