

array

ICMC 2018/Reviews

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**ARRAY -- Special Issue****International Computer Music Conference ICMC 2018, Daegu (KOR)**

In August 2018, the 43rd International Computer Music Conference ICMC 2018 took place in Daegu, South Korea. Under the conference's theme "preserve | engage | advance", a high number of papers, compositions, and installations have been presented at Daegu Art Factory, Daegu Concert House, Sogeuam Changgo, and several public spaces. The program also contained workshops, panel talks, a kids program and a Hack-N-Makerthon.

In order to give a glance on some works shown at this vast conference, this special issue of ICMA Array features reviews of eight concerts and four installations presented ICMC 2018, written by Teresa M. Connors, Peter Hulen, Mark Oliveiro, Brian Questa, Martin Ritter, Alexander Sigman, and Wanjun Yang.

The full program as well as the conference proceedings are available online under <https://icmc2018.org> (Program -- Papers / Concerts / Installation).

Miriam Akkermann (Editor), December 2018

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**Concert 1****Monday, Aug 6, 2018, 10:30 a.m.****Chamber Hall, Daegu Concert House***Reviewed by Martin Ritter*

The first concert took place in the Chamber Hall in Daegu, a modern hall that suited the electronic performances well. There were several works programmed with high technical demands – these demands were facilitated by a team of audio engineering professionals, a feature not present at all ICMCs. For this review I will look at four of the seven pieces on the concert.

Prior to attending the concert I made the decision to react solely on the sound alone, reserving the reading of the program notes for after my initial reaction. This was partly also a practical decision since the pieces followed each other in quick succession and there was no time to read all the notes between them. Before writing the reviews I read the notes and biographical information, which were used to (re)inform my initial reactions. The issue with the a review of a premier or previously unknown piece of music, specially ones as technically, timbral, formally, etc. complex as pieces with cutting edge electronics, is that the initial reaction might not be appropriate and

further contemplation over a period of time is required. These pieces deserve more than a single listen if a fair and appropriate review is to be attempted.

*Inherence002.opposition* for live laptop by Alyssa Aska officially started the concert program of this ICMC (although there was a pre-conference concert the previous night). It was a curious piece that did not conform to one's expectations. As stated in the program notes, it is a piece for Leap Motion controller, however the controller was violently unplugged about 1/3 into the performance, after which the composer continued the piece on laptop alone. The first part, with Leap Motion, created the source material, which was recorded in some fashion to be manipulated and improvised with at the laptop during the second portion of the performance. The whole composition was restrained in many ways. It had only two modes of interaction (Leap Motion and laptop), two large formal sections, and one synthesize technique (potentially FM with some distortion). The synthesized sound was somewhat grating and since the timbre did not change much throughout the piece it created a very tense and overwhelming experience. There was only one short pause in the continuous

soundscape when the composer unplugged the Leap Motion to continue on laptop. At this point, the monophonic line created by the Leap Motion controller was layered on top of itself at various levels of transposition and time stretching, creating at times a thick all-encompassing texture, which the composer skillfully manipulated. The piece ended abruptly, without warning and the sudden void created by this was pregnant with psychoacoustic afterimages.

*Almost* for fixed media (audio) by Yunze Mu started very strong with clean samples, good energy and direction. As the piece progressed, I initially lost interest due to a lack of real formal or musical development. Reading the program notes revealed that the piece was based on meditation and immersion. With this knowledge we can somewhat adjust our listening and understanding of the piece with regards to form and development. However, the claims made by the composer of “self-discovery” or large philosophical questions such as “the nature of meditation and the motivations behind it” again remove me from the music as these elements are exceedingly difficult to portrait in a medium such as sound. In the end *Almost* was almost able

to capture my imagination but fell short on some minor compositional shortcomings, and was altogether too difficult to achieve philosophical goals.

The entire program note reads: “*Lilith, Cometh* is a new work for live computer and flute performer, it is a deconstruction of fixed-media and computer dichotomies, as well as an examination of the Feminine anti-hero in Patriarchal fiction/myth.” The piece for flute and computer by Patricia Surman and Mark Oliveiro featured a live flute performance, live computer, and live interactive video projection. It was technically very demanding and had many interdependent parts. Unfortunately, one of these parts, the video component, did fail about two-thirds through the performance, and neither the composer nor the technicians were able to remedy the situation for the remainder of the piece. The flute and electronic portions of the piece were well done, if not a little on the safe and traditional side of the spectrum. The video component was perplexing. It featured imagery of apples and snakes and the female body (not a very subtle nod to a “Feminine anti-hero”). It is still not entirely clear to me how the composer deconstructed the fixed-media/computer

dichotomies. What seems clear is that the flute was tracked by the system (likely pitch and amplitude) and these were simplistically mapped to the deformation of the female body in the video. However, since the projection failed partway through the performance, it is difficult to say how, or if the composer developed the interaction further.

### *Shall I compare Thee to a Summer's Day?*

For live laptop orchestra by Lee Cheng had the most intriguing opening of any piece I witnessed at ICMC 2018. As the lights were dimmed, 16 performers with tablets completely surrounded the audience quickly and quietly. Then the lights were turned off. What followed was a frenzy of 16 people tapping their devices in Morse code and the flickering of the devices' flash lights in response, recreating the Shakespearian sonnet in sound and visuals as words were projected on stage. There seemed to be a gaming element to the way the performers were interacting with their screens. A very tense and focused performance was the result. Unfortunately, the Morse code with the flickering lights, the gamifications of performers restoring the sonnet line by line wore thin as no new elements were added or developed throughout the piece.

Soundfiles were triggered at some points to underscore the tapping and to keep the audience's interest. This however felt more like a gimmick than an earnest attempt to develop this intriguing concept.

### **Concert 6**

**Tuesday, Aug 7, 4:30 p.m.**

**Chamber Hall, Daegu Concert House**

*Reviewed by Peter Hulén*

The program for this afternoon's general concert was a mix of pieces for a variety of solo performers with electronics, and fixed media pieces. The opening piece was 7口一 (*Flow*) for soprano, acoustic guitar and electronics by Alexander Sigman. The electronics were projected through the use of transducers attached to the acoustic guitar, played by Woojae Kim. Computer-generated voice rendering of the text — from the 1600 John Dowland lute song "Flow My Tears," translated into Japanese through a digital algorithm — seemed to be actuated by means of playing or taps on the guitar. The soprano, Jooyoung Bang, sang the simple melodic material, similarly translated, in a plain-voice style. Various elements of the composition were well integrated, and the overall effect was balanced and contemplative. The piece featured a

number of notable techniques for the guitar, including pitch-bending by means of scordatura (the pegs turned by the soprano as she sang!), sul ponticello bowing, and striking of the strings with a wooden beater.

The second piece was *Up in algid skies* for haegeum, a traditional Korean two-string fiddle, and electronics by Sam Yulsman. The haegeum part, performed by Jeonghyeon Joo, was somewhat soft, but the electronics were subtle and well-balanced, their rumbly, knocking gestures and longer middle- and higher-frequency drones never intruding or getting in the way of the instrumental performance. The electronics were conceived as a reference to the intonarumori of the Italian Futurists, mediated through the nonghyun vibrato technique of the haegeum. The haegeum part, in turn, featured rather modernistic techniques and gestures. This created a somewhat brooding, thoughtful dialogue between a form of Korean traditional music and a form of nascent Modernist thought and expression.

The two pieces for live performance and electronics were followed by a fixed-media piece: *Metascape III: The Inner*

*Soundscape of Guzheng* for audio fixed media by Yu-Chung Tseng. M. Tseng's work represents the successful creation of an abstract, composed soundscape, as opposed to one recorded live reflecting a specific time and place. This was a very active, dynamic piece, gesturally and spatially thought through, and composed with clear artistic intent. Spatialized sonic layers of varying frequency, duration, and character were carefully constructed from processed samples of the guzheng, a traditional Chinese plucked zither.

At this point, the program not only returned to live performance, but also moved to a piece that included a visual element: *The verse of autumnal wind* for solo flute and Digital Imaging with Processed Sound DIPS by Hongshuo Fan. The flute part, played by Youkyung Kim, moved from long tones to a complex, pointillistic texture, and back again, and was processed into long, multi-frequency simultaneities that moved into a modernistic texture swirling into continuous sound, and back again to complex simultaneities. The sound of the flute was processed into live video: broken blocks with wavy colors and rotations, to geometric swirls of white light, fragmenting and becoming more complex.

The processed sound and video were very well coordinated through use of the DIPS plugins for Max/MSP. The Chinese lingual tones of the sad, longing poem of Autumn by Li Bai referenced in the title were used as the basis for the flute part. The flute, the digital processing of sound and video, and the visual elements themselves were structured into a formally coherent and artistically unified whole.

The program then returned to fixed media with *Rituals* for fixed audio media by Chin Ting Chan. This sound collage drew on many different types of sampled sources, processed with Max/MSP. The resulting variety of sounds was extensive. The piece moved between realistic and surreal soundscapes. It became very active, yet still remained subtle. Dynamics were achieved by a terracing of activity rather than relying on mere changes in overall amplitude. The formal and dramaturgical arc of the piece was carefully planned and well executed, which sustains Mr. Chan's well-earned international reputation.

Next came the piece *Te* for piano and live electronics by Seunghyuk Lim. The piano, played by Hye-sung Yoon, opened with widely spaced, forceful, rapping gestures interspersed with quiet midrange

simultaneities and other shorter gestures. All piano material was processed; the piano part itself was sparse enough to allow clarity between its gestures and the processed electronics. The work was well balanced in that way. The piece was also formally coherent as midrange gestures become complex and tremulant, finally returning to the beginning material.

The program alternated to another fixed media piece with *Distant Objects Come into Operation* for fixed audio media by Larry Gaab. This piece featured a variety of interesting sounds accumulating into sound masses and dissipating into singular events without ever becoming either too busy or stopping momentum altogether. It was a well-crafted pace, with whizzing, swishing, and juddering pitch and timbral glissandi moving between foreground and far subtler background positions.

The piece that followed was *Trefoil Knots* (総角) for cello and electronics by Jacob Sudol. The term *agemaki* in the title is ambiguous, since it has many different associations and connotations within Japanese language and culture, not least in *The Tale of the Genji*, which the composer mentions in the program notes. Mr. Sudol's stated intent with the piece was to

reflect on the complexity of relationships within the referenced work. The cello part, performed by Seung Won Jung, began with sul ponticello harmonics in single- and double-stops before the electronics began in the form of transpositions into subtle, droning masses of sound. The piece was never loud. There followed sliding harmonics, and a slow, rising melody on intervals of the harmonic series. These were echoed in canon by the electronics, growing in layers as the rising figure repeated and quickened. The layers then faded, and the cello returned to single harmonics with subtle processing. Overall, the piece was harmonically lush and formally sound.

Again, a piece with live performance was followed by one for fixed media: *Atlas of Uncertainty* for audio fixed media by Massimo Avantaggiato. The source material for this piece ranged on a continuum between concrete and synthesized sounds. According to the composer, these included kitchen noises, treated bell textures, electronic whip sounds, chimes, Tibetan bowls, whooshes, and granular accumulations, to name a few. It featured long ringing clusters and buzzing backgrounds punctuated by multiple noisy, juddering events. It was a

short, but interesting and effective piece.

The final piece on the concert was *As the Flames Grow Higher* for flute and electronics by Patrick Reed. This was a programmatic piece depicting scenes from a camping trip: the sounds and sensations of a campfire and its afterglow. According to composer, the flute part, played here by Youkyung Kim, creates a narrative supported by the electronics. The latter began with very subtle, bell-like gestures and flutters behind trilling, modernistic melodic passages by the flute, with some flutertongue. The flute part was either transposed in advance for fixed media, or live-processed at the lower octave. The electronics faded to the subtlest background, as the flute continued. There was a long-breathed melody with some pitch bending, and a breathy tone over cricket-like sounds. Transposition of the flute to a lower major sixth created a texture of fixed planning, and melodic material was repeated with transposition at other intervals. Subtle, fire-like sounds were included — burning, crickling sounds and quiet rumbles. The electronics were ever-subtle, growing slightly at the end to create a formal climax. The concert was nicely rounded out with this piece — a fine, evocative musical narrative.

**Concert 7****Tuesday, Aug 7, 2018, 8:00 p.m.****Grand Hall, Daegu Concert House***Reviewed by Martin Ritter*

Concert 7 took place in the Grand Hall in Daegu and featured several works with high technical demands. Many of the concerts ran smoothly and without technical difficulties, this particular concert experienced several such difficulties that slowed an already lengthy program. Out of the scheduled ten pieces, four had (multiple) false starts or other technical issues. This considerably lengthened the already very long runtime of the concert. Another common problem at conferences such as these, especially when there are simply so many pieces and the aforementioned technical problems, is that concerts often run so late that audience members must leave before the final piece if they wish to see the late night concert (or miss the beginning of the late night concert).

For this review, I will again focus solely on the sound alone, reserving the reading of the program notes for after my initial reaction, as outlined more in detail in my review of concert 1.

The opening piece, *As hovering ashes in a*

*quarter moon*, for cello and electronics by Chen-Hui Jen, was the first, but by no means the last to fall victim to technical difficulties and had to be restarted only a couple of measures in. Afterwards, the piece ran without further interruptions or obvious issues.

The cello line was composed with a very traditional, and highly idiomatic melody, which while underscoring some of the intended ritual had the unfortunate effect of sonic and harmonic stasis. The electronic treatment of the instrument was very restrained using techniques such as delay, ring modulation, and frequency shift, which suited the melodic writing and the overall concept of memory, hovering, and residue. Pre-recorded string instruments other than the cello were used later in the piece. These sounds seemed confusing and out of context, considering the notion of hovering ashes and a Buddhist funeral. A more restrained set or samples to complement the ritual might have been more appropriate. This would have elevated the restraint shown in the melodic writing as well as the restrictions used in the live electronic portions.

*Smart-alienation*, for small flexible ensemble, electronics and video by Igor Silva, the second piece, had two false starts

with lengthy periods of waiting in between each, before successfully running on the third. On the first attempt, the ensemble could not hear the click track and on the second the click track was erroneously routed to all the speakers for everyone to hear.

The EA components as well as the video used glitch very effectively, rapidly cutting between noise, glitch, and pure tones/images. Highly rhythmic and energetic, the tight coupling between these two technical spheres (audio and video) made for an interesting and engaging performance. The instrumental writing (flute, clarinet, cello, bass, percussion), while technically well executed by the composer and synched effectively to the other material, was underwhelming. For the majority of the time, the ensemble appeared to be using a popular film/game scoring technique called mickey-mousing. They did not offer new points of view nor develop the already skillfully assembled electronic materials. The piece might have had a stronger impact and would have been more affective if it was trimmed down to the electronic and video parts, foregoing the added complexities of the live, click tracked instrumental performance.

*Tourbilloner, danser une danse sonore...*, for tárogató and electronics by Cort Lippe was the third piece, and also had to be restarted only several measures in since apparently no audio signal was received from the performer. From a purely technical perspective this piece certainly was one of the more complex ones of the evening, as well as containing the most virtuosic live performance. What the performer was able to achieve technically on the tárogató (a single reed, conical-bore instrument commonly used in Hungary and Romania) was nothing short of stunning. The DSP processes accompanying, enhancing, changing the live performance were flawless, of high quality and expertly executed by the composer live in concert. The program notes stated, “this piece is a trio of sorts.” However, the system seemed to react to the input of the performer and at no time was it obvious that either the performer had to react or adapt to the system nor how the composer, the theoretical third member fit into this description. Nevertheless, this does not in any way diminish the virtuosic display we witnessed on stage and on the computer.

*Moel Y Gaer, Bodfari*, for fixed media (audio) by Christopher Lock had a

fascinating concept: take excavation site diagrams, convert them to graphical notation in the IanniX software, and assign triggers/nodes derived from sites of interest from the actual dig. This score is then played back in IanniX and interpreted in Max where these triggers are mapped to different sounds and functions. Unfortunately, the IanniX score was not shown during the performance. This would have helped immensely to better understand the connection between real-world data and artistic interpretation. This software was created with the intent that graphical scores could be projected for audiences so a deeper understanding of cause and effect could be achieved. It was difficult to ascertain an internal logic while listening to the piece and seeing the abstracted data. Maybe an overlay of the original sketches by the archaeologists or pictures of the dig itself might have deepened the audience's reaction to the piece.

The double bass is an interesting instrument, in part because the high registers (including harmonics) can be used in such powerful and interesting ways in combination with the low end and the huge resonating body. The melodic line of *Yahaney Inlet*, for double bass and

electronics by McGregor Boyle was inspired by plainchant and heavily quotes the hymn "Veni Creator Spiritus". This moves to piece into a modal plane, which was underscored by the use of pre-recorded sounds from Yahaney Inlet. The bass was simply processed, it seemed with delay and feedback to prolong certain notes. Indeed, the program note confirmed that pitch tracking was used to sustain certain notes. However, the integration of the live processing with the pre-recorded material was not convincing. The tessitura for the melody also seemed awkward for the double bass and might have been better suited for the cello. The low range of the bass was never explored, nor the extreme high register, where more timbrally interesting material might have emerged.

*Han:geul* was a piece for janggu and motion graphic score by Deborah Kim. "Han:geul", as the composer informed the audience in a pre-performance introduction, entitles the Korean alphabet. The audience should be able to learn and better understand Korean traditional janggu drumming by the end of the piece via a motion graphic score. This visual score, which was invented by the composer, used traditional janggu

notation along with images and video that the performer had to interpret.

The concept of the motion graphic score is intriguing, however the claims that it is a “communicational device that is first interpreted by the performer, and then understood by the audience” with the “cultural and historical dimension of the creation of Hangeul, and its aesthetics variety and complexity [...] embedded in the visual component of the work” are lofty goals. These goals were not entirely met, as the visual component did little to educate an uninformed audience about Han:geul or jangu performance.

Initially I was disappointed by *Ecosystemic Improvisation System no. 3* for live electronics by Michael Musick, because of the lack of formal cohesion, cliché sounds and DSP processes, especially as the idea of ecosystemic performance is one I am quite familiar with. The title conjured memories of the work of Agostino Di Scipio, which sets a type of expectation for listeners familiar with this research and work. “Ecosystemic”, “improvisation”, and “system” are very semantically charged words, which also influenced or pre-set expectations. In hindsight, however, the piece is much more effective, after some distance to the performance and having

now read the program notes. Here it is crucial to know about the independent agents in the system and their relationships and interactions, which now explains the somewhat rough edges concerning form or sonic cohesion of materials. Knowing of the intended interactions, or non-interactions, shifts the focus away from overall formal structure, even the sounds themselves, and invites the listener to participate in an adventure where sounds and parameters are shared between independent/interdependent players to create an altogether unexpected whole.

Barry Truax, one of the keynote speakers, performed two pieces in this concert. Truax is known, among other things for his contributions in Acoustic Ecology, continuing the work of R. M. Schafer, and his work on granular synthesis and his PODX system. His two pieces “Earth and Steel” and “The Garden of Sonic Delights” were easily the most polished and well-crafted contributions of the evening (if not the entire festival).

*Earth and Steel*, acousmatic work by Barry Truax conjured up images of a large, sonorous space where large metal objects were hit by other large metal objects. The

program notes confirmed that the piece was an homage to the days “when large steel ships were built in enclosed slips”. While the piece was extremely polished, had clean sound sources, and was expertly performed by Truax at the mixing desk (dancing along with the sounds, anticipating and reacting to the clangs at times), it still left me wanting. The promised “larger than life sounds” did not seem to appear at quite the imagined scale. The various hits of metal became predictable in their rhythmic, formal, and spatial treatment and their timbre remained virtually unchanged throughout, which is to be expected due to the conceptual framework Truax is working in. This is not to say that the piece was not enjoyable or boring to listen to, quite the opposite. Originally, this piece was performed in an enclosed metal slip, and I imagine that with the physically impressive spatial dimensions in combination with the unique acoustic environment, this piece surely must have lived up to the “larger than life sounds”.

*The Garden of Sonic Delights*, acousmatic work by Barry Truax was a delightful walk through an imaginary garden. Much of it seems to have been inspired by the work of the World Soundscape Project and the

soundscape/soundwalk compositions of Hildegard Westerkamp. The piece took the listener on a stroll during different times of the day and invoked sounds, although weirdly alien of water, wind, walking on foliage, etc. The stroll was pleasant, remarkable at times and all sounds seemed natural (even in their alienness) within the universe Truax created for the listener. However, like many other pieces, the solemn ambience at the end of Truax’s piece was immediately broken by the audible sounds of the headsets of the crew, a technical error that should be avoided in the future. The one minor objection I might have is that the piece abandoned the alien soundscape at the end where a coda like section was now, presumably presenting us with the unaltered natural sounds used in the composition. While I can easily justify this compositional decision on various levels both technical and conceptual, for myself I would have like to remain in the garden Truax so painstakingly constructed for us in the course of this work. I did not need reality to intrude on my daydreams...

*The scream* for dance and audiovisual work by Byung Ki Kim was the last piece of the evening. It was an extravaganza of a live dance performance, audio, and video.

It was the most ambitious work combining three different artistic practices at very high levels. Each component was well executed, had an internal flow and logic, and a formal trajectory. However, combining the three seemed to take away from each component as it became very difficult to connect the different practices into a whole narrative. Specifically, the two visual components, video projection and dance, seemed to be disconnected. This odd counterpoint may have been interesting to explore, however the music did not underscore this relationship or play with it but rather had its own trajectory. Each of the three components in combination with one of the others would make for a fascinating experience. Combining them, it unfortunately did not live up to what it could and should have been, given the quality of the components.

### Concert 9

Wednesday, Aug. 8, 2018 10:30 a.m.

Chamber Hall, Daegu Concert House

*Reviewed by Brian Questa*

How can a composer approach recorded or found material? How much does the recording process itself effect our perception of the sound source? And where is the border between self-

expression and a pure presentation? These questions were focal points in this concert, as each piece presented them in an interesting light.

Siting Jiang's *To come into focus* for snare drum and electronics was unique in a program of mostly fixed media works. Nevertheless, the piece still displayed a wide range of interactions possible between a sound source and its live processing. From the sonically distant yet strongly correlated, to the battling of the drum and electronics for the same acoustical space, the music, as it moved through the diverse interrelationships, presented a clear and emerging form, which aptly encased the work's engaging adaptation of more characteristic snare drum gestures.

Antonio D'Amato's *Paysage marin avec bateaux et hydravion* for fixed media did not shy from the fact that our perceptions of recorded environments are strongly influenced by the imposition of the recording process itself. His work highlighted this fact by introducing his own synthesized sounds, blending the electronic and environmental sources in a skillful spatialisation and composition. Instead of characteristically attempting to

depict the real world, the work succeeded in creating an even more convincing virtual one.

Se-Lien Chiang's piece, *Gula huset* for fixed media, constructed from the recordings of instrumental sounds, was fascinating as it avoided the more typical characteristics of instrumental music. Instead, the work presented a virtual world, an enriching and imaginative field built from the collected instrumental samples and their restrained processing. At times, the work was like a field recording for a world which only exists in composition, which highlighted the strengths inherent to our art form. Through a skillful spatialisation, I felt the music reach out beyond the concert hall. The sounds seemed to extend out and through loudspeakers, pulling us further and further away, rather than grounding us in our chairs.

Before Hugo Solis's and Gabriela Villa's Duo *Juum Improvisation* for solo viola and electronics, I asked myself how can a solo instrument possibly compete with the totality of all sounds available to a computer? The question was poetically answered when, in the midst of a fiery moment, the violist detuned her lowest

string while playing, dramatically extending the viola's range to match a deep glissando in the electronics. All in all, the performance was an engaging and sensitive dialogue between two experienced musicians, who both understand the challenges of their chosen instruments.

In the last work, Daniel Gomes's fixed media piece *Invergent Flex, for alloy*, the hand of manipulation is everywhere. Although an investigation of alloy and other metals, the performative nature of the metals being stroked and rattled, as well as the electronic processing of the sounds put the transformation and manipulation of the found material at the forefront of the work. The sublimation of natural sounds into the concert hall, inherent in all the works, was here most obvious.

### Concert 11

**Wednesday, Aug 8, 8:00 p.m.**

**Grand Hall, Daegu Concert House**

*Reviewed by Alexander Sigman*

Occurring on the third full day of ICMC, just following the customary banquet dinner, this concert featured nine works, six of which involved live performance. As

was the case on other programs on the conference, there were instances of composers performing their own pieces. On this occasion, however, these performative contributions were not confined to the domain of music. I will describe and comment on the works that were amongst the most memorable.

The program began with a characteristically immersive and captivating multichannel fixed media work by Robert Normandeau. Commissioned for the fiftieth anniversary of the Montreal metro by the Société de transport de Montréal (STM), *Tunnel azur* dramatizes the “cinema for the ear” created by the metro tunnels at different times of day. The title makes reference to the new Azur trains placed in circulation by the STM. As the composer explains, “[t]heir name is particularly significant, since we usually associate azure blue with that of the sky, while the metro lives in perpetual night.” This state of perpetual night is further darkened by samples derived from the octobass, a rare nineteenth century instrument, which the Orchestre symphonique de Montréal (OSM) recently acquired. Traces of Mahler’s Ninth are also to be found amongst the layers of sonic material,

which bear personal significance for Normandeau. (The Mahler was the first piece that he had heard Kent Nagano conduct, and is amongst his favorites.) Despite the heterogeneous nature of the sound sources employed, *Tunnel azur* maintained focus and fluidity throughout.

Likewise for Peter Hulen’s *Homage and Refuge*, scored for voice and electronics. Despite the eclectic array of linguistic and textual references that the work absorbed, it maintained a singular character and consistent relationship between the vocals and live processing. Hulen opens his program note by stating: “Homage and Refuge (2017) is what the Middle Indo-Aryan Pali language, subtractive synthesis, Theravada Buddhism, pulse waves with resonant filters, The Anglican Chant Psalter, digital voice encoding and decoding, and the 14th-century anchorite and English mystic Julian of Norwich all have in common.” The composer’s intoning of this diverse array of texts is harmonized and transformed in the electronics, resulting in a vocoder-inflected permuting chord sequence. Given the digital techniques employed, it was difficult to avoid associations with Peter Frampton-era Talkbox vocal processing.

University of California Santa Barbara student Rodney DuPlessis' *BachFlip* also made use of historical raw material, centering on the singing voice: namely, the *Dona Nobis Pacem* from Bach's B Minor Mass. Two spectral manipulation techniques were applied to the Bach: spectral compression, in which "the 16 most prominent partials of a given sound are pulled towards a dynamic center frequency," and spectral spatialization, i.e., the segmenting of the spectrum into bins, which are spatially distributed. In the case of spectral compression, compression rates exceeding 100% result in an inversion of spectra across the center frequency (hence the "flip" of "Bachflip"). While these spectral operations in themselves were perhaps not perceptible upon first hearing, and contrary to the composer's claims, have been employed in acousmatic and electroacoustic composition for some time, they produced intriguing distortions to/dissections of the mass movement, whose identity was never entirely masked.

Although the program note of Toho Gakuen student Mizuki Kobayashi's *Crowd/Masse/Gunshu* focuses on group and swarm behavior, the salient feature of the piano/live electronics piece was its extensive use of ring modulation. As a

result, the work connoted classic '70s electroacoustic pieces such as Stockhausen's *Mantra* and Murail's *Treize Couleurs du soleil couchant*. Nonetheless, there was an at times mesmerizing quality to the pacing of the piece.

The program concluded with sound artist, researcher, computer engineer, and tango dancer Courtney Brown's *Puente: A Study in Interactive Tango Dance*. In this study, she and dancer Brent Brimhall, outfitted with motion sensors, generate musical output via a structured dance improvisation. Besides reversing the typical music-dance causality paradigm, there occurs a feedback loop between dance and music. That is to say: not only did the choreography influence the music, but the music, which maintained some of the tropes of tango but extended beyond its limitations, would influence the dancers' movements. While interactive systems employing dance/movement input have a long history, there was some degree of novelty to the application of such a system to a social dance form laden with conventions.

As was the case for most of the concerts at this year's ICMC, the performances proceeded relatively smoothly, with only

one or two unexpected delays. Despite the overabundance of concerts and listening space sessions, it was a pleasure to discover the recent works of composers spanning generations, geographic locations, aesthetics, and praxes that this and other programs represented.

### Concert 12

Wednesday, Aug 8, 10:00 p.m.

Late Night Concert, Sogeuam Changgo

Reviewed by Peter Hulen

*Sogeuam Changgo* is a gallery and performance venue that includes a restaurant and bar near the Daegu Concert House. The late-night concerts were held there. This concert was well attended, with audience members filling the tables at stage level and sitting at the bar. Some tables were pushed together to form one long communal table where attendees drank and ate snacks during the concert, meeting each other and chatting between pieces. The atmosphere was convivial and energetic, and the mix of pieces was eclectic and engaging.

The concert opened with *The Blue Line* for oboe and electronics by Hong Ehwa. The oboe part, played by Na Eun Kim, consisted of separated long and staccato

tones processed into staccato echoes, and long, honking multiphonics. Sustained high tones were transposed into simultaneities. There were trains of recorded staccatos. Layers of processed sound built up, subsided, and built up again, mixing with the relatively prominent and dramatic oboe part.

The next piece was *The Murmurator* for live electronics by Eli Stine. The audio was partially fixed and partially processed live. As the title suggests, sonic materials consisting of granularized audio were structured and spatialized over the eight-channel system according to flocking patterns, controlled live through a control interface. The sonic texture was continuous as layers of granular streams faded in and out, creating an ebb and flow of members and their collective amplitudes through a continuous simultaneity of sound. The layers in these textures became somewhat tonal, and finally gave way to granular trains at the culmination of the performance.

After that electronics-only piece, the program moved back to instrumental performance with *Spiritual Fragments* for haegeum and electronics by Jeonghyeon Joo and Patrick Rhie. This was a

collaborative piece between Ms. Joo, the haegeum player (a haegeum is a traditional Korean two-string fiddle), and Mr. Rhie, who was responsible for the electronics. The haegeum part consisted of idiom-challenging, modernistic gestures, including non-traditional extended techniques: long glissandi and rhythmic slapping of the instrument's resonator. There were arpeggiated harmonics, tremolos, shakes, melodic figures and short gestures answered by various recorded samples, with some gestures of the haegeum processed. There was some modest video processing included, with occasional flashes of simple black-and-white images above the performer. These techniques and the characteristics they produced remained consistent throughout as the performance continued to its culmination.

The program returned to electronics only with *Timpangee 01* for audio fixed media by Daisuke Kawashima. The piece featured rollicking trains of disparate samples, distributed left and right. This created some active, exciting textures, relieved by quieter, sometimes continuous, reverberant passages of varying kinds. The piece as a whole reflected a good, composerly sense of timing, continuity

and dynamism.

The next piece was also for electronics, but this time, it was for live performance by the composer rather than for fixed media playback. *Boundless Filament* for live laptop by Michael Blandino also integrated a video component. Parameters of the audio and video elements were controlled together by the performer through a slider interface. General technicalities of the system controlling oscillators and physical modeling of certain sounds were reflected in the program notes. The results were coruscating trains of resonant impulses corresponding to the color video with radiating and rotating lines on a dark horizon. The overall effect was that of a well-integrated whole, incorporating sound and video together.

This was followed by another live electronic piece, albeit without a visual element: *Quarries HSL* for live electronics by Shawn Greenlee. Both synthesis parameters, sample playback and processing were performed through a control interface by the composer. Improvisatory sound control and spatialization were manipulated according to a graphic score, varying the individual

continuous sounds and the overall texture. Soundscape samples sometimes provided a background to the overall texture. The performance itself was characterized by a measure of virtuosic display on the part of the performer.

The final piece was a live laptop performance: *Corbeille* for live electronics by Will Klingmeier. This piece featured a slow, rhythmically walking texture of percussively functioning samples and sounds, against a continuous droning background. The overall effect was continuously varied enough to be interesting, and pleasantly hypnotic in its rhythmic continuity, in the manner of a work song.

### Concert 13

Thursday, Aug. 9, 2018, 10:30 a.m.

Chamber Hall, Daegu Concert House

*Reviewed by Brian Questa*

Many of the pieces in this concert pit the real world against an artificial one, a world of realistic sounds against a world of representation. We heard program music which sought to represent a landscape, as well as a virtuosic piece accompanying the micro-world of biology, creating sounds where real ones aren't readily available.

On the other hand, a synthetic choir challenged the need for the real thing, playing with our expectations and conventions. An artificial intelligence program became a participating subject, a third and contributing member in a chamber ensemble. In this concert we ask what is real, and what needs to be real?

Yeabon Jo's *Representation and generalisation* for flute, viola and live electronics is essentially a trio for flute, viola, and machine learning program. The computer uses the input from flute and viola to collect data and to form its own sonic response. It was a clear example of how machine data can create a live and dynamic accompaniment.

Compositionally speaking, and perhaps this is a challenge for all machine learning pieces, although it was exciting to hear how the machine derived its material from the musicians, it was not possible to hear how the musicians derived their material from the machine. In other words, the computer can follow, but how can we allow it lead?

Giuseppe Desiato's *Microtopia* for fixed media is an audio-visual work which explores the realm of soundscape at the microlevel. The visuals featured images of

insects up-close with microscopic views, as well as bubbles and diverse parts pressed up against microscope slides. The synthesized music dramatized the tiny world with micro-sounds that appeared to press up against the microphone, bringing our ears right in close to the hidden world. The soundtrack and cinematography were dramatic and at a virtuosic level.

Nicola Fumo Frattegiani's *Polvere nere* for fixed media, whose title translates to black powder, is according to the description of the work, representing the "totality of the acoustic material," which brings together "an incessant dialogue between two opposing formal poles: bands and points." The work was captivating and extremely visceral with a depth of sound and enticing obscuration of the sound source. It felt as if thousands of objects were stuffed into the loudspeakers fighting for attention. The work managed to create moments of intense physical distance which at any moment were suddenly replaced by the incredibly close.

Su Kyong Ahn's *Extension* for violin and electronics featured a convincing dialogue between the live violin and electronic music derived from the violin material.

The piece struck a fine balance between an electronic part which follows and accompanies the soloist, and creating situations where the violin is pursuing the electronics in turn. The electronics did indeed seem to be an extension of the violin, yet they took on a life of their own, ever threatening to become the soloist. The piece was exhilarating and captivating, leaving me wanting to hear more.

Sue Jean Park's *Dialogue* for flute and electronics makes use of both, extended techniques for the flute as well as imitating the sound of a Deageum, a traditional Korean bamboo flute. The piece takes its inspiration from a poem by Dong-Ju Yun, an early 20th Century poet known for his resistance and lyrical writing. The work presents a deep sense of emotion and features a marvelous display of colors which I could call "orchestral". The effect was like a poem for flute and orchestra, with the orchestra replaced by a blanket of synthesized sounds and flute samples which expanded the sonic space in convincing ways.

Zhiyong Deng's *Daybreak: A Black Mirror form East to West* for piano and electronics is a work for piano and

soundscape which features 8 channel electronic sound and “creates a scene of daybreak, where the cross-cultural conversation sets up a mysterious invisible black mirror between the Eastern and the Western...” The work takes on a clear narrative form which lends a storytelling quality. The beginning bell-like music in the piano was soft and delicate, leading through rolling chords and calmly arriving at a soft melody. With no fear of conventions or tonal music, the work also featured a soundscape which acted as a soft background to the music, like a mist covering the scene.

Chung Eun Kim’s *Piano Forte* for fixed media began by sonically placing the audience inside of the piano, where the spatialisation gave one the feeling that the instrument was being excited from all around us. A clear physical space was established as disorientation and intrigue began to blend: with the emergence of synthetic sounds, the vision of the physical instrument began to break, and with it the laws of physics themselves. The location of the audience to the piano was problematized as both appeared to be tossed around in the imagined space of real vs unreal.

Christophe Langele’s *The Machine* for live electronics was an improvised performance of live-electronics in Supercollider which, according to the program notes, sought to overload the computer’s CPU until the machines heavy breathing itself could be heard. The spatialisation, instead of creating an imagined space of depth, rather highlighted the speakers themselves, thrusting the audience deep into the actual concert hall in which we found ourselves. The loudspeakers in this setting became performers, their presence undeniable, perhaps just as the computer itself was sought to be made audible by its “breathing.”

Sunhuimel Xia’s *Solo Choir* for voice and electronics challenges us to consider the possibility of a MIDI choir in a fixed media piece. The sound of the real human voice was accompanied by clearly computerized voices, for which I first asked the question - if computerized voices are made to sound as real as possible, why not use only human voices? Yet as the MIDI (or MIDI-like) choir extended to ranges of the un-human, the real voices themselves were augmented in a way that only electronic music makes possible, suggesting a search for some hybrid realm.

**Concert 19****Friday, Aug 10, 8:00 p.m.****Daegu Concert Hall, Grand Hall***Reviewed by Wanjun Yang*

Friday was the last day of the ICMC 2018 in Daegu Korea, and this concert, which could be called the final concert, was perfect for ending the conference.

The program list of the concert was long, including 10 different pieces composed for instrument and electronics, VR, acousmatic, fixed media and video.

The first piece of the concert was *Sonic Environment Daegu*, composed by Andreas Weixler and Se-Lien Chuang for ensemble and electronics, mixing eastern and western music and culture. The ensemble, which consisted of piano, harp, and three traditional Korean instruments, Daegeum (a transverse bamboo flute with seven large holes and a buzzing membrane), Geomungo (a fretted bass zither with six to eleven silk strings plucked with a bamboo stick and played with a weight made out of cloth) and Haegeum (a vertical fiddle with two strings), was combined with live painting and video creating a very appealing and distinct impression. The painter was situated on stage. A camera captured the

big canvas which was used for painting as well as the movements of the painter, and the resulting images were sent to a computer and processed in order to control the electronics and the live video, which was projected on the screen. The interaction between video, live instruments and electronics was well-designed and constantly kept attraction. Only the sound that appeared when the painter used fork and painting spatula to scratch on the canvas was too sharp to appreciate.

Hibiki Mukai's *Drama queen/Euphoria/Navel-gazing (2017)* was composed for harp and electronics. The composer combined prepared samples in the electronics, some of them excessively rhythmic, popular, and several played in loops with special sounds created by the harp player using glass and other objects to stop the vibration of the strings, which created very special sounds and timbre. Harp sounds picked up by microphone and processed in real-time completed the piece.

The third piece, Francesco Bossi's acousmatic and spatial music piece *In Memory of a Little Soldier*, was composed for an 8 channel system. The composer

recorded the sounds of trumpet, female singer, male singer, snare drum and percussion into buffers of a Max/MSP patch, and processed the sound samples based on an FFT analysis module, extracting the spectrum of the sounds and playing back the spectral frames at different speed and direction. The processed sounds were then assigned to variable channels. Altogether, the audience could experience a very special spatial audio piece, which, however, embraced a little too much reverb.

It followed Judith Shatin's *Gregor's Dream* for piano, violin, cello and electronics. The performance was carried by the skillful play of the musicians, who presented the well composed instrumental part on piano, violin and cello with emotion and precision. The electronics, for which the composer recorded many different sounds from nature and processed them by electronics, produced mostly background sounds. The electronic part completed and enhanced the wonderful instrumental part, appearing just like sounds in a dream. Even though it would have been more successful if instruments and electronics worked together more coherently and in balance, the audiences could follow the main idea of the composer well, and the

music matched to the title of the piece.

*Listening to the image - 'Angelus architect nico de Millet'*, an audiovisual piece composed and performed by Minchang Han, was one of my favorite pieces of the concert. The Architectonic Angelus of Millet is a famous masterpiece of Salvador Dali. The composer's idea was to transform the image into musical data by the help of electronic music technology. The piece was composed for 6 MIDI channels, and followed the main goal of converting space-based art into time-based art. During the performance, the composer (who was also the performer) moved a mouse over a representation of *The Architectonic Angelus of Millet* in order to get the information on RGB data of each pixel, and assigned this to one of the 6 MIDI channels which were mapped to different parameters and triggered the music. In moving the mouse over the painting by following each line, the audiences could hear the process of painting: the performer explained the audiences how the painting was created. Undoubtedly, this music piece is an impressive work, but there is still some room for improvements. During the performance, the console of the software was visible on the screen. The audience

could see all parameters changing with the mouse movements done by the performer, which led to the impression that the performance remained in rehearsal status rather than presenting a complete performance. If the composer can change the way of picking pixel information, hiding cursor and console panel of the software, and show only the image of the painting on the screen, the audience could get a better immersive experience with painting and music. In addition, the use of more output channels could provide the composer with more options to map image information to music information, and the piece would sound and look better.

*Visby, S:t Nicolai*, a piece for voice and electronics, was very special. It started with a picture of a bright church ruin on the screen, and a very sweet and beautiful soprano voice. When the singer showed up on the stage, the audience found out that the singer was a male soprano singer, Paul Botelho, who was also the composer of the piece. The composition was focused on the sonic environment of medieval church ruins, which the composer had captured with first-order ambisonic field recordings in order to get the impulse responses. In the performance, the singer's

voice was captured with a microphone, and then processed with the impulse responses in real-time. The sonic environment of the ruins was expressed through vocal performance and sound transformations. The composer also offered the audience to visit a website with their mobile phone during the performance, where they could explore the church ruins of Visby in a 3D model, and experience the sonic characteristics.

How should the breath of water sound like? Mara Helmuth and Esther Lamneck gave the answer. In *Breath of Water*, for clarinet and electronics, the composer captured the sound of the clarinet, analyzed the sound, and extracted the subharmonic parts, which then were processed and amplified, so that the tiny sounds were clearly audible. The clarinet player's gestures were captured with sensors on the hands. This data was used to control the parameters of the sound processing, which made the sounds more vivid. The first part of the piece was an allegro part: the clarinet produced fast notes, which sounded like a small stream running down the rocks; the second part was quiet: the audience could feel the stream flowing gently; the final part was rather exciting: the loud sounds made the

audience experience a waterfall.

The next piece was another one about water. Kim SunJin's *Big Bang in Water* was a 4 channel fixed media piece. The main motive was the sound of a drop of water. The composer captured the sound and processed it in diverse ways, using EQ, reverse, delay, echo, dynamic, reverb, pitch shift, etc. The tiny sounds of water drops were sent to the speakers in a well-designed logic, and created a very special sounding space. The dynamic range was quite wide; the sounds came out with power, and the audiences could sense the explosion – the big bang of a water bubble –, and get the main idea of the composer. This piece was one of my favorite fixed media pieces of the conference. Unluckily, this piece came after the *Breath of Water*. As both pieces were about water, in some moments, the materials of the two pieces seemed similar, and this piece sounded like an extension of the previous one.

The Geomungo (also spelled komungo or hyeongeum, literally "black zither") is a traditional Korean string instrument of the family of zither instruments with both, bridges and frets. In Keun-Hong Kim's *The Four Elements for Geomungo*, the composer expressed his understanding of

the four elements of the universe with Geomungo and electronics. In the first section, the Geomungo was played in a non-traditional way: the player used bow and bow hair of Haegeum (a traditional Korean vertical fiddle with two strings) to trigger the strings of the Geomungo, clapped the body of Geomungo with her hands, and plucked the strings with a bamboo pick in order to generate different sound effects. The sounds were captured with a microphone, processed with a Max/MSP patch, and sent to the speakers. In the second section, the Geomungo was played in traditional way, and was presented with less computer processing. The audiences could hear the original sound of the traditional Geomungo. In section three, the player changed the playing technique again, using a bow to rub the strings, and rapping strings and body with a bamboo pick. The Geomungo generated a unique timbre. The sounds were also processed with effects, such as reverb, flanger, and delay. The combination of traditional Korean music and electronic techniques, the resulting diverse sounds, and the skillful player created a very nice piece. A better balance of acoustic and electronic parts would make the piece even more enjoyable.

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 musical development and the implementation of VR technology.

In summary, the concluding night of ICMC 2018 was a full blast. The well-composed 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 to the audiences. 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 engaging audiovisual installation of 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 bodies in motion: "musicians, 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/wind-from-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 McEvoy states: "the audience 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 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) x 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-of-concept 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 multivalent contemporary media 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 z-position 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 a 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 structured process to reflect 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**, both at Anton Bruckner Private 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.