The final piece of the night was Garling Wu's Island Universes, a very special live interactive electronic piece. The composer set up a three-dimensional space using VR devices on the stage; a female dancer with sensors on her arms was the performer. The movement of her body and the gestures of her hands triggered sound materials, noise and sound textures. The positions and movements of the sensors in the 3D space were captured and sent to a computer, which transformed the data into parameters of the music, controlling amplitude, pan, distortion, harmony, and effects. There were no special marks in the 3D space, and the audience didn't know what sounds would be triggered with the movement of the dancer. It was like navigation in the darkness, uncertainty was the most special design of the piece. Unfortunately, there was no interactive image on the screen. With a length of less than 10 minutes, the piece was too short to fulfill the expectation concerning the development musical and the implementation of VR technology.

In summary, the concluding night of ICMC 2018 was a full blast. The wellcomposed works were presented in great performances, and the different types of electronics music made the concert a great success. The long program took more than 2 hours, which was both, a great pleasure and challenge the audiences. to Unfortunately, there occurred some technical problems during the performance, which could have been avoided with more time for rehearsals and technical checks. Nevertheless, the night was still a successful finale of the conference, which provided a wonderful platform for a rich electronic music feast. I am looking very much forward to next year's conference and concerts.

Installation Reviews

Hunter Ewen: *LEDpaint* Aug 6–10, 2018, Daegu Art Factory *Reviewed by Teresa Marie Connors*

Hunter Ewen's LEDpaint (2016–17) is an audiovisual installation of engaging improvisational practices. The work contains 22 images on 18x22 inch brushed aluminum panels, sonic material and light sensors. Shot in the dark with LED lights and audio microphones, each panel consists of various exposures to different motion: "musicians. bodies in performance artists, dancers and movements artists." Ewen suggests the panels represents a short improvisational

performance that emerges from a curated process of documenting the "ephemeral nature of improvisation."

The panels are each equipped with a photoresistor onto which gallery attendees are required to light, using their phone or another source. The light, in turn, triggers the sonic material associated with the image, which varies in length between six seconds to three minutes.

While each panel represents a short time frame, Ewen indicates that it takes time to consider and engage with all aspects of the creative process. For example, the short sonic materials triggered by the light, "result from hours and hours of composition/improvisation with and independently of live performers."

The work is enjoyable to "play" as each panel is captivatingly beautiful with the abstracted movement of light, colour and sound. Moving quickly between paintings, a multilayered process of improvisation can be experienced. This, I believe, feeds into Ewen's noted intention to "examine the boundaries between technology and creativity [and] to find new approaches to interdisciplinary, creative works."

The only hiccup to Ewen's installation was the low lighting in the gallery. Some people entered the space and thought it empty; hence, walked out without engaging with the work, which is a real shame as LEDpaint was worth exploring.

Haein Kang: *Wind from Nowhere* Aug. 6–10, 2018, Daegu Art Factory *Reviewed by Teresa Marie Connors*

Haein Kang's installation *Wind from Nowhere* (2016) takes inspiration from Samuel Butler's work Erewhon. Kang's creative uses wind speed data, mechanical motors, wooden structures and translucent vellum paper to creatively engage with the following text: "The wind rose. Branches were swaying. Twigs were trembling. These vibrations made the leaves brush each other. The soft rustling of leaves went around here and they are following the wind."

Wind from Nowhere was ideally located at a main entrance to the Daegu Art Factory. On entering the building, visitors could pass closely to Kang's wind modules to experience the system in operation. For ICMC2018, Kang installed eight portable wooden bench-like structures, which had attached to the top eight moveable sheets of heavyweight translucent vellum paper. Pre-collected wind data was converted to drive a mechanical motor arm that, in turn, moved the vellum papers from side to side. Upon moving, the sound of all 64 sheets of paper was crisp and, depending on the wind data conversion, became quite loud. To this effect, and as noted by Kang, the wind data "creates wind phenomena [...] to represent this beautiful moment mechanically."

Kang's installation is well constructed and offers a unique approach to an interdisciplinary practice that sits at the intersection of art and technology. Unfortunately, during the conference, the extreme heat and humidity in South Korea caused the paper to lose form, which interfered with the action. Because of this, Kang is now researching different paper products that might withstand such humid conditions. Examples of Wind from Nowhere are available on Kang's web page: https://www.haeinkang.org/windfrom-nowhere

Clovis McEvoy: A Study in Virtual Reality Music – Active Observation Aug. 6–10, 2018, Daegu Art Factory Reviewed by Teresa Marie Connors

Clovis McEvoy's *A Study in Virtual Reality Music – Active Observation* (2017), is a substantial exploration into the creative potentials of virtual reality environment and traditional visual music composition.

McEvoy, who was awarded one of three New Zealand's APRA Professional Development Award (2017), has joined the growing group of creative practitioners exploring the immersive world of VR artworks.

I was eager to explore McEvoy's work but slightly hesitant as I've experienced VR motion sickness with previous works. Fortunately, McEvoy's system uses the latest VR technology, and with each participant free to move within a defined space — no such ill feelings emerged. As "the audience McEvoy states: is empowered to be an active observer" by interacting with the sound-objects based on the viewing angle and proximity within the defined space and time period of the work. To this effect, participants are free to experience specific items at will.

The resulting work is similar to a surrealist dreamscape. McEvoy's general aesthetical inspiration draws on Olivier de Sagazan and Francis Bacon works, particularly their use of darkness and sense of depth, which McEvoy notes: "makes any object or splash of color all the more vivid and stark. This resulted in the floor material which is largely dark but has slowly pulsing waves of deep red color, and the glowing orbs contrasted by the deep black orbs." In combination with 2D and 3D sounds, participants moved through this dreamscape effecting the panning, volume and frequency of certain visual objects. At one point I was drawn toward an abstract shape in the sky, while another moment, reflexes forced me to jump aside to avoid a flaming fireball.

It was informative to watch other participants in the system — to see the different reactions. Some would move fluidly in the defined space while others became frightened. To this effect, McEvoy's approach to virtual reality opens a platform of creative research that has enormous possibilities.

Patrick Monte and Brian Questa, Anomy, for U.S. News Aug. 6–10, 2018, Daegu Art Factory Reviewed by Teresa Marie Connors

Anomy, for U.S. News (2016), is an impressive audiovisual artwork. Installed on the Media Facade at the busy Daegu Station intersection, this generative installation ran nightly amongst a mesh of traffic movement, lights and passersby.

Constructed in C# and Supercollider, Monte and Questa use eleven live U.S news feeds coded to redact words containing the letter 'e.' These blacked out words, in turn, trigger a note explicitly allocated to each feed — in this case, one

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note from the 12-tone Western music scale. Similar to a piano roll, the eleven news feeds scroll from right to left, with each redaction generating the piano score.

It was captivating to stand on the sidewalk and experience the 50ft $(15.2m) \times 37'$ (11.2m) news feeds scroll by with the piano score sounding from speakers below the facade. At moments, the score blended with the sonics of this busy intersection and at other times became an intriguing disruption.

Of the title, Monte says: "Anomy" references French sociologist Emile Durkheim research on suicide. Durkheim's theory of Anomie (also spelled anomy) proposed that certain types of suicide occur more often in societies where social standards are in a state of change. Within the transitional period, psychological states would emerge like a lack of purpose, emotional emptiness and despair, which contributed to suicide attempts. For Monte and Questa, this theory was useful to contemplate the processes at work in Anomy, for U.S. The authors stumbled on the term Anomie during the proofs-ofconcept stages when, by hand, they blacked out words in a dictionary to

develop "musical translations of the markings." Of this Monte says, "Anomy" [...] seemed to describe the concepts and processes we were developing around language. Removing words with "e" from the news feeds effectively decenters the entire language and [how] it produces meaning. We use the word "anomy" to signal breakdowns in concepts of meaning and truth in language typified by the contemporary media multivalent experience. This multivalency we consider to be in some ways 'suicidal' on a social level, or indicative of a societal need for new, regenerative forums of truth and empathy that may go beyond language or require its restructuring."

Takano Mamoru: *quad~ sonification for hand stroke* Aug 08-10, 2018, Daegu Art Factory *Reviewed by Alexander Sigman*

One week prior to the beginning of ICMC, I heard Tokyo Metropolitan University PhD student Takano Mamoru give a presentation on his installation *quad~ sonification for hand stroke* at a Japanese Society for Sonic Arts (JSSA) meeting in Tokyo. As such, I was quite intrigued to experience the installation *in situ* at the Daegu Art Factory. The

installation was placed in a separate room. The setup consisted of a laptop running Max 7 with a Leap Motion V2 controller attached, four speakers (hence "quad~"), and a chair situated in the middle of the quadraphonic field.

Information regarding the mapping between physical parameters and the spatialization of multiple sound sources, x-position of the hands determined localization in the stereo field of the front two speakers (L/R pan), and changes in zposition shifted the sound sources between the front and rear speakers (F/R pan). Filter cutoff frequencies (between 200-2000 Hz.) were determined by y-axis values. Acceleration rate fluctuations of hand motion were correlated with fluctuations in acoustic characteristics of the sound sources (amplitude and frequency modulation). The user could manually select the extent of stereo spread (narrow/wide), and activate а randomization setting. A questionnaire window was placed at the center of the screen, in which users could rate the perceptibility of the spatialization and the connection between their motion and the spatial trajectories along a five-point Likert scale.

In my experience of the installation, at first the breath and depth of hand motion required to influence the audio was unclear, but after a couple of iterations, I was able to adapt my movements accordingly. Although the description mentioned multiple sound sources, it seemed possible only to manipulate a single broadband noise source. The artist makes references to "sonification" and "physical cognition" in the description, but it was difficult to determine the extent to which this project has introduced innovations to the existing collection of Leap Motion-controlled sound synthesis applications.

ICMC2018 Awards

ICMA Music Awards

The Regional Award for the Americas went to Chi Wang, University of Oregon, for Peony Garden for live electronics. Jury motivation: "For its unique way of using the Wiimote for sonic transformations. The Regional Award for Asia/Oceania went to Jaeyoung Park, for Dysthymia, a computer-aided acoustic composition. Jury motivation: "For its adoption of a reflect structured process to the composer's perspective as an observer, mixing synthesized and recorded sounds." The Regional Award for Europe went to Andreas Weixler and Se-Lien Chuang, Bruckner Private both at Anton University and Atelier Avant Austria, for Sonic Environment Daegu, a piece for ensemble and electronics. Jury motivation: "For its strong balance of creative control and multiple devices in a multimedia performance. The Student Award went to Anne Veinberg, Leiden University, for CodeKlavier 'hello world', a piece+paper contribution. Jury motivation: "For it contributes to instrument performance with a good-humoured mix of pianisms and live coding." The Audience Award was not given.

Jury Music Awards: Dr. Miriam Akkermann, Mr. Patrick Gunawan Hartono (Audience Award 2017), Dr. Choi Insook, Dr. Taehi KIm (ICMC Music Chair), Dr. PerMagnus Lindborg (ICMA Music Coordinator / Chair ICMC2018), and Dr. Cort Lippe.

ICMA Paper Awards

The best **Paper Award** went to Marta Gentilucci for the paper "Vocal Distortion and Real-time Processing of Roughness".

Jury Paper Award: Dr. Christopher Haworth (Research Coordinator ICMA), Dr. Arshia Cont, Dr. Stefania Serafin.