

Local artist, global impact

Drue Kataoka on helping humanity, hacking the senses and the VR revolution

by Karla Kane / Palo Alto Weekly

It's hard to imagine a better ambassador for the local art scene than [Drue Kataoka](#). An alumna of Sacred Heart Preparatory in Atherton and Stanford University, she utilizes cutting-edge media, speaks passionately about the integral relationship between arts and sciences, and has a strong social-justice conscience, with the high-profile track record to back it all up.

Ever eager to experiment and push boundaries, she's currently exploring the potential of virtual reality (VR) technology.

"There are so many opportunities that we have to leverage the media for social good and for humanity. It's incumbent upon us to jump in and try to push the medium to its limits," the Portola Valley resident said.

Last year, her piece ["Now Is The Time,"](#) which celebrates historic firsts for American women (leading up, she'd hoped, to the first female president), was unveiled at the Democratic National Convention and became an iconic image in Hillary Clinton's campaign. This year, she transformed that political-poster, which features an image of an hourglass with notable women's names and the dates of their achievements snaking around it, into a 3-D work (retitled "Yes! Now is The Time") using VR, and organized a first-of-its-kind gathering for women in social VR, at which attendees piloting avatars were able to connect and meet and engage with the work (30-feet high in its virtual form).

"I like to push myself, to see, what are the new things that can be done or tried," she said, explaining that she envisions VR as having a useful role in future gatherings, protests and rallies, at which people can physically stand up and be present for a cause from afar. "Virtual reality is a new frontier for activism and social justice, for organizing people and for connecting people."

Kataoka has combined her roles as artist and activist in various ways over the years, especially when advocating for the rights of women and girls. She's been a Young Global Leader & Cultural Leader of the World Economic Forum; her work ["400,000 Is Not a Number"](#) called attention to the [Test400k](#) campaign, which brings awareness to the backlog of 400,000 untested rape kits in the U.S.; and the ["Touch our Future"](#) digital installation dealt with infant mortality and involved collaboration with a number of Nobel laureates and luminaries.

After the murder of British member of parliament and humanitarian Jo Cox last year, Kataoka, who was acquainted with Cox and her husband, was deeply saddened by her shocking death and wanted to help both memorialize and pay tribute to Cox's pro-diversity, anti-hate message. Her iPad sketch of Cox ended up going viral, used on signs and banners in the United Kingdom and around the world, along with the hashtag [#LoveLikeJo](#). Kataoka said she was overwhelmed with emotion upon seeing her artwork spread so widely: a testament to the powerful intersection of art and social media. She believes it won't be long before VR, too, becomes integrated into everyday life the way smartphones and social media have.

"I feel that we're really at the gates of a revolution with virtual reality, as that technology is going to disrupt every single aspect of our lives," she said. Her goal is to help steer that revolution in a positive direction.

She recently spoke at a summit held at the Kennedy Center in Washington, DC., which also featured Yo-Yo Ma, Condoleezza Rice and a number of other prominent artists, scientists and cultural leaders. There, she said, she discussed cultural "moonshots": Her dream would be to use VR to capture and catalog the world's artistic and cultural treasures in a way that's easily accessible for everyone.

She's also a strong advocate for arts education. Last week, she co-authored an [article for Time](#) with Senator Tim Kaine about the importance of supporting the arts, citing studies that suggest the most successful scientists and engineers are often also involved with artistic pursuits. With a presidential administration that seems to devalue science and art, she said, it's more important than ever to champion them both.

"Anything that was really at the apex of human achievement inevitably brought together art, science, math and whatever the technology was at the time," she said, giving the construction of the Parthenon and the awe-inspiring Gothic cathedrals of the Middle Ages as examples. Looking to the future, she sees VR as the next step in a long line of art and tech connections.

"It's exciting for me because I feel that virtual reality is an art form. It's as much art as it is technology. We need to bring in a hybrid interdisciplinary mindset into this space," she said. "The idea of being able to really create an immersive world that someone can enter into is actually the dream that artists have had for millennia."

As a current artist-in-residence with Google's VR department, she is working with engineers in its Tilt Brush division. With Tilt Brush, users are able to "paint" life-size strokes in three dimensions, opening up the imagination to a world of possibilities. [Painting in VR](#), she explained, challenges the brain and body in new ways: physically, cognitively and artistically. One of her creations is a vivid, surreal fantasy land full of enormous trees, some growing upside down; a frozen lake; and a unicorn of fire. At her home studio, she's experimenting with the ways in which the brain can be fooled by the VR setting, designing, for example, a spiky virtual environment that, when walked through, can trick the brain into perceiving a prickling feeling where the spikes seem to touch the body, a sensation akin to phantom-limb syndrome.

"That's a really interesting thing to me because with virtual reality you can really hack the senses," she said. "There are so many interesting boundaries to blur and play with."

Kataoka, who spent her early childhood in Japan before moving to the Peninsula, said her first love was traditional Japanese ink painting. Working in monochrome, she sought nuance in the grays and blacks of her brushstrokes (a number of her pieces are still part of Stanford's collections).

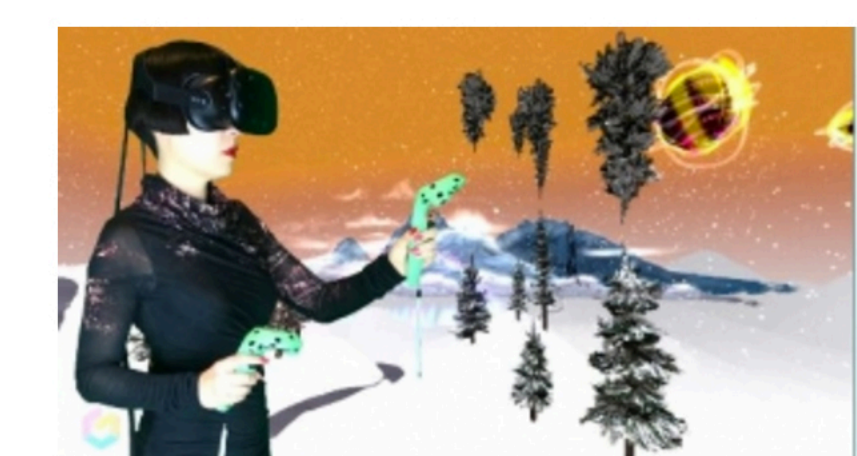
She's made art from EEG brainwaves and even created the first [zero-gravity art installation](#) for the International Space Station. As a sculptor (and former Djerassi artist-in-residence, featured in a [2013 Almanac cover story](#)), over the past decade she's worked with mirror fragments and mirror-polished stainless steel, creating outdoor pieces that reflect the environment around them (incorporating, for instance, an immense fallen tree), allowing for a unique viewing experience from day to day. She has an ongoing interest, she said, in the concept of "the artwork as a living organism, not something that's just a fixed, static thing."

As part of her commitment to encouraging arts education, each year, in partnership with the The Rotary Club of Menlo Park Foundation, she offers a [scholarship](#) to local high schoolers who are interested careers in the arts. And though many of her mentors over the years have suggested she move to the East Coast or Europe, she's remained Peninsula-based.

"There are incredible pockets of creativity and talent, and also some of the world's biggest art collectors here. But it's not always so apparent. Things are sometimes more subterranean and more spread out. Whereas, I feel like in New York, there is a lot of infrastructure, and things are often more visible," she said of the local art community. "Sometimes it makes things difficult for people who travel here to get a sense of where the arts are. You have to know where you're going."

For someone dedicated to the intersection of art and tech and inspired by both the natural world and the virtual one, it makes sense that she makes her home where the wonders of nature meet the forefront of scientific development.

"I've always thought that Silicon Valley is the creative capital of the world. It's not just the technological center but the creative center," she said. "Being very close to where many new things are constantly being built and disrupted is important."



Virtual Reality technology allows artists to create entire new worlds, including "Winter Landscape with Unicorn." Image courtesy of Drue Kataoka.

