

q/a

Puzzling Perception: A Conversation with Tauba Auerbach

by Jan Garden Castro

Tauba Auerbach, whose aesthetic investigations break the mold, has described her work as an attempt to reveal “new spectral and dimensional richness... both within and beyond the limits of perception.” With a restless curiosity, she explores the outer fringes of logical constructions (linguistic, mathematical, spatial), seeking the point where these structures break down and open up new possibilities. Her choice of media is equally adventurous, ranging from painting, photography, and sculpture to book design and musical performance. Optics, physics, and anatomy come together with glass, plastic, molten color, and printing





**Flow Separation,
2018.**

Commissioned by Public
Art Fund and 14-18
NOW and presented on
Fireboat *John J. Harvey* in
New York Harbor, through
May 29, 2019.

PHOTO: NICHOLAS KNIGHT, ©
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PUBLIC ART FUND, NEW YORK,
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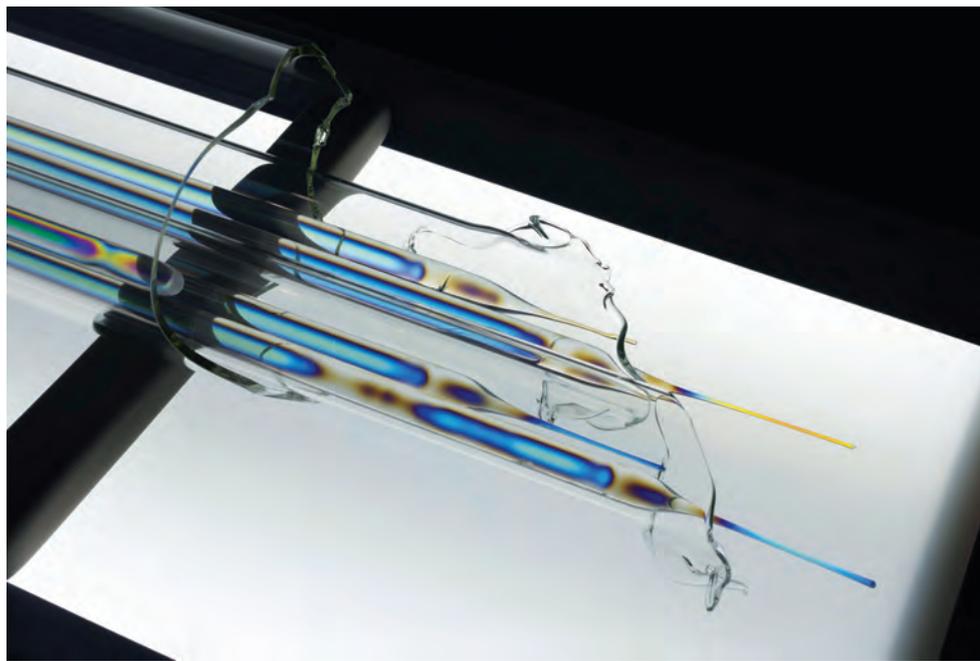
processes to form complex design puzzles and mind-bending geometries that extend known principles in directions that can only be imagined.

Auerbach's recent major exhibitions include "INDUCTION: Tauba Auerbach and Éliane Radigue" at MOCA Cleveland (2018) and "The New Ambidextrous Universe" at the Institute of Contemporary Arts, London (2014). For her first public art project in New York, *Flow Separation*, on view at Pier 66 in Manhattan through May 29, she painted her version of "dazzle camouflage" on the *John J. Harvey*, a historic New York City fireboat launched in 1931, retired in 1994, and returned to service on 9/11. New work is currently on view at the Artist's Institute in New York (through June 1), and a major survey is scheduled to open at the San Francisco Museum of Modern Art in spring 2020.

Jan Garden Castro: *Could you discuss your idea for *Flow Separation*? What is dazzle camouflage?*

Tauba Auerbach: I tried to come up with a design that used the same reasoning as the original dazzle but looked different. The artist who came up with dazzle, Norman Wilkinson, thought that it would be more effective to confuse the enemy than to hide from them, since hiding a boat in open water is pretty difficult. The optical equipment used on German submarines during World War I would slice the image in half—you had to adjust the rangefinder to make the halves line up, and then you could take a reading of the boat's distance. These high-contrast, buzzing, stripey patterns made it very difficult to do that. Slowing someone down by just a few seconds could be a matter of life and death, many lives and many deaths.

I also tried to use other ideas from historic boat camouflage, like the false bow and false stern, where features of the boat are painted just to the side of where they actually are. A few years ago, I attempted to learn how to marble and gave up. It was surprisingly difficult, and I wasn't coming up with a good reason to use it, other than the fact that it looked cool. So I didn't have sense of purpose. But when the Public Art Fund came to me with this assignment, it almost immediately fit together. I thought I could marble a high-contrast pattern that had the qualities of historic dazzle, but the marks would be the result of fluid flow patterns. It seemed right for a boat. I did a whole lot of marbling,



and the two pieces I used in the end are sharp-edged—made up of stripes that are dragged and sliced up. The pattern mirrors on the side of the boat to make a false bow and false stern.

JGC: *Your talk at the New York Society of Mechanics (January 18, 2018) covered a wide swath of technical subjects, including how colors have interactions yet resist modeling and historic uses of the meander. You pointed out that decorative forms like waves also appear in nature and noted five variables of ornament—four root shapes that fold, spin, and oscillate. Was any of this inspired by your parents' background in architecture and theater design?*

TA: My parents had a theater consulting firm for my whole life. My dad led the design teams, and my mom developed it as a business from the ground up, even though she had a degree in art. I don't know why, but I wasn't interested in my father's work until recently. I was always interested in him as a maker, though—he's probably the best craftsman and engineer I know—I just wasn't into theater. But last year, he helped me with a lighting idea for an exhibition I had with Éliane Radigue. I saw his expertise at work and how impactful it was. I loved using light to change the mood in the

FROM LEFT:
Non-Invasive Procedure
(detail above),
2018.
Adjustable-height medical
table, light box, 3 lenses
with stainless steel
supports, polarized film,
plastic, and glass,
69.5 x 48 x 95 in. overall.

space. Now we're working together on some installation ideas I have for a survey show that I'm trying to work out in my head. I like sharing this kind of tinkerer, problem-solver head space with him.

JGC: How did you start addressing optics, science, the body, and world cultures?

TA: I'm curious about many things; it's hard to identify how my curiosity starts. I open my ears and eyes, ask why, compare things, and notice patterns, like all people do, just each in their own way. Some things have jumped out at me over time, especially similarities in how things are connected to themselves.

JGC: What were the ideas behind your glass sculptures, which you showed at Paula Cooper Gallery last year?

TA: I've been learning about anatomy, a little bit about medical imaging, qi, fascia, and various types of healing theories and practices—and somehow all of these things came together in the sculptures. *Non-Invasive Procedure* (2018) shows you something invisible embedded in some kind of specimen. When you look through the lenses, you can see light refracted by the molecular

CLOCKWISE FROM BELOW:

Where there had once been a snag in the fabric (detail), 2018.

Borosilicate glass on cushioned physical therapy table, sculpture: 6.75 x 18 x 66.5 in.; base: 86 x 33.25 x 48 in.

[2,3], 2011.

Paper, ink, binder's board, glue, fabric, and silkscreen, closed: 20.75 x 16.5 x 4.5 in.; open, dimensions variable.

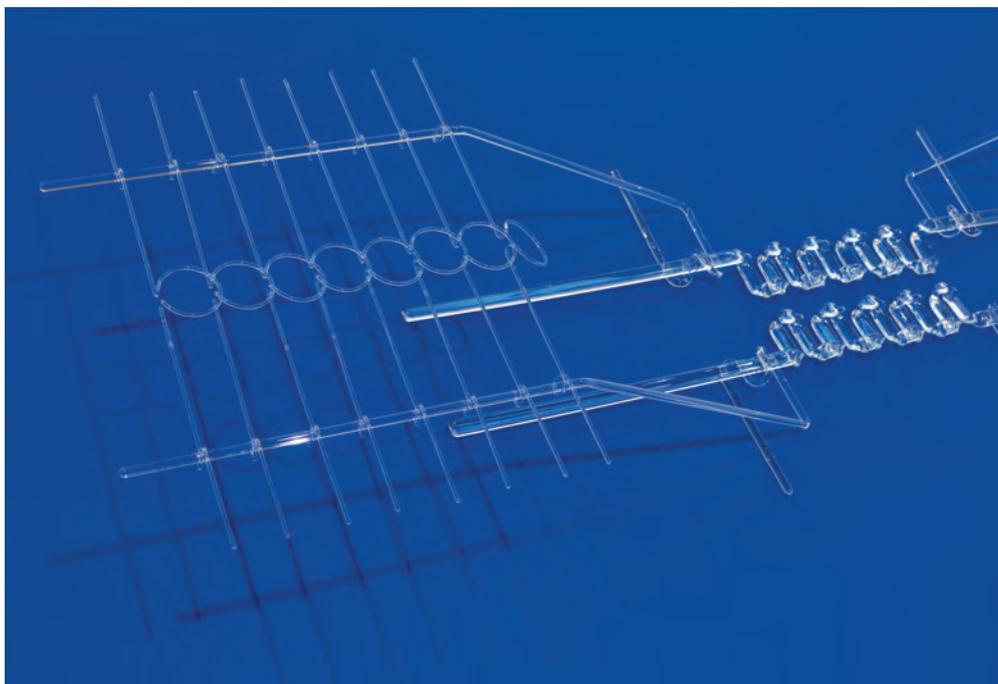
stress inside the plastic. I'm a new glass-worker, so a project is cause to learn something, but I'm still quite limited by my skill set. I have to plan my projects around what I can do. I realized that a lot of the moves I'd learned to do with glass and a torch could be done with plastic and a heat gun, so this was the first time I did that. *Where there had once been a snag in the fabric* (2018) is all glass. I made it after experiencing a tremor that left me feeling different afterward than ever before.

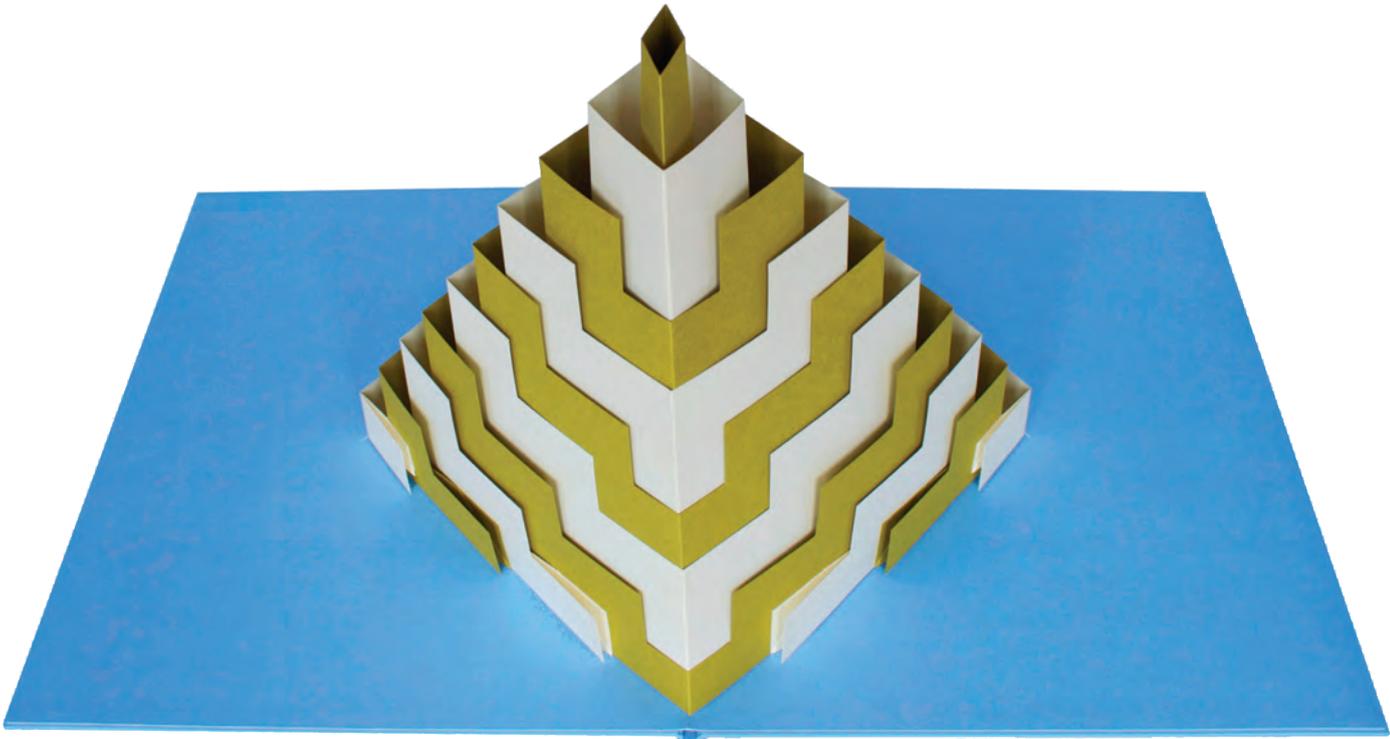
JGC: In *Non-Invasive Procedure*, a specimen lies on a table, with three viewing lenses that turn the clear plastic tubes into spectrums of color. The third, large lens suggests an entrance to an MRI chamber. Are the broken tubes a metaphor for the body? Why is the color inside the tubes important?

TA: The tubes and rods are indeed meant to be some kind of biological scrap headed in for a scan. It was important to see color inside the clear rods because the piece was focused on revealing usually inaccessible information. I wanted to show that there was something going on inside the material.

JGC: Your sculptural pop-up book *[2,3]* (2011) was a centerpiece in "Graphic Revolution: American Prints 1960 to Now" (St. Louis Art Museum, 2018–19). It offers complex design puzzles, with each double page opening to form a non-traditional geometric sculpture, such as a pyramid with successive triangles enclosed within each side. How did you go about making it? Why is it important to re-discover the versatility and energy of shapes like triangles, circles, and the stepped pyramid?

TA: Versatility and energy are such nice qualities to point out. It's mysterious and remarkable to me that some shapes occur so consistently. My main motivation in making this book was fun. I loved engineering it and making the prototypes. People seem to have fun handling it. Maybe it's because the shapes have some kind of power, or maybe it's enjoyable to watch a change of state.







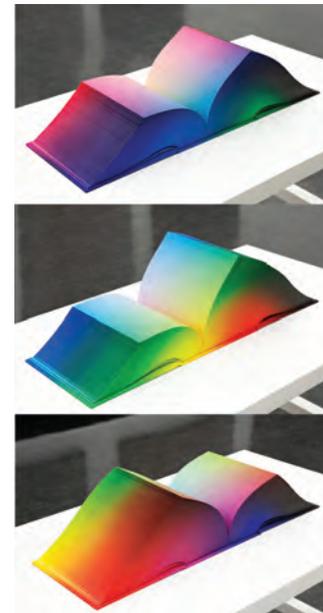
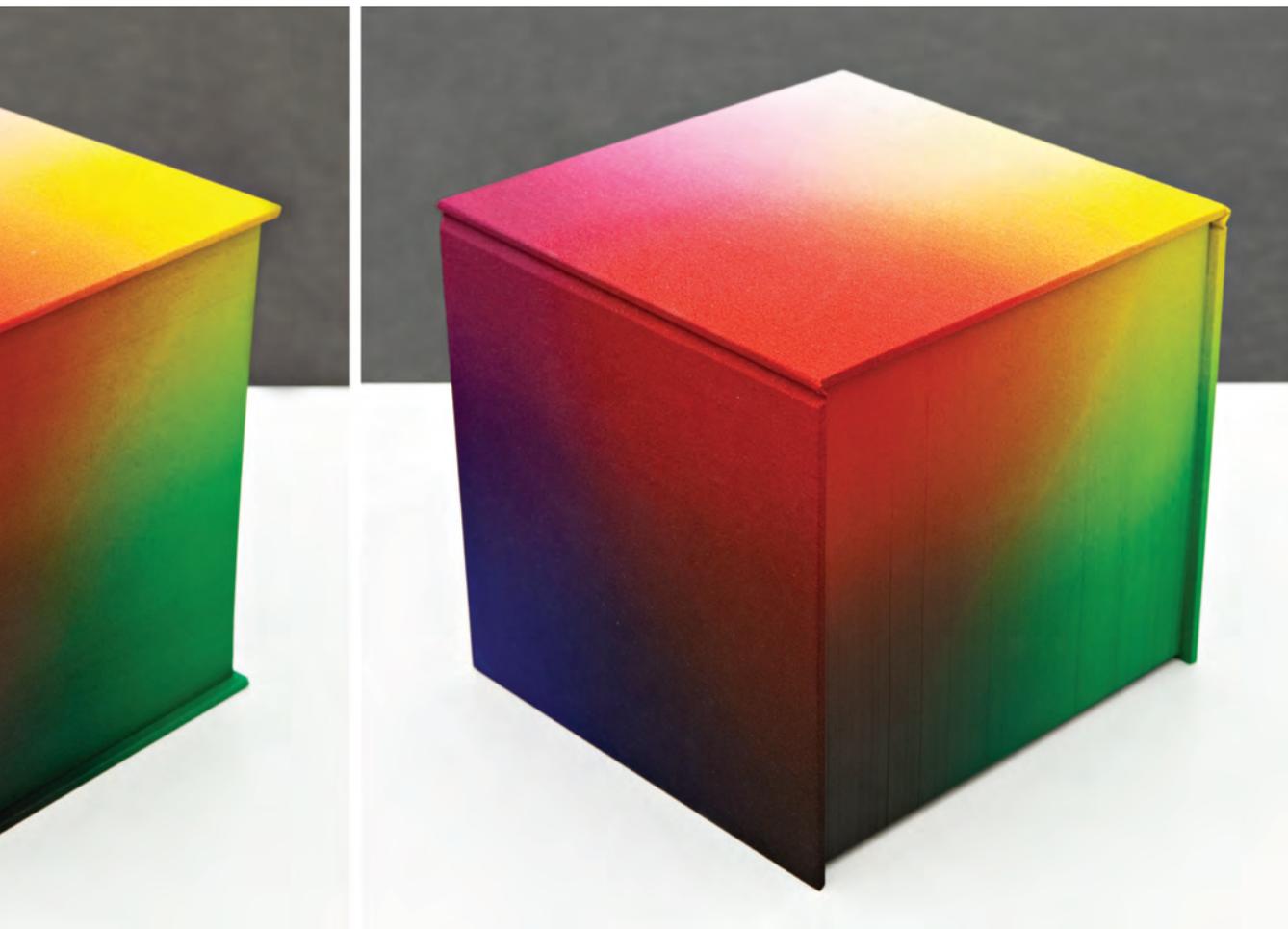
JGC: *RGB Colorspace Atlas* (2011), with its experience of molten color, is one of my favorites. What inspired you to create a bound book in the form of a cube?

TA: RGB stands for the light primaries—red, green, and blue. “RGB color space” is a widely used three-dimensional model of the visible spectrum. It gives each primary color an axis and builds a one-unit cube starting at the origin where all the values are zero and the corner of the cube is black. At the far opposite corner, all primaries are at their full value and combine into white. I airbrushed the covers and the edges of the pages, but the pages themselves are printed. I had to make the book a cube in order for it to be the shape of the model. The piece has three volumes—each one is the same cube sliced in a different direction. Binding it was only possible because I met the most amazing expert bookbinder, Daniel Kelm.

JGC: You’re passionate about typefaces, prints, and patterns, and you’ve even created your own typefaces. How did this begin, and where is it going?

TA: I’ve created many typefaces, and I can’t remember when I started. I had different “fonts” for my handwriting when I was a kid. I remember journaling about letters when I was young. I make a few typefaces a year, usually prompted by something, but not always. Sometimes I do them for album artwork, a calendar, a show or a book. Recently I’m doing a lot more by hand with markers. I don’t know where it’s going, maybe nowhere. I think lettering and type design will always hum along parallel to everything else.

JGC: Why are Claude Bragdon’s books *A Primer of Higher Space* and *Projective Ornament* important to your practice?



TA: I like people who talk about math with emotion.

JGC: [How have you added to his thoughts on the fourth dimension?](#)

TA: The fourth dimension is not Bragdon's idea, but he wrote about it a lot. I like it as a model or armature for thinking about all kinds of things. It's little bit like pressing the sustain pedal on the piano—an extension that changes the texture. I like the idea of extruding in a direction we can't see and can hardly imagine. I've tried to expand on his idea of applying projection drawing to rendering 4D shapes in ornamental contexts.

JGC: [How does music activate your work? For example, Greg Fox's drum sequences accompany *Pilot Wave Induction III* \(2018\), a video in which a silicone drop bounces on its own wave. Why is the wave-particle rela-](#)

[tionship important beyond the physics lab?](#)

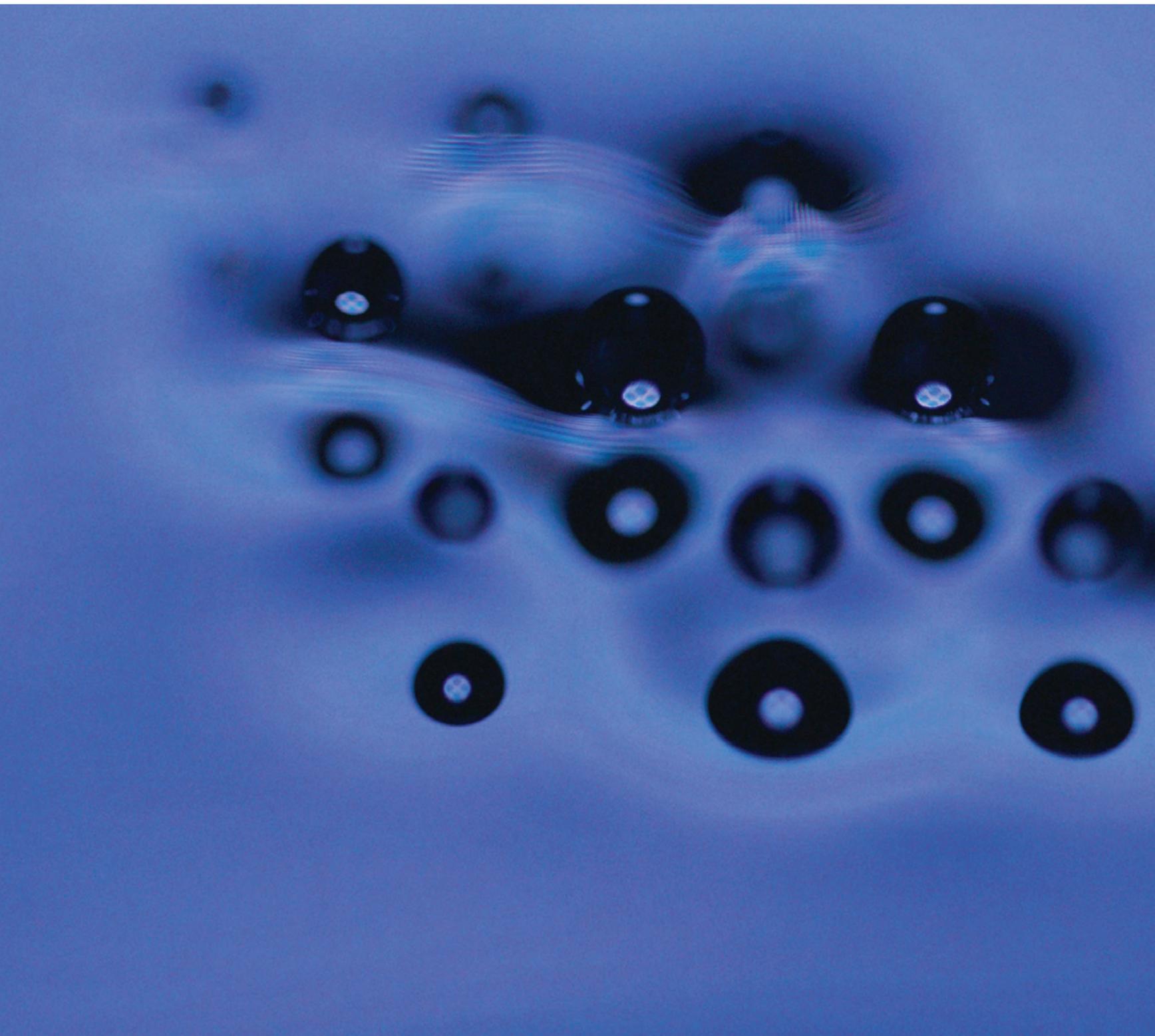
TA: I think the wave-particle relationship is probably at the heart of all things, so its relevance would extend everywhere into everything. I'm in love with music because it hasn't been—or can't be—reduced by words as easily as the image. When I listen to music, I don't have a bunch of -isms and names of colors flying through my head. For me, music carves out abstract thinking space that's specific and visceral.

JGC: [Is there a historical precedent for *Auerglass Organ* \(2009\), which you made with Cameron Mesirow?](#)

TA: Many other organs take several people to operate, but I don't know of another one that's structured in this particular way. It's basically symmetrical but a click off. I pump the air for Cameron, and she does it for me, and we each have half the notes in a four-octave scale.

***RGB Colorspace Atlas*, 2011.**

Set of 3 books: digital offset print on paper, case bound book, airbrushed cloth cover and page edges, each book: 8 x 8 x 8 in. Binding co-designed by Daniel E. Kelm and Tauba Auerbach. Bound by Daniel E. Kelm and assisted by Leah Hughes-Purcell at the Wide Awake Garage.



JGC: You spent the winter in Rome. What kinds of patterns were you exploring and making in Italy?

TA: Rome has become a regular city for me, because my partner is from there. I mentioned a survey show that I'm planning for SFMoMA—I felt like I needed to put myself somewhere else in space to think about it properly, somewhere unfamiliar enough to require alertness but not so unfamiliar that it was going to take a lot of my energy just figuring out how to exist there. I thought this might help me to look as brutally and honestly as I wanted at all of my work, notebooks, and hard drives from the last 15 years, without totally cracking. It sort of worked. I was also in the fun stage of planning two kinetic sculptures that I'm currently showing at the Artist's Institute.

JGC: You collect mathematical and scientific objects. Have any of them informed your sculpture? Did you start a new collection in Rome?

TA: I have a nice collection of puzzles, a bunch of 3D printed models of minimal surfaces, glass variations on the Klein bottle, weird clocks and maps, fulgurite, chainmail samples, and lots of interlocking things. They help me get my head around other ideas that are hard for me. My studio is really cluttered with this stuff, and in Rome I had hardly anything. It was a helpful change, but I really adore living with all these shapes. I was happy to go home to them. ■■■

FROM LEFT:
Still from *Pilot Wave Induction III*, 2018.

Single-channel HD video, 16:10, color, sound, duration 9'03" (looped), dimensions variable; as installed, 100 x 160 in.; percussion: Greg Fox, camera: Rafe Scobey-Thal.

***Auerglass Organ*, 2009.**

Wood, acrylic, steel, copper, leather, and felt, 190.5 x 31.5 x 116 in.

