Spellbound

May 11, 2013
6 minutes, 34 seconds

Speaker: Andy Muehlhausen, Nicholas Drashner

Transcribed by: Allura E. Hays

Time   Transcription

00:00   [music] [IDEAS]

00:04   [INITIATIVE FOR DIGITAL EXPLORATION OF ARTS AND SCIENCES]

00:14   [Spellbound
             Nick Drashner
             Saturday May 11, 2013
             Qualcomm Institute]

00:27   [music]

01:12   Speaker 1: So thanks. So, I guess a few comments, maybe first. One is that, this
             particular technology that we see here, has been developed by the visualization
             group here at Calit2 [California Institute for Telecommunications and Information
             Technology], now Qualcomm Institute. And it's principally been developed for
             scientific visualization, as well as advanced conferencing and multipoint
             conferencing and, essentially, establishing local or network conversations around
             big data sets and big visualization sets. But, as is always the case in the arts,
             artists often look at a technology and ask the most interesting and, sometimes the
             most impossible, questions of a new technology. And I think that this piece and
             also this whole series of events taking place in the room this spring and this
             summer, are a good case in point of artists asking interesting, difficult, and
             sometimes previously imponderable questions of new technologies.

02:30   Andy Muehlhausen: I am a second year sound design MFA [Master of Fine Arts]
             here at UCSD [University of California San Diego]. I got my undergrad at Purdue in
             computer science, so I do a lot of this cross-pollination of sound exploration and
             computer programing. So for example -- I'm also involved with graphics research
             here at Calit2 [California Institute for Telecommunications and Information
             Technology], I guess now Qualcomm Institute, although not officially. That's a
             couple days away, right? I still don't know. And so what I -- what I'm doing is this is
             an engine I made, it's just an OpenGL engine, it's on my computer and it's
             separate from all this. And so I'm involved with research of networks graphics
             rendering. And then, beyond that there's the Kinect here, this is a -- this is pretty --
             people use the Kinect a lot. This is a Xbox gaming device. You know, it tracks user
             -- users and just gives you that data and it gives you the data pretty quickly.

03:20   Andy Muehlhausen: And so you see up here, I am tracking myself and what's --
             I'm tracking my hands. So it's my left and my right hand, each hand has a different
             amount of balls on it. And that's okay. And it's a gravity algorithm, so things are
             gravitating around. These balls are gravitating randomly. You'll see them gravitate
             towards people, like the blue balls in the background gravitate towards people over

an amount of time. And the white balls just gravitate towards your hands. And the idea that we were going for in this piece a lot, was just, sort of like an immersive exploration. And this is a very -- it's a very preliminary presentation of this idea, cause we have more ideas and more. Cause the idea was really that it would be a progression through different stages, you know? So like, ideally you would come in and you would explore this space and when you figured out we'd have cues preset to trigger the next stage. You know, like the visuals would change and you'd be in a different world, as if you unlocked something. You know, you made the right exploration and you get rewarded by some change, some shift in the environment.

04:19   Andy Muehlhausen: I also have a notion that perhaps this would work very well as a -- if these blue balls were a solar system sort of pattern and there just wasn't time to do this but I want to do this. Make the blue balls a solar system and then you step into space and your white balls are sort of your craft to fly through. So they're still gravitating around you and you step forward and you fly forward in the solar system, and you step back and you fly back, you navigate and you can cooperatively navigate this space, and in the same way you find these hidden -- these hidden gems. So it's about exploring and finding the rewards and figuring out just these kind of little puzzles and being rewarded visually and orally. And that was what we were pushing for and this is where we got.

04:59   Nicholas Drashner: The -- basically the issue that working with sound that I was most dealing with in the work that we've done with this, cause this is about the third or fourth iteration that we've done, is figuring out how to map sounds or create meaningful musical gestures with the interactive input. And when we first started we were doing mostly stuff with parameter shifting, so just having a sound and having it change very directly based on the users gestures. But this sort of got old after a while, so with this iteration, what we were -- what I was trying to do is explore the possibilities with larger form control. So, something about the interaction of the user changing the form of the piece.

05:50   Nicholas Drashner: And so this is sort of -- kind of what we landed on for that, in that, each time you hit a ball, something -- the sound that's associated with that ball changes and moves up a stage and becomes into the space more. And so each ball is trying to work back to its stage zero. So if nobody interacts with the piece, it eventually will settle and stay at that state. But when -- so it encourages user interaction, in that, you need to explore the space and find the balls and activate them, like that one there. As you hit it, it becomes more active and brighter and the sound comes into the space more.