

[MUSIC PLAYING]

My name is Lia Halloran, and I am a COLA 2021 visual art fellow.

[MUSIC PLAYING]

So I went to UCLA as an undergrad, and went on to graduate school in art. But one of the most formative experiences that drives the work that I do now, which is an intersection of science and art, started when I was 15 years old. And I was hired at the science museum, the Exploratorium, in San Francisco as a science explainer. And that job was very cool for a 15-year-old. I would walk around and explain how magnetism or lasers or electricity worked to the general public. And also do cow eye dissections, which is a great thing to have on one's resume at 15 years old.

And through that experience I then got hired to work in the machine shop. And the machine shop was this endless curious place, where you could build anything and everything. You know they're inventing different kind of exhibits to explain physics. And it essentially set up the foundation of the way that I think of my studio practice now, which is very experimental and playful and invested in material exploration. So although I had a really incredible experience through undergrad and grad school, which cultivated the way that I think about my work within the contemporary art dialogue, the making of my studio practice was founded at the Exploratorium.

[MUSIC PLAYING]

For the COLA project, I am making a large scale cyanotype. The process in which I'm undergoing is that first I'm creating a large scale negative. It's going to be 25 feet long by 10 feet tall. And so essentially, I'm first making a painting that light can pass through. And I use that as if it's a photographic negative.

And each panel is printed independently out in the sun to get its photographic positive. But the piece itself is really meant to be an homage, or almost temple, to the sun. And the research for this was done based on Mount Wilson Observatory, which we sort of generally know about in Los Angeles. And you can, on a clear day, see those white domes kind of looming over Los Angeles.

And some of the very first solar observatory, and solar observing, and the foundational understanding of the sun actually comes out of the solar tower up on Mount Wilson. So I did a deep dive into the archives of Mount Wilson, learned about Ellery Hale, who founded the solar telescope. And those images are then integrated in different forms into my final piece.

[MUSIC PLAYING]

Color is very important to me in the use of creating work about astronomy. And that is because the innate color that cyanotypes are. You can see a large cyanotype right behind me. And you know cyanotypes are historically some of the earliest forms of photograph. So I think whether you realize that or not, they have a kind of nostalgia that's just built into the process. Also the color itself, to me, it has the dual ability to have a luminosity to it. And the richness that one might think of when they're evoking a sense of deep space in the sky.

And I also love that the sun is what's used to expose the chemistry, and return it to this magnificent blue. And it's not something that's produced in a dark room, but the sun itself activates the cyan in the cyanotype and you get that color. So the piece that I'm producing for the COLA grant, based on the eclipse, is also going to have a color that explores the surface of the sun. Magnetic fields, all different kinds of like nods to different parts of invention and discovery of the sun.

But one of the other things that I'm going to use in the piece, is a type of material it's called black 3.0. It's essentially like a poor man's vantablack, which has the ability to absorb 98% of the light that hits it. And so it has this very velvety flat feel to it. And it's meant to-- when we think of the eclipse and what the experience is, it really is a lack of. It's a void. And so you have this, on one hand, luminosity of the sky and the sun. And then you have this like emptiness and this void. And so the two colors working together in tandem and kind of create a friction between each other, between that blue and that really, really flat deep black.

[MUSIC PLAYING]

Reading about solar expeditions is a really fascinating history. Because usually when we think about science, it's connected to a particular instrument or a particular group or a particular location. When we think about astronomy-- of course, what do we think about? We think about these amazing domes and feats of technology and going to a specific area. Solar eclipses happen randomly all over the Earth at all times, right. And one could happen in the middle of the ocean, it could happen over Antarctica, but they also happen over land. And so what you see at the turn of the century is the rise of these solar expeditions.

Where they'd be led by different-- and sponsored-- by different observatories. And then you have for the idea of accessibility for the first time, women participating in very big numbers in these expeditions. Because and the travel to them would take them all over the world, because they're pretty much random. And so the photographs of the eclipses, or the expeditions, have some of the most open participation between genders which I think is fascinating. But also it's like this-- it was used as an excuse for women to travel to very far off places.

[MUSIC PLAYING]

One of the most important parts of my piece that I've created for COLA, is that you one day will be able to stand in front of this piece and experience the scale of it. And in that scale, like I said from the beginning, it's really meant as almost like a temple to the sun. That you feel just completely consumed by this vast field of blue, the voids of black. And that you then are kind of curious about what the piece is.

[MUSIC PLAYING]