

Q&A Session for **Lighting University - Sculpting at the Scale of Cities**

Session number: 956125221

Date: Wednesday, October 25, 2017

Starting time: 6:54 PM

First of all, I would like to invite all of you to sign up for our bi-annual newsletter, on our website www.echelman.com. Also, please visit our [Facebook](https://www.facebook.com/janet.echelman) page at <https://www.facebook.com/janet.echelman> and [Instagram @janetechelman](https://www.instagram.com/janetechelman) for updated information on all of our projects.

-Ashish saste (ashish@unicapower.com) - 7:47 PM

Q: What is the best option for outdoor street and climate....?

A: I've had to find new kinds of fibers to meet the demands of Mother Nature. I'm now using a variety of high-tech fibers - some that are 15 times stronger than steel, and some that are colorfast and can withstand extreme exposure to Ultra-Violet light, high temperatures, pollution, and even chemical reactions - all while remaining strong and ultra lightweight. We select different fiber types depending on the harshness of the climate for each sculpture.

-Brian Skalak (bskalak22@gmail.com) - 8:29 PM

Q: What is your best advice for scaling up a piece and shopping it around to festivals?

A: For our traveling sculptures (1.8 and 1.26), it was important for the team to design them to be adaptable to different locations, attachment points and climates. We don't want the sculptures to be static, but flexible and able to fit well in a variety of installation locations.

-Juan B (juan.beckmann@visteon.com) - 8:29 PM

Q: What kind of lights were used to illuminate the moving sculpture? And, it is possible to project images on it?

A: I designed the color of the final artwork to combine these physically colored materials together with the colors of projected LED light fixtures that create iconic illumination at night. The sculpture is entirely soft, made of many different kinds of fiber, and arrives as one piece in a crate that fits on a pick-up truck bed. On top are ropes that form the structural layer. The ropes are braided from Ultra-high-molecular-weight polyethylene (UHMWPE) fiber, which is more than 15 times stronger than steel, pound for pound. The pattern of the ropes are all spliced by hand, in countless hours of human craftsmanship. Attached to that are the soft layers of netting, which are made from custom-braided twines of colored high-tenacity polyester.

-Sugandha Gupta (sugandha2108@gmail.com) - 8:36 PM

Q: Which is the software that you have been using, this is so damn interesting!

A: My studio has been collaborating the past 6 years with the world's leading design software company (Autodesk) to build a custom software tool that allows us to soft-body 3D modeling of our monumental designs while understanding the constraints of our craft, and showing response to the forces of gravity and wind. We couldn't have built our monumental city-scaled sculptures without it.

-Alvaro Moran - 8:38 PM

Q: I am from Mexico, on my country what could be a nice application?

A: My 1.8 sculpture was just exhibited at FILUX in Mexico City, November 16-19, 2017, and we hope to do another installation in Mexico sometime in the future! Visit www.echelman.com for photos of the recent installation.

-Helle Knudsen (helle.knudsen@afconsult.com) - 8:39 PM

Q: How do you choose the colours for your sculptures? All the best Helle

A: Different color palettes allow me to express a desired mood and content for my sculptures as related to the context and location. Developing a different color palette for each installation allows me to express a desired mood and content specific to that place. For example, to amplify the watery quality of the river installation in 1.26 Amsterdam, I experimented with using color opposites to neutralize the hue of the twine to create an alternate mood, almost washing out the apparent color. In Singapore, I've created a sequence which unfolds very slowly, creating calm amidst this bustling city. I've focused on mystery, and deep blues, which fade into the night sky, with a counterpoint of vibrant oranges and reds. I was drawing upon my memories of visiting Singapore in my youth, and the vibrant colors and flavors I remember.

-Alvaro Moran - 8:49 PM

Q: do you use RGB reflectors or Monocromatic LEDs?

A: No, and no.

-Diana Yanez (di.gys@hotmail.com) - 8:49 PM

Q: How did you get budget for your very first project?

A: My first satisfying sculptures were made in collaboration with fishermen on miniscule budgets. We hoisted them onto poles to photograph on the beach. I discovered their soft surfaces revealed every ripple of wind in constantly changing patterns and was mesmerized. When I was asked to create my first big commission for Porto, Portugal, I didn't know if I could build a permanent artwork for their city. I didn't know if I could do that and preserve my art - but I said yes. It took many people helping figure out how to build at scale within a budget.

-david theriault (david.threiault@philips.com) - 8:49 PM

Q: all lighting is external to the sculpture?

A: Yes.

-Diana Yanez (di.gys@hotmail.com) - 8:50 PM

Q: How do you know where to start when you don't have any idea?

A: I look all around me for inspiration - at the forms of our planet in macro and micro scale, to the patterns of life within it, to the measurement of time, weather patterns, or the paths created by fluid dynamics. I am always in search of inspiration from life. I guess this is my way of making sense of the world, and finding my tiny little moment within the larger unfolding story of humanity on our planet.

-Americo Paulicchi Filho (americo.paulicchi@gmail.com) - 8:50 PM

Q: Are you planning to do a so beautiful art in Sao Paulo - Brazil?

A: We are constantly planning installations in countries all over the world, and are always excited to exhibit a sculpture in a new place! Stay tuned for our future exhibitions.

-Bas Campfens (bas.campfens@philips.com) - 8:50 PM

Q: Are you planning any new work in The Netherlands?

A: We are constantly planning installations in countries all over the world, and are always excited to exhibit a sculpture in a new place! Stay tuned for our future exhibitions on our [Facebook](#) page and [Instagram](#), @janetechelman.

-Abhijith Sharma (ar.sharma1289@gmail.com) - 8:50 PM

Q: I'd like to ask you, how do you consider interaction of users with your art installation, what is your approach?

I am exploring different approaches to interactivity, and am constantly trying new things. For the interactive aspect of Unnumbered Sparks, I collaborated with

digital artist Aaron Koblin, who led the Data Arts Team at Google. The public was able to choreograph the lighting in real time using physical gestures on their mobile devices. Technology is often blamed for isolating us from one another and I want to continue to explore how we can use technology in new ways to connect us in physical space.

-Wing Keung Lau (henrywklau@hotmail.com) - 8:51 PM

Q: Although you said there was no bird incident, how can you guarantee that will be safe for birds?

We get asked questions frequently about the safety of birds and wildlife with respect to our sculptures. No bird or creature has ever been harmed from one of our artworks. Our work goes through a careful review in order to receive legal permits before construction begins. We consulted a bio-engineering firm that explained to us how the physical qualities of our nets don't meet the criteria that would endanger birds and other wildlife. We've heard of an occasional soccer ball getting into one of our sculptures, but it came out through the openings in the net.

-Samuel Laguarda (tandem.arquitectes@gmail.com) - 8:52 PM

Q: How long do they usually last? Maintenance costs?

A: Our engineers stamp the documents for life spans up to 25 years with the potential for indefinite continuation, with maintenance and replacement parts.

-Maripaz Umana (mariumtac@hotmail.com) - 9:22 AM

Q: How do you know when a concept is good enough to base the artwork on it?

A: I just know.

-michael mehl (mmehl@lightboxstudios.nyc) - 8:58 PM

Q: When projected from underneath(belly side) - does angled projection of artificial light, better 'cover' the canvas ? or tend to distort or blend the varied colors?

A: We use projection mapping.

-Sugandha Gupta (sugandha2108@gmail.com) - 9:03 PM

Q: Which is the software that you have been using, this is so damn interesting!

A: See question above.

-Sabrina Mandel (smandel@led-ls.com) - 9:07 PM

Q: Are you planning to do anything in Argentina?

A: We are hoping to have a sculpture exhibited in Buenos Aires potentially in April 2018 - stay tuned on our [Facebook](#) page!

-Lyn Godley (godleyl@philau.edu) - 9:07 PM

Q: When do you expect to install the Philadelphia project?

A: The piece is partially completed with additional phases currently underway.

-Abhijith Sharma (ar.sharma1289@gmail.com) - 9:09 PM

Q: Have you considered integrating LED lighting replacing typical canvas in your art work?

A: Not at the moment.