

Tokyo University of the Arts COI Site



“The Tower of Babel”
Exhibition
makes a triumphant
return home

For the "Study of BABEL" exhibition, organized by our University's COI Site in association with the "Tower of Babel" exhibition, which took place at the Tokyo Metropolitan Art Museum last year (18 April - 2 July 2017), we created not only a 110% Clone Cultural Property of the "Tower of Babel" in cooperation with the Netherlands Institute for Conservation, Art and Science (NICAS) as a new challenge, but also a 3D model of the "Tower of Babel", projection mapping and a video work.

These were highly praised and as a result, the 110% Clone Cultural Property, the film describing the "Tower of Babel" and the video work of moving painting which was inspired by the original painting, are all on display at the Museum Boijmans Van Beuningen in Rotterdam, Netherlands, for the current "Babel: Old Masters Back from Japan" exhibition (3 February - 21 May 2018). Going forward, we expect to further develop the global "fusion of scientific technology and art" through our research collaboration with NICAS.

Arts & Science LAB. COI news

TYOJTL

Vol.12

First printing : 14 March, 2018
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Design : Hiroko Kuboki, Yuchiro Taira
Publisher : Tokyo University of the Arts COI Site
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Paper : VENT NOUVEAU F-PS



Science Agora 2017



The Research on culture sharing group exhibited at "Science Agora 2017" in Telecom Center Building and elsewhere between 24 (Friday) - 26 (Sunday) November 2017 on the theme "Beyond the boundaries". Our exhibition titled "Overlapping world - the Edo period and the modern age" used ukiyo-e painting as a tool to present the concept of "overlap" as the central theme. As new challenges for ourselves, we had two items on display. In the "liquid ukiyo-e", a painting by Katsushika Hokusai was sculpted onto an acrylic board using the sculpting function of a laser cutter. The laser converts the contrast of colors into contrast of depth so that when colored water is poured onto the painting the design of the painting magically appears. "Mr. color separation β " was an interactive content where the participants could relive the way ukiyo-e artists of the Edo period saw the world. They divided the world into structural color layers and completed their paintings by overlapping multiple impressions of woodblocks on paper. In addition, we had a space to display three Clone Cultural Properties of ukiyo-e paintings and for the participants to learn about the natural dye used in ukiyo-e paintings of that period. Many visitors experienced this unprecedented "overlap" of worlds created through the encounter of ukiyo-e art of the Edo period and modern scientific technology.

Synesthetic mediaconcert to Dvorak's "From the New World"

Research on Synesthetic media group shows films at musical performances, with the aim of creating new sensations by synchronizing music and film.

At the main concert of the "Geidai Arts Special - Disability and Arts 2017", conductor Yuko Tanaka and the Geidai philharmonia orchestra played the 4th movement of Dvorak's "From the New World", while a film combining CG animation and live-action was shown, under the theme "colors you can hear and sound you can see".

In the CG animation, shown in time with the music, a circular ring similar to a volcanic crater appears and with an explosion, a penguin is born. The penguin flies off and the film is then seen from the penguin's perspective. Before anyone knows, the volcano becomes Mount Aso, and the penguin slowly flies around in circles, looking down on an ice green crater lake, to a calming melody. Eventually, as the music reaches its climax, the penguin flaps its wings gently but boldly and



moves towards its parents who are watching from the sky. The Penguin was created by the students of Yokohama Special Support School for the Visually Impaired. To make a film, we used photogrammetry to make the character three-dimensional and turned it into animation. For the filming of Mount Aso, we used a drone. Drones proved to be extremely useful in filming a long shot of places not easily accessible and vast landscapes as we could film them using a remote controller.

We will continue to incorporate new technologies and make films for concerts in the unique style of TUA's COI Site.

At the end of 2017, we organized an English class using a robot for the first time. We have conducted a few classroom communication education programs in Japanese, and this program is finally entering a new stage.

My end goal is to develop a series of about six classroom programs, that could also be applied to standard public school classes.

As I mentioned previously, we believe that classroom programs using robots will become the norm in future, just like electronic blackboards or tablets are widely used nowadays in classes. As pioneers in this area, we aim to create proper curriculum plans.

The only issue is that robots have such a wide range of use, it is difficult to determine the curriculum's "purpose" or "standard" in a conventional classroom-based teaching setting. Through our current plans for use of robots in classroom projects, we expect to bring many benefits to students such as "communication skills", "English ability", "interest in programming", "interest in robots themselves" and "teamwork skills". Our challenge is to analyze each of these benefits and create versatile curriculum courses.

Art latent in sport

Things born

out of diversity

Project Associate Professor
Tokyo University of the Arts

Rui OGAWA

Last year, I had the opportunity to try a wheelchair for competitive use by wheelchair badminton players. it was much lighter than I imagined, and I was surprised that it could move so quickly, unlike the wheelchair I am accustomed to pushing around my elderly mother in.

In "Summer Arts" Japan 2017 Ushikai" in August, there was a performance where wheelchair badminton players rallied with those without disabilities. If the sound of the rackets hitting the shuttle, the sound of the shoes and the wheels rubbing against the ground, energetic movements of the players and the trajectory of the shuttle which was supposed to be stars in the sky were all considered a piece of "art", there was no dividing wall between them at all.

2020 will be one of the iconic symbols amidst the movement of the people wanting to understand things or people that are different from them. Regardless of nationality, color of the skin or gradation of sexuality, I hope that athletes on the big stage will bring their energy to act as an outburst of expression.

Of course, 2020 is only a pass point but after more than 50 years since the Paralympic Games was first introduced in "Tokyo" in 1964, "Tokyo" now is about accepting the infinite range of diversity and considering how they can blossom in positive ways.

In our current world, where technological innovations are advanced, there are many ways to express ourselves. At the abovementioned project with the cooperation of badminton players, we generated music out of movements of their muscles. The musicians wore head-mounted display, showing the music sheet so that they were released from their usual position "in front of the music stand".

In this context, perhaps the ideals that all of us pursue can be found in art. "Beauty" exists within individuality and by fusion of different things, a new set of values can be created. That is required of us in this diverse society and now is the opportune moment to strongly push this agenda forward. I will consider a wide range of possibilities to create a new "beauty" by exploring the fusion of many individualities in sports, art and science.

The 2020 Initiative: our activities this year and beyond



In 2017, the 2020 Initiative group organized the "Summer Arts Japan 2017 Ushikai" in Sogakudo concert hall on 6 August; an international symposium "Sports, Arts & Inclusion" at TUA's Hall 6 on 29 September; and "Mai, Hi-Ten-Yu", in Sogakudo concert hall on 22 November.

At "Summer Arts Japan 2017 Ushikai", we had athletes in wheelchairs and badminton players without disabilities × Orchestra. In "Mai, Hi-Ten-Yu", we had a "SAS" program of a dancer × an ensemble. At both events, we showcased a performance that has evolved since the previous year. These projects were highly successful and were widely featured in newspapers, magazines and TV.

At the international symposium "Sports, Arts & Inclusion", experts on sports of people with disabilities, invited from Japan and abroad, spoke about their country's situation and proactively exchanged opinions. On 20 March (Tuesday), we will organize a "Concert Symposium: Smart Hospitality in Japan Omotenashi" at Sogakudo concert hall. We will invite members of the Tokyo 2020 Culture and Education Commission and will discuss the Japanese omotenashi culture.

We are now preparing to host the "Smart Hospitality" concert symposium, and to continue and further develop the 2020 Initiative group's unique research projects including SAS program and others, we are strengthening our publicity to external stakeholders. Based on our achievements this financial year, we are actively working on our research, developments and business planning for the next financial year.

People with disabilities seen as a subject for study - understanding the needs of those with disabilities

Three years have passed since the Research on disabilities and expressions group was established at TUA's COI Site, and I started to wonder how our research is being perceived by those with disabilities. Chigusa Asaka, a member of our team who is blind will be leaving TUA after two and a half years, and on this occasion, I decided to ask for her honest opinion.

"Ever since I lost my eyesight at a young age, I have always explained my condition to people around me, to be accepted at school, at work and in the community. One purpose of that was to clarify exactly what kind of support was necessary. I only needed support to do things I could not do alone or was difficult to do alone. At the same time, I have always expressed my opinion that support is one of the tools that helps us all co-exist in one society. When I first joined the Research on disabilities and expressions group, I did not feel entirely comfortable. That is because, first, I had become the subject for study myself, and second, the theme of

the research itself was to explore "support for people with disabilities" using arts techniques in the arts sector, not the social welfare sector. In addition, as I had always believed it was important to adapt to the community, it was strange to suddenly feel like I was the main character on stage. But through discussions with the other members of the team, I realized that this research is also about learning from those with disabilities and discovering the needs related to art. Furthermore, building on research activities will promote participation of people with disabilities in this sector. Taking these points into account, I started to think that we, people with disabilities, should also appeal our needs in alignment to this movement.

In recent years, the word "barrier free" has become familiar but many barriers still exist. As these projects at TUA become more widely known in society, I hope that they become the cornerstone to remove more barriers.

We interviewed Akitaka Sugishita,
a member of the Center for Advanced
Medicine and Clinical Research
at Nagoya University Hospital.

Clinical Assistant Professor, Information Technology
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Akitaka Sugishita



— Please tell us about the Center where you work

Nagoya University was selected both as a Translational & Clinical Research Core Center (Ministry of Education, Culture, Sports, Science and Technology) and on the Clinical Trials Core Hospital Program (Ministry of Health, Labour and Welfare). There are only 11 of those in Japan. Our Center divides the function of these programs into “Advanced Medicine Division” and “Clinical Research Division”. Our organization has centralized the process from seeds discovery to medical services stabilization and conduct all of these.

The former is responsible for phases from basic research to FIH (First in Human) clinical trials, and the latter is responsible for the subsequent clinical research and clinical trials.

I lead the team in charge of IT in the “Advanced Medicine Division”. Our main tasks are to research and develop innovative medical information system from a global perspective; and to research and develop non-innovative IT networks in the health, medical and welfare sectors from a local perspective.

We developed a medical support tool using mobile networks which we have been using since the 1990s. We also obtained a patent by internationalizing the standards for medical information network system and the community cooperation critical path for stroke patients in 2006.

At that time, it was a groundbreaking new system, but operation costs were high, and they did not bring financial benefits to the hospitals that were using the system. For those and other reasons, it was never put to practical use. However cutting-edge the technology is, if it cannot be put to good use over a certain period, it is meaningless. This made us realize the importance of seeing the local perspective, not only the global perspective.

— Did you then switch to old-fashioned methods?

A mixture of old and new was good, and we involved the end-users of the system from the beginning to make them realize they were the inventors. That was how we developed the “NU-Med electronic correspondence book” – a system to share information that integrates community medical

system and community-based comprehensive care. For example, in a home-care program, the experts such as the family doctor, the visiting nurse and the pharmacist can all use this system to make a support team and share information. Through this system, the patient can receive the best medical care and can avoid troublesome communication. Of course, this system must operate at a security level that can protect medical information.

Moreover, since 2016, Nagoya University Hospital, with others, is running a health and medical care trust business, aimed at elderly people.

— Are you also working with local companies?

There are many SMEs specializing in manufacturing in Aichi prefecture, and we organize information sharing events on a regular basis in cooperation with local chambers of commerce. For instance, we requested for an IV stand that does not fall or an electric cord to link multiple infusion pumps and the local builders or manufacturer can make them for us. There was an idea to create an IV stand that one can carry like a rucksack. This is one example of the “non-innovative” part of our project.

— That is much like the inventions in Doraemon's world! How can you collaborate with TUA's COI Site in future?

Through community medical system and community-based comprehensive care network, we can find out how many people have disabilities in which areas of any given city and understand their needs. By doing so, we can make requests for a special kind of music for this group of people or an art workshop for that group etc. If there are small-scale concerts or workshop packages that fit the needs of each region, that would make it easier for us to collaborate. In addition, I think there are demands for concerts and workshops designed as respite care (short-term breaks) for caregivers and supporters of people with disabilities.