



Tokyo University
of the Arts
COI Site



@Taira Tairadate

Find the latest
“human and art” relationship here!

SEVEN SENSES THEATRE

Since 2011, Tokyo University of the Arts (TUA) has organized the “Geidai Arts Special – Disability and Arts – ” every year as a networking event for all through art. This year, a revolutionary stage performance that appealed to various senses such as sight, hearing, smell and touch, the “SEVEN SENSES THEATRE” was performed at TUA’s Sogakudo Concert Hall on 1 December 2019. This was a new project to promote the purpose of the event even further by calling the uber-sense born out of human diversity as a “seventh sense”.

The props to stimulate the senses were placed already in the foyer, immediately after entering the venue. Through these props such as playing with musical instruments to enjoy wind and light; a trick painting where creatures from the sea appear when warmed up; and walking through a space to enjoy the fragrance embodying the pieces of music to be played, the expectation among the visitors for the performance was built up.

The performance was in two parts. In the first half, a musical suite “the carnival of the animals” by Saint-Saëns was played. A poem written exclusively for this song by Mr. Shuntaro Tanikawa was read aloud, with the sign dance (a physical expression of poetry using sign language) by Mr. Dakei as well as film and live music created the stage. All these elements came together in harmony and expressed a

diverse and rich world of the artwork. Also, at various points during the performance, artworks and dance routines that the Research group on inclusive arts of the COI Site had created with children with disabilities up to now could be seen, making full use of the personal connections that have been fostered.

The second half was a performance called “Sounding Seven Senses” by Mr. Koichi Omae, dancer, and Mr. Dai Fujikura, composer. This was their first performance of the artwork they created together, commissioned by the COI Site. Mr. Omae performed a dance with a focus on his prosthetic leg to Mr. Fujikura’s music. The audience were handed a watch-like device which lit up in rhythm with the music, to create a feeling of unity for both the performers and the audience.

In the talk session at the end, background stories like the process of creating the performance for the second part and secrets to the venue’s sound systems were revealed. For this performance, there were 16 speakers provided by Yamaha Corporation, a participating member company at the COI Site. The sound projection designed by Mr. Tatsuo Nagami apparently provided an atmospheric acoustics within the hall too. “SEVEN SENSES THEATRE” was a high-quality stage that brought together such technology, people and art.

HYOJUN

Vol.17

Arts & Science LAB. COI news

Date of Issue : 31 January, 2020
Editor : Kei Arai, Ritsako Hosaka, Hironobu Murata,
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Design : Hiroko Kuboki
Printed by OKAMURA PRINTING INDUSTRIES CO.,LTD.
Publisher : Tokyo University of the Arts Center of Innovation(COI)
Address : Tokyo University of the Arts, 12-8 Ueno Park, Taihoku, Tokyo JAPAN
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Science Agora 2019

There were two booths set up by the Tokyo University of the Arts' (TUA) COI Site at Science Agora between 15 - 17 November 2019. The "Super detailed museum - how to view art" was a booth set up by the Research on culture sharing group. Through a recreated version of an oil painting by Vincent Van Gogh, created using Clone Cultural Property techniques, the visitors experienced seeing an artwork in a multifaceted manner, by gaining an understanding of Gogh's life, the techniques used, and the building depicted in the painting in a VR film.

The Research on robotics & performing arts group organized a booth titled "Let's learn through robot art! Programming thinking and

humanity", to run an educational workshop which is currently being developed for children. The visitors experienced thought experiments related to AI such as the "Turing test" and Searle's "Chinese room" using the audio interface and conversation scripts that the research group has developed, to gain an understanding of the issues of computers and minds. Although the original workshop is targeted at children, this workshop was open to a diverse range of visitors, regardless of age and association. Mr. Takenobu Chikaraishi, Project Lecturer, commented that "through participation in this workshop, we aim to reduce unrealistically high expectations or fear towards IT technologies".

The booth of the Research on robotics & performing arts group



The booth of the Research on culture sharing group



The venue of art.0

art.0 The Birth of Art and City — OTEMACHI ART LAB.

"art.0 The Birth of Art and City" organized by the Cultural Diplomacy and Art Business Group at the Tokyo University of the Arts (TUA) COI Site took place at the OTEMACHI ART LABORATORIES from 15 October - 20 December 2019. This exhibition was the culmination of the ART LAB, which began in April 2019. There was a display of films and live painting by TUA students under the concept to "showcase the moment of birth of culture and art from Otemachi PLACE, the newest city in Tokyo". The films being shown included a Japanese dance performance with Cambodian ruins or jungles as the background stage, and a documentary exploring the history and background to how art was born and nurtured in France. Parts of these films were shown live in the ART LAB. The fact that the audience watching in Japan were able to experience the moment art was born in different cities around the world using the internet, which is a necessity in our modern society, was an important element of the artwork.

The live painting exhibition was also broadcast live on social media and the completed works were displayed at each stage, so the atmosphere of the venue was always changing. OTEMACHI ART LABORATORIES was being transformed every day with a sense of speed like a modern city, and it was indeed a "laboratory" for art.

GEIDAI ARTS in Marunouchi 2019

"GEIDAI ARTS in Marunouchi 2019" was held between 9 - 16 September. This event showcasing the Tokyo University of the Arts' (TUA) culture and art is held every fall, in cooperation with Mitsubishi Estate Co., Ltd. which is a company that designs the town of Marunouchi, a business center that represents Japan. This year, Prof. Junji Ito was the Chief Producer and Prof. Akira Senju was put in charge of the music. Under the theme of "voicel", there were many events held including displays of works and recitals

by winners of the Mitsubishi Estate Award, VOICE! concert, student-led events, the fourth BO-GAKU meeting, TUA auction and GEIDAI café.

At the fourth BO-GAKU meeting, there was a keynote speech by Dr. Hideaki Koizumi, an opening discussion by experts, as well as new program elements being introduced as a practical challenge for sensibility education in early childhood, such as "Kabuki for kids in the Reiwa period" and "Picture book reading with live music". This year saw an increase in the number of events organized and run by students, compared to previous years, and TUA students showcased their expertise in many places. For the concerts and performances in the open space of the Marunouchi Building (1F of the building, MARUCUBE), many passers-by were seen unexpectedly stopping to listen.



Voice of TUA SENJU LAB Presents a trombone concert "Into the Sound"

Continuing overseas expansion — AI-based animation synchronization system —

A film festival "Kinomania" took place in Sofia, Bulgaria. At the festival, the AI-based animation synchronization system which can play an animated film in synchronization with a live performance of Vivaldi's "The Four Seasons", jointly developed by the Research on synesthetic media group at the COI Site of the Tokyo University of the Arts (TUA) and Yamaha Corporation, was showcased.

On 17 November 2019, out of four animated films from Vivaldi's "The Four Seasons", "Winter" created by Mr. Theodore Ushev was screened to showcase the system. Over 3000 spectators filled the venue at the National

Palace of Culture, and after the performance, the audience gave a standing ovation. Overseas performances in 2019 using this system have included the US, Portugal and France, and this performance in Bulgaria was its largest yet.



The screening at the National Palace of Culture in Bulgaria.

Exhibition "What is Super Clone Cultural Properties?"

The exhibition "What is Super Clone Cultural Properties?" took place in the Chinretsukan Gallery, Tokyo University of the Arts (TUA) from 16 - 29 September 2019. While cultural properties need to be "preserved" for historic, artistic and academic values that they hold to pass down to future generations, they also need to be "disclosed" for public benefit. It was the technologies of Clone Cultural Property, developed by TUA and TUA COI Site's Research on culture sharing group, as well as Super Clone Cultural Property which creates a new set of values, that resolved this dilemma between "preservation" and "disclosure".

On 1F of the exhibition venue, panels were displayed, detailing the background to the birth of Super Clone Cultural Property, the technologies that have been developed, and its cultural and societal values. In the past, copies

of cultural properties have been made either to protect the works or to understand the techniques used to pass them down. But Clone Cultural Property integrates state-of-the-art digital photography

techniques and 2D, 3D printing technologies, which makes it possible to revive even the "DNA of the art".

On 2F of the exhibition venue, there were displays of Super Clone Cultural Property that have so far been created by the aforementioned group and the different stages of production. Cultural properties that can only be seen at the local site, such as the Shaka triad statues of the Horyuji temple or the mural paintings of the ruins of Penjikent in Tajikistan, were each reproduced using specific research methods and production techniques unique to them. In addition, there was a demonstration of the manual stage of the production of the Clone Cultural Property at the exhibition, and the visitors quietly watched as the "DNA of the art" came to life.

A demonstration of how a Clone Cultural Property is produced



YOKOHAMA OTOMATSURI 2019

The Research group on inclusive arts, at the Tokyo University of the Arts (TUA) COI Site, seeks "to achieve a symbiotic society that offers a world full of dreams to all by learning from people with disabilities about the emotional thrill of coming into contact with the arts" through its research projects. In August 2019, the group concluded a "Social Inclusion Project Partnership Agreement" with the Yokohama Arts Foundation.

Prof. Oko Arai was appointed as Director of "YOKOHAMA OTOMATSURI 2019" (15 September - 15 November 2019), one of the largest music festivals in Japan. The theme of this festival was for "anyone to enjoy music freely beyond borders, generations, gender and regardless of whether one has a disability", with a total of around 300 program elements of genre-free music such as classical, jazz, pop and Japanese, in venues spread across the entire city of Yokohama. The workshops that this group has been working on including "See the music, Touch the light" (5 October), "Everybody can play the piano" (6, 9, 11, 19, 20 October) and "Music in the dark" (2 November) were showcased and played an important role in promoting social inclusion which was the theme of the festival.

At the workshop "See the music, Touch the light", there were 24 participants, who were elementary-school children aged 6 - 10, with developmental disorders. At the core of the workshop were paper craft animals made by the participants and the concert of "the carnival of the animals" in which those paper craft animals were shown in an animated film. There were added elements such as an animation app which connects people's movements and voices, and the drum circle so the participating children were all proactively engaged until the end of the workshop.

These events were featured in the media, and the tickets for "Music in the dark" was sold out very quickly. It was a good opportunity to understand how people feel about inclusive art and its ever widening potential.



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"Music in the dark"



Concert held during "See the music, Touch the light" workshop



Playing with "Everybody can play the piano!"

The platform

Project Associate Professor,
Research on culture sharing group

Yuichiro Taira

The Tokyo University of the Arts' (TUA) COI Site which began as a trial project in 2013 is now in its seventh year. The first application form for the Site that I have says that there were only six participants from TUA including me (but excluding part-time Visiting Professors). The internal project, which would later become the Site, started and we created the Arts & Science LAB, on campus. The project has now significantly grown, with over 60 participants from TUA working on research and production, as well as 16 companies and universities participating.

As a founding member, I was involved in the research, production and management of the Site, which is the reason I believe that I probably understand the buildings, the Site and the background better than anyone. Perhaps, this means that I am more responsible than anyone to see the future direction of the TUA COI Site.

Right now, I am working on commercializing and building what I refer to as the platform for the Site, post-COI. I have no background in business so my knowledge is limited, and COI will fulfill its term in two years, so those of us working on this project will have to start preparing for our departure. As a non-expert, I would just like to convey my wishes for what the platform should look like.

Until now, many short-term projects lasting three to five years have been continuously created at TUA, and when the subsidy ended, the outcomes, artists and researchers all departed simultaneously and that had become the pattern. I think it is a real shame as there is no role model, and I also think that this trend could further a system that exploits young artists and their efforts.

As far as I know, people who recognize the COI Site for what it is are scarce among the staff and students of TUA. If we continue, we will go down the same path as past projects. In the post-COI era, cooperation between the university's existing faculties and fields of expertise will be vital for both parties. But we can only achieve that if the Site proactively approaches each faculty to spread the benefits of its achievements, rather than inviting the faculties to come and participate. I sincerely hope that through this approach, this will become the first sustainable project at TUA.



Technology Seed Incubation Co., Ltd became a participating member company of COI Site at the Tokyo University of the Arts (TUA) in 2019. In this interview, we asked about the company's philosophy and businesses as an incubation company, and its projects at the COI Site.

Operating Officer, General Manager,
Tokyo Business Incubation Dept.
Technology Seed Incubation Co., Ltd

Dr. Takayuki Kumagai

What kind of businesses do you have?

Our company's main business is in supporting the commercialization of technology seeds, which are developed mainly at universities and research institutions. An example of commercialization which may be familiar to those at TUA would be something like the licensing of intellectual property such as music and art to generate copyright fees, but our company is particularly focused on establishing ventures.

Merely "starting an enterprise" is not difficult; the issue is whether it is sustainable as a business. Generally speaking, there is a big gap between the technology seeds developed at universities or research institutions, and the needs of the customers (companies or consumers) who will buy the end-product or receive the service born out of the technology seed. That is where we add value by suggesting essential elements to bridge that gap to make it a successful business. Together with universities and research institutions, we create the most appropriate business model, and that is how we support commercialization.

By establishing ventures which create new businesses in line with current trends, it encourages the turnover rate of industry which leads to new employment opportunities. We believe that this will then eventually contribute to Japan's GDP increasing.

Please tell us about some university-led ventures

Recently, Japan has started to focus on creating ventures, and investment into domestic ventures is in fact on the rise. I also believe that investment from private sector to universities is increasing too. Universities are proactively conducting joint research projects with private sector companies, and universities are enthusiastic about businesses using patents etc. For example, if a venture using the patent held by the university succeeds in creating profit, then the university would benefit from the license fee income. The university could then use some of the income to invest back into the lab to accelerate the research even further and we can expect to see new technologies invented.

In fact, our company is participating in the "Program for Creating Start-ups from Advanced Research and Technology (START)" by JST as a project promoter from this year. Our project with Osaka Prefecture University was selected onto this program. The university and the project promoter together spend three years to commercialize a project. In university-led ventures, applying for funds from a public organization such as JST is one way but it is also possible to obtain funds from private sector and promote its commercialization at an accelerated speed. It is important to decide which method would be best suited depending on the type of technology seed.

Please tell us about the commercialization project you are currently working on at TUA COI Site.

It is still at an early stage, but we are working to commercialize the "system to turn vital data into art" which uses muscle movements to

play music. It was created through the COI fund for young researchers at TUA, Ritsumeikan University and Juntendo University.

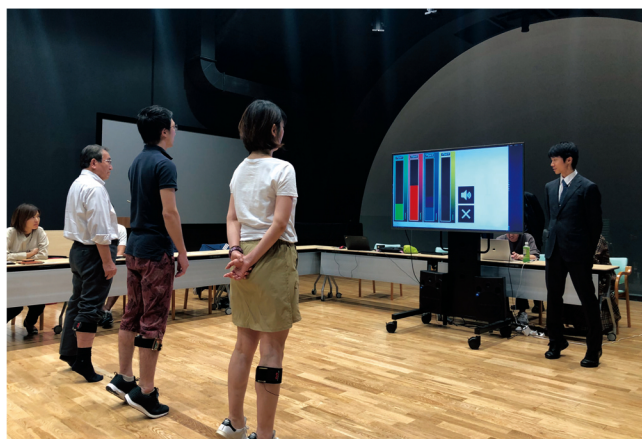
To be more specific, we had a meeting with the core members of the project in July last year, and we pitched our proposal detailing the targets that we had considered and our plan for commercialization. With that as a basis for our discussions, we are currently trying to establish a shared vision of what the best-case scenario in commercializing this would be. In November, we conducted a demonstration experiment to try and play the music in a round and changing the tune of the music by repeatedly standing on tiptoes. By experiencing the system for real, rather than having discussions at the table, we were able to simply enjoy playing it.

We think the pure enjoyment that people will get by using the "system to turn vital data into art" will bring about an unprecedented kind of motivation for keeping fit. It will be even more appealing if we could use music produced by TUA. There are many more ideas still to come so exactly how it will be commercialized is not yet set in stone, but our vision keeps getting bigger. This commercialization project is only happening because of the wonderful seed invented by three researchers. We will continue our support so that it hopefully will become a successful project example of the COI fund for young researchers.

What do you think about the possibilities of a TUA-led venture?

An overwhelming number of university-led ventures come from science universities, so a TUA-led venture, based on art, would not be so straightforward. But that gives us all the more reason to give it a try. It will have a huge impact if it is applied in society and it will be a touchstone for ventures born out of an arts university.

We understand that as well creating a platform, we are now required to apply our research results to society at the COI Site. We hope to take on a role in the project management side of this social implementation, by planning and executing ideas that fill the gap between the seeds and the needs, managing budgets and timelines.



A demonstration experiment of the "system to turn vital data into art"