

The Moody Foundation Chandelier in the Winspear Opera House, incorporated into the performances of “Death and the Powers”.
PHOTO: KAREN ALMOND, DALLAS OPERA

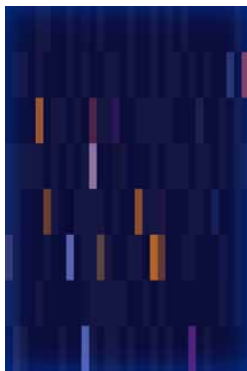
DALLAS OPERA’S SIMULCAST

– Tod Machover’s *Death and the Powers*

BY PIO BARONE LUMAGA

The experience

I’m seated at the theatre of the University College of Opera and Royal Institute of Technology. There is a subtle air of complicity amongst the music-loving audience as we have our mobile devices turned on, and follow the streaming instructions of a MIT app, *Powers Live*, while the opera is being shown on a large screen.



Screen captures of the *Powers Live's* app.



“We find our commitment to free public opera events rallies the community, builds the next generation of opera lovers, and inspires our donors.”

Keith Cerny, Dallas Opera

Being a spectator is being a witness, a watcher, a bystander, an onlooker, an observer, and with the MIT app we broaden our sensory input and actively weave in real time extra information, emotions, or actions into our experience.

Although I had previously seen excerpts from the opera and read Robert Pinsky’s libretto, I initially experience the light anxiety of splitting gaze and attention between the performance on the big screen and the app. Then the need to control my experience recedes as I spiral into the vortex of the singing characters.

I am enthralled by the tunnel experience of a masterful artwork where the musicality is interwoven with the lyrical quality of the text, the notes are echoed by robots and the interplay between Death, Powers and Love takes unexpected turns in the quest for immortality of Simon Powers. A successful businessman who, to escape death, downloads mind and spirit into his environment, creating “The System” pervaded by his consciousness.

Slowly another part of me emerges and takes in the theatre, the darkness, and the spectators’ faces dimly lit from screens on their laps. I tap my screen and a graphical interface comes alive: through dots, lines, and colours I dialogue with feelings, words, and ideas giving them fresh expression. It does not take long for a new mode of split perception to take root and seamlessly shift back and forth from my individual layer to a larger collective one; it’s like keeping open two stereophonic channels at the same time.

Through robot’s eyes now I perceive an ‘inside stage’ point of view... I couldn’t be in Dallas for this performance, but following it here in Stockholm is the next best thing.

The conversation

Pio Barone Lumaga – *Tod, you have created a participatory and audience-feedback system with the MIT Media Lab app. What have you learned from it?*

Tod Machover – In creating the *Powers Live* app for the interactive simulcast of *Death and the Powers* from The Dallas Opera, we wanted to help audiences around the world – and far from Dallas – to feel intimately connected to the opera by establishing new channels of perception. Watching a live performance on a big screen – even with multiple HD cameras and surround audio – is not the same as being in the physical location. We have tried to add *new* dimensions of performance to compensate for ones lost by this distance.

The app gives everyone the chance to have a close connection to the action on stage/screen, since close-ups can literally jump into your hand, new perspectives on the show – such as the “Simon Powers” or “Operabor” point of view – can be offered, and indeed, everyone can alter the content either on the mobile app (by changing visuals through finger movement) or by sending information back to the live performance, in this case altering the behaviour of the Moody Family Chandelier in the Dallas Opera House. We tried very hard to provide a powerful mobile experience that – at the same time – would not take attention away from attending to the opera itself. This is really difficult, especially when many audience members are likely seeing the show for the first time.

We were rather successful in creating a model for a new kind of augmented experience, and the mobile channel was rewarding. We probably tried too hard to make the experience discreet; I would make it bolder and wilder next time around. And I would have liked to have found a way to show audiences in Dallas what the effect of remote audiences was at every moment, but this wasn’t possible since the Dallas production had already been designed and could not be significantly altered for the simulcast. It would be great to have the opportunity to design a show from scratch, where the content, onsite performance, and remote experience were all imagined together.

Pio – *Multi-layered experience is the nature of life, and recently in the Toronto Symphony you have grafted the citizens’ sound inputs into your composition. In performing arts, interactivity and multi-perception are essential to capture the attention of younger generations and foster creative powers. You are one of the initiators of a participatory movement based on music, technology and creativity. What role do you see yourself playing in the next years?*

Tod – I have been interested in creating powerful, transformative musical experiences that draw on



Joelle Harvey as Miranda, being carried off by The Miseries in the climax of "Death and the Powers."
PHOTO: KAREN ALMOND, DALLAS OPERA.

innovative technologies to stretch the medium and to mix the senses. In parallel, I have tried to use similar technologies to allow everyone to be active participants in musical experiences rather than passive observers. In my recent series of collaborative symphonies – done in Toronto, Edinburgh, and Perth (Australia) so far – I have been trying to combine these two models by inviting the general public to create a musical work *with* me, and to use this process as a way of listening to, reflecting upon, and understanding something fundamental about the place where they live.

I think this model is really important for the future of art, when we need to establish a much healthier, more flexible relationship between artists and public, experts and amateurs. I intend to further develop this collaborative composition model over the next few years, and expand it into a new art form that plays counterpoint with the senses, makes everyone a creative participant, uses space as an instrument, and establishes profound, empathetic connections between people across the globe.

Pio – Do you see interplay or potential conflicts between your role as composer and the co-creative drive of the audience to change your work? Does co-creation add complexity to authorship?

Tod – Collaboration of any kind is not easy. It's funny because one of the things that first pulled me to music composition was the magnificent experience of – literally – listening to one's inner imagination, in silence and isolation, and extracting from that process something unique, personal, and – paradoxically – universal (one hopes) at the same time. And I still love that process, and cherish the time I get to spend in my 18th-century barn-studio, composing the old-fashioned way. At the same time, much of my work involves passionate discussion with others – students, colleagues, artists of different disciplines, engineers, scientists, etc. – throughout the whole creative process, an activity which is beautifully cultivated at the 21st-century MIT Media Lab. I love both ways of working and enjoy weaving each style into my life.

The joy of collaboration of any kind is precisely that it not only *changes* one's work, but it *enriches* it. Honestly, I would not be interested in collaborating if it did not lead to ideas that I would not have found on my own, and if I did not feel that my contribution had changed the ideas of someone else. It's the balance that matters. You won't have anything valuable to share if you haven't spent time alone, in silence, cultivating your personal imagination and "voice". But your life will be poorer if you haven't found a way to go

Online streaming

For the first time in history on February 16, 2014 at 2:00 pm Central Time, remote audience members across ten worldwide locations experienced live streaming and interactive moments through a specially designed, downloadable app, entitled *Powers Live*.

During choreographed segments throughout the opera, remote audiences received additional audio, video and multimedia. The added content allowed audience members to virtually experience the main character's thoughts and bring the sights and sounds of the live performance in Dallas "within reach". Using the mobile app, remote audience members could affect *The Moody Foundation Chandelier's* illumination and motion in real time during significant moments in the opera. The audience seated in the **Dallas Opera, Winspear Opera House** felt the presence of others watching the opera around the world as they witnessed the chandelier's dramatic changes.

Death and the Powers, written by acclaimed American composer, and professor at the MIT Media Lab, **Tod Machover**, received its Dallas Opera premiere performances on February 12, 14, 15 and 16. The work was named a 2012 Pulitzer Prize Finalist in Music for both its score and the innovative technology created by Machover and his *Opera of the Future Group* at the MIT Media Lab. The libretto for *Death and the Powers* was written by former U.S. Poet Laureate **Robert Pinsky** and the production was directed by the Tony-award winning **Diane Paulus**, designed by **Alex McDowell**, choreographed by **Karole Armitage** and produced by **Tod Machover, Keith Cerny, Robert A. Ellis, MIT Media Lab and the Dallas Opera**.

beyond yourself and beyond the limits of what any single individual can dream. Finding ever stronger ways to encourage both forms of creativity – and to blend them – is the key to healthy, vigorous individuals and societies, and music – in its gestation and in its experience – provides one of the very best models of how we might be able to live.

Pio: *Keith your career spans both music and high-technology; the Dallas Opera (TDO) has successfully mounted seven free public simulcasts since 2010. As TDO's CEO what made this one stand out?*

Keith Cerny: This production can be considered historic for three reasons: First, this marks the first time an opera company has pulled off an interactive, multi-city, multi-national simulcast of any opera production - in this case including simultaneous transmissions to nine locations in the U.S., U.K. and Continental Europe. Second, the simulcast included secondary multi-media content as an integral part of the production, delivered to handheld devices within the theater. And third, participants in the remote locations were able to interact with the production here in Dallas via their smartphones and other devices, in order to influence aspects of the lighting and visual effects as they occur in real time on the Winspear Opera House stage. ■