

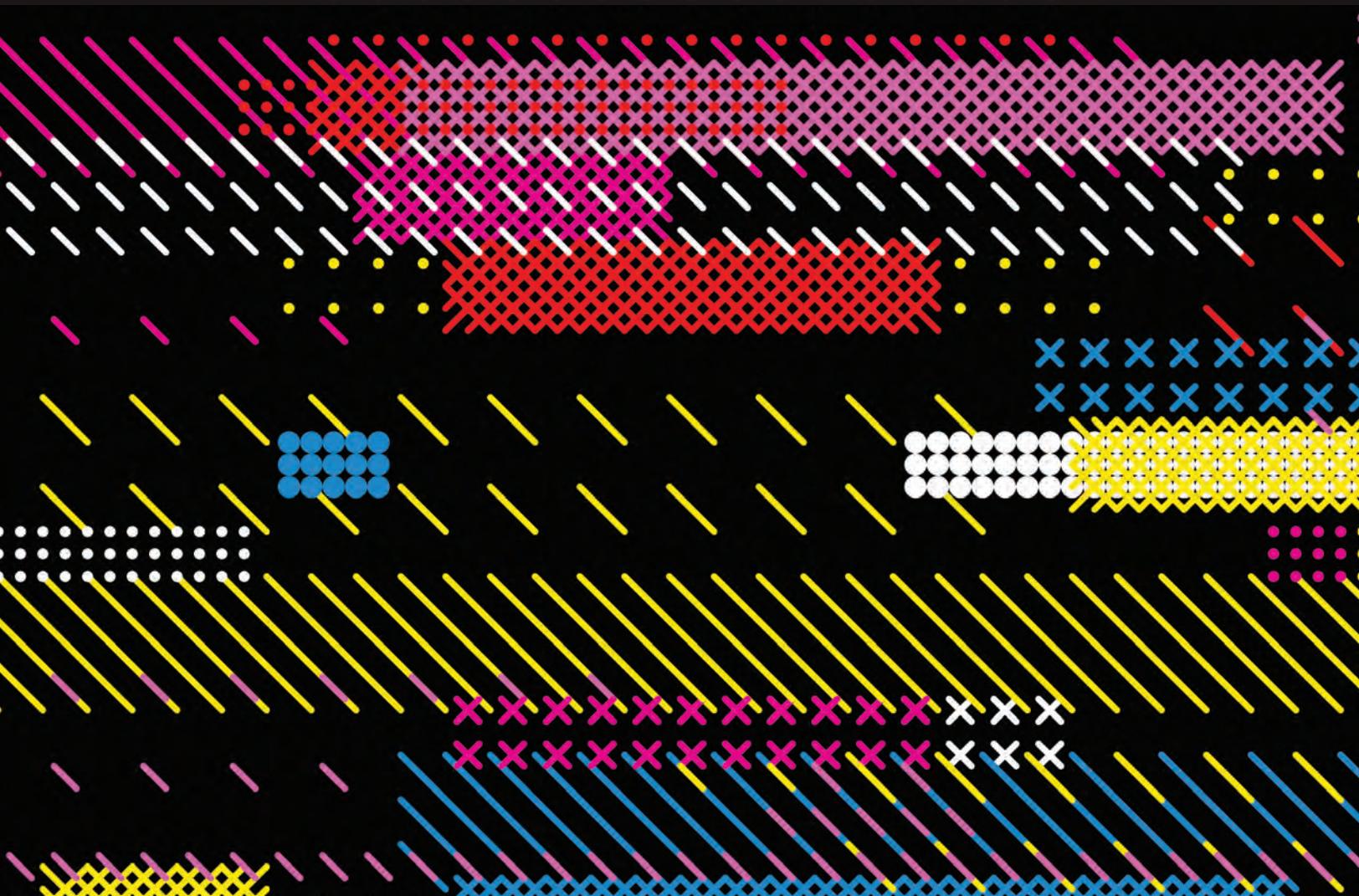
NEA ARTS

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Number 3, 2018

PUSHING THE BOUNDARIES

A Look at Visionary Approaches to the Arts



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This issue

“Art is always visionary. Art always disturbs present realities, however satisfactory they may seem to the rest of the world.”

—Visual artist Ben Shahn

While it may be true that all art is visionary, some visions are more expansive than others—pushing the boundaries of what’s seemingly possible, and in some cases, permanently changing the artistic landscape. In this issue of *NEA Arts*, the National Endowment for the Arts explores organizations and individuals who have impacted artistic fields through their bold approaches and by refusing to limit the scope or daring of their imagination.

We’ll learn how the Processing Foundation seeks to break down barriers to digital art by making coding more accessible, and we’ll show how Meow Wolf has created a new frontier for how art can be presented. We’ll see how director Richard Linklater has experimented with cinematic techniques to make movies in new ways, and how the Martha Graham Dance Company has maintained its status as a groundbreaking company not just through dance but through technology. We’ll be introduced to Baltimore’s American Visionary Art Museum, where self-taught artists are celebrated, and meet playwright Luis Alfaro, who transmogrifies classic plays into dramas for contemporary audiences. And we’ll look at how the new initiative Sound Health explores the impact of music on health through an innovative partnership of musicians and scientists, while Byron Sanders, CEO of Big Thought, shares his own vision for introducing creativity to education to overcome the opportunity gap.

We hope you’ll be inspired by the innovation and imagination you find in this issue to see how your own creative vision might similarly impact our world.

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About the cover: *Geometric Shapes* by Saskia Freeke, using the computer programming language from the Processing Foundation. Photo courtesy of Saskia Freeke

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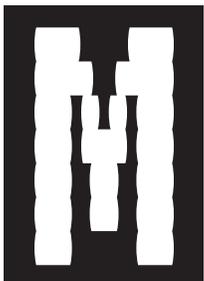
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Muse in the Machine

The Processing Foundation Makes Code-Based Creativity More Accessible

BY MICHAEL GALLANT



Michelangelo summoned angels with a simple paintbrush, and Leonard Bernstein catalyzed star-crossed love with a composer's pen and conductor's baton. But today, the creation of groundbreaking art often involves tools that were unimaginable even a few

decades ago. Instead of wood and horsehair or pen and ink, many modern artistic implements are as microscopic as they are mighty—copper and silicon, ones and zeros.

Ben Fry is co-founder of the Processing Foundation, an organization dedicated to making digital art creation accessible to experienced computer coders and technological newbies alike. A Massachusetts Institute of Technology graduate who has crafted award-winning works of visual art using computer programming, Fry began the foundation in 2012 with fellow programmer and digital artist Casey Reas.

The technological core of the foundation is a computer programming language and integrated development environment simply called

▲ Learning art and coding during the Creative Coding Fest at New York University's Interactive Telecommunications Program. Photo courtesy of Ellen Nickels and Dominic Barrett

“Processing,” which Reas and Fry first built in 2001. Unlike other programming languages, Processing is designed to help artists turn their ideas and inspirations into actual images on the screen, while teaching the fundamentals of computer programming at the same time.

“We want the process of writing computer code to feel as easy and natural as sketching something in a notebook, rather than having to learn a complicated language and obscure symbols,” said Los Angeles artist Lauren McCarthy, who joined the foundation in 2015 and serves on its board of directors. “All of our tools are designed with that sketchbook metaphor in mind.”

In practice, this means that artists experimenting with Processing-fueled tools can create images, animations, games, websites, and more, while seeing the related code—the digital DNA on which their creations are built—front and center, on the very same screen.

“We put the code in the foreground in the hope that, yes, you can make whatever you want, but along the way, you’re also learning *how* to code,” said McCarthy. “That’s a skill that you can then take to a job, to another programming language, or to create completely new kinds of art.”

The success of this approach speaks for itself, with a vibrant and expanding community surrounding the foundation, and hundreds of thousands of coders and artists using the language worldwide.

The inspiration for Processing, as both a language and a foundation, began nearly two decades ago when Fry and Reas became frustrated at seeing talented, aspiring coders repeatedly drop out of computer science. The reason? An unfriendly “eat your vegetables” approach to teaching the subject, Fry described, as well as an elitist flavor of “priesthood” when it came to who could code and who could not. “That’s not a very interesting place to be,” he said. “When it came to getting involved in computer science, we wanted to significantly lower the barrier to entry.”

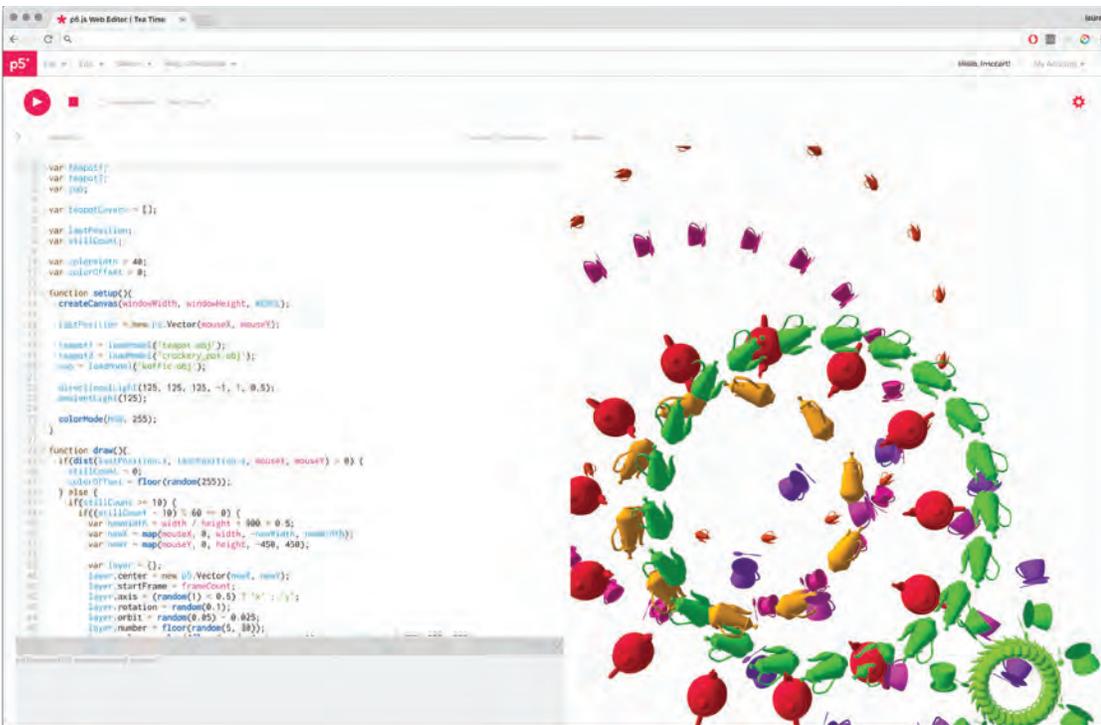
As a result, he and Reas tapped their own programming skills, and Processing was born. “Usually when people take a class in computer science, they’re first made to learn a lot about concepts and structure, not necessarily building things right away,” Fry said. “We think that’s backwards. We try to focus on helping people create things first, and find their way to those more advanced ideas when they’re ready.”

The Processing Foundation helps to actualize those goals not just through custom tools offered online, but through a robust fellowship program as well. Supported by the National Endowment for the Arts, Processing Foundation Fellowships support artists, coders, and anyone else interested in taking Processing-themed technology—and the foundation’s inclusive vision—in new directions.

One successful fellowship provided coding education opportunities to prison inmates in

Washington state, while another funded the development of audio capabilities for Processing-related software, making it much more usable for people with impaired vision. McCarthy also describes a fellowship, given in 2017, that supported an organization for Latina girls in Los Angeles called DIY Girls; the foundation’s support helped DIY Girls develop new coding-related curriculum projects, offering free, creative, multilingual learning materials online for all who were interested in them. The

▼ Artwork by Matthew Kaney in Processing Foundation’s p5.js web editor, development led by Cassie Tarakajian. Photo courtesy of Processing Foundation



list of inspiring projects—all centered around spreading the tools and knowledge to program software and make art—goes on.

For those unfamiliar with the worlds of coding and digital art, it may be easy to question the importance of learning to forge and manipulate software. Yet with computers becoming an increasingly ubiquitous part of our world—for artists, computer scientists, and laypeople alike—Fry sees learning to code as key to gaining vital perspective on our current way of life.

“Frankly, part of the reason that computers can be so dreadful is because decisions for how they work are being made by people who are comfortable in that realm,” he said. “I hope that we’ll bring more people into coding who want to blow all of that up, because they have a different perspective on the way things should work, but need enough coding background to help express it.”

Fry also encourages people to think of the broader importance of coding in terms of Processing’s core metaphor: analog, pencil-and-paper sketching.

“Why do you take a drawing class?” he said. “Is it because you’re going to do illustration the rest of your life? Probably not. But you do train your eye to see things differently, to understand composition on a page, how light hits objects, and how color works, which opens an entirely new perspective. It’s the same with music classes. A tiny number of people will be professional musicians, but it’s all about expanding a different part of the world to you.”

Despite its worldwide user base and inspiring mission, funding has been a challenge for the foundation. “We’ve grown steadily and organically and, as a result, we went from being unknown to being something that was just ‘there’ and taken as a given,” Fry said. Many funding organizations are uninterested in supporting what they see as ongoing “maintenance” work, he continued, even though such support is particularly vital to the foundation’s success.

Fortunately, the National Endowment for the Arts’ support has the potential to transform the situation, Fry believes. He sees the grant as not



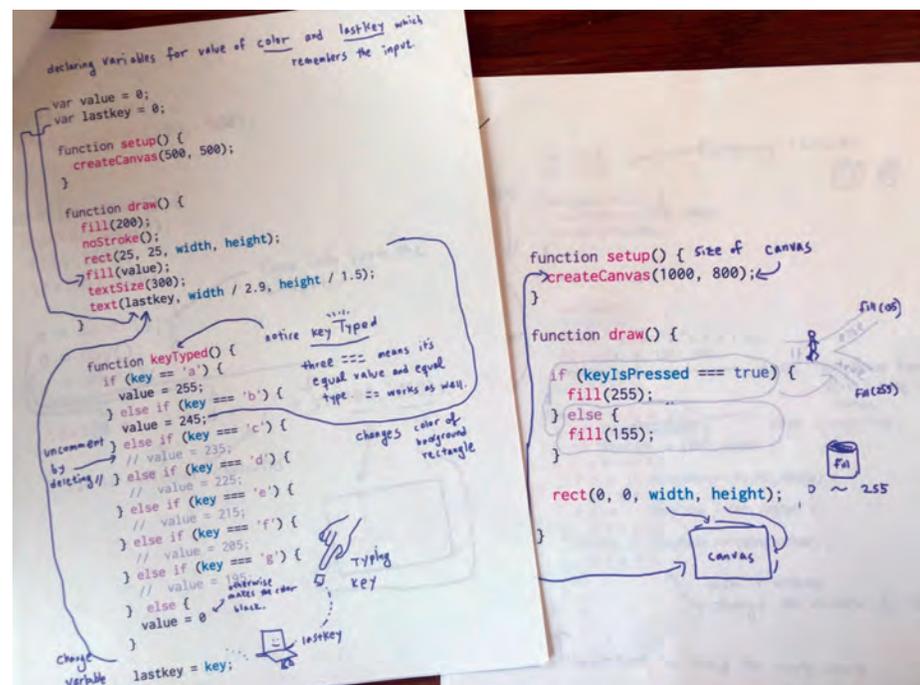
just helping to keep the proverbial hard drives spinning, but serving as “a green light to other funding organizations to be willing to sign on.”

The Processing Foundation’s leaders hope to see its efforts broaden in the future, particularly in ways typified by the fellowship program, “where we bring in a wide range of people and projects to help us stretch into all sorts of new areas,” Fry said. “The point of the project has never been the Processing language or syntax itself. That’s just a means to an end.”

Michael Gallant is a composer, musician, and writer living in New York City. He is the founder and CEO of Gallant Music.

▲ Creative Coding Fest at the University of California, Los Angeles. Photo by Casey Reas

▼ Learning aids for a Signing Coders workshop led by Taeyoon Choi, which taught p5.js to people with hearing impairments. Photo by Taeyoon Choi



BRINGING WHAT IS IN THE DARK TO LIGHT

The Power of Luis Alfaro's Plays

BY ISABEL PELLEGRINO



(From l-r): Jose Joaquin Perez as Creon, Romi Dias as Jocasta, and David Anzuelo as Laius in the Woolly Mammoth production of Luis Alfaro's *Oedipus el Rey* in Washington, DC, supported by the National Endowment for the Arts. Photo by Stan Barouh

During the 1990s, Luis Alfaro held a playwriting residency at a correctional facility in Tucson, Arizona. There, he met a 13-year-old girl who had murdered her own mother as revenge for the woman's attempt to murder the girl's father. The same night he heard her story, Alfaro happened upon a theater bookstore offering a "Ten Greeks for \$10" deal. Having never read the Greek classics, he bought the package and began Sophocles' *Electra*. Inside the ancient text, he found the same tale he had heard in his workshop that day: a young woman who murders her mother to avenge her father's death.

The episode inspired Alfaro's critically acclaimed *Electricidad* (2003). Set in the East Los Angeles barrios of Alfaro's youth, the play adapts ancient theatrical traditions for the Latino community, filling the stage with Spanglish as well as the gang culture and violence that Alfaro frequently witnessed as a boy.

Other classically inspired texts followed. From Sophocles' *Oedipus* came Alfaro's *Oedipus el Rey* (2010). From Euripides' *Medea* came Alfaro's *Mojada: A Medea in Los Angeles* (2015). And with support from the National Endowment for the Arts, he is currently developing an adaptation of *Romeo and Juliet* based on an interracial couple's experience.

By adapting classic texts, Alfaro has shown that the Latino community is as natural a setting for Western European works as any other, and the issues that they deal with are not issues of the "other"—they are, in fact, the same problems that have plagued humanity from the start. "I'm trying to let us see that 1,400 years later nothing's changed," said Alfaro. "We are part of a continuum. I think the ancient texts are really teaching us something about being very human, about the fragility of humanness and how we can learn to be better people by not repeating our same mistakes."

In both his adaptations and numerous other works, Alfaro is known for diving into marginalized communities, empathizing with their struggles, and transporting their stories to the theater, despite the field's long tradition of excluding communities of color.

For example, in 2014, 73 percent of artistic directors and 62 percent of executive directors

at leading U.S. theaters were white men. Out of 39 Broadway shows produced during the 2015-16 season, there were just six writers of color, including composers. Perhaps not surprisingly, minority groups are still the least likely to attend plays—musical and non-musical—according to studies by the National Endowment for the Arts.

But Alfaro has always seen the value in telling his story, even from an early age. He recalled an incident in fourth grade when he was suspended and sent to a psychiatrist for telling his classmates about a man who was murdered on his front lawn in the violence-riddled Pico-Union neighborhood of Los Angeles. The punishment quickly ignited Alfaro's voice rather than muffled it. Raised by union farmworkers and protestors, he was taught to "bring what is in the dark to light," and treated his school's actions as a fierce blow of censorship.

"I've got to keep doing this because they're trying to stop me," Alfaro remembered thinking. "In truth, I think that's probably what set me forward in terms of writing about things that were real in my community. I think what I was really trying to do is name the world that I was in."

▼ Playwright Luis Alfaro speaks at the opening of the Oregon Shakespeare Festival's 2017 season during his playwright-in-residence term. Photo by Kim Budd





▲ (From l-r): Vilma Silva, Sabina Zuniga Varela, and VIVIS in the Oregon Shakespeare Festival's production of Luis Alfaro's *Mojada: A Medea in Los Angeles*. Photo by Jenny Graham

In doing so, Alfaro has developed into one of the most distinguished playwrights in modern day theater. He has received a MacArthur Foundation "Genius" Fellowship, two Kennedy Center Fund for New American Plays awards, and a United States Artists Fellowship, among other awards. The National Endowment for the Arts has also supported numerous productions and premieres of his work throughout the country.

Alfaro says much of his work is rooted in his "citizen artist" identity. While Alfaro's parents encouraged his artistry, they also exposed him to their religious value for community and the subsequent effort to uplift vulnerable groups, like themselves, through advocacy. He has held jobs in nonprofits and social service agencies where he worked closely with the people who inspire his writing today.

"Whenever I start a play, I'm really working with people in the community to help keep the play authentic, to be truthful and honest about the environment or language in the story," said Alfaro. "In some way, I'm always there, I'm always in that world. I'm always trying to think about how I write about the world around me."

But for Alfaro, to truly connect with the community, writing plays about his world is not enough—there must be true interaction that includes outreach and educational efforts by the theater. For example, when he came onboard six years ago as the playwright-in-residence of the Oregon Shakespeare Festival (the first such position in the organization's 85-year history), less than one percent of the festival's audiences were Latino, despite its location in a heavily Latino neighborhood of Ashland. Thinking beyond traditional marketing tactics, he instead turned to the local Mexican community for inspiration.

His vision for connecting with Latino audiences was, first, to recruit a taco truck and park it in front of the theater, despite the owner's initial objection, saying, "No, they don't like me there." He dubbed her fears as rooted in myth and paid her \$3,000 to show up alongside a mariachi band from a neighboring town.

The taco truck made over \$10,000 that day and the theater shifted its participation rates to include the surrounding community for the first time. Alfaro continued the effort by translating plays into Spanish, providing open captioning, setting aside tickets for people unfamiliar with buying in advance, and holding festivals geared towards Latino expression. Similarly, when New York's Public Theater produced *Oedipus el Rey* last year, the show sold out before rehearsals even started, and its run was extended twice.

"I not only bring the play, I bring the audience," said Alfaro, "If you let them know, and they find value in it and they see themselves in a story that reflects something they're concerned about or wishing to be represented by, they will show up."

Currently, Alfaro is an associate professor of dramatic writing at the University of Southern California School of Dramatic Arts, where he is teaching a guiding principle he learned from a mentor of his own, Maria Irene Fornes: "There were a lot of great artists before you and there will be a great many after you. All you have to do is tell the story of today."

To better impart this lesson, he is constantly working around an institutionalized curriculum, urging department leaders to allow class outside

of the classroom, and providing experiential spaces. He often rejects the notion of writing classes as incubators for marketable works, but rather sees them as opportunities to shift and shape young minds.

“I’m okay if they do failures all three years. If all they did was experiment for three years they will walk out a better artist,” said Alfaro regarding his students. “What I do really well is I help people, not only audiences, but students and other artists shift the point of view in our thinking.”

In the classroom, Alfaro is constantly reminded that the field of theater has much more work to do to move generations forward. The problem is complex, he noted, involving a struggle to ensure both artistic programs and leadership are inclusive and diverse. As a result, he shares his sense of “citizen artist” with his students to invigorate their civic engagement.

“There’s a radical action to ‘not play nice,’” said Alfaro. “To hold a board accountable, to hold our artistic director accountable and say, ‘Listen, I don’t know where you thought it was

okay to not feature people of color or women in your season. Look at what’s around you.”

Alfaro himself makes the effort to look around at his surroundings and see the need for his work in communities of every color, gender, sexuality, and background. His goal is to work beyond the confines of identity and produce plays that say something for everyone. Alfaro is consistently asking, “How do I create some sort of parity here that allows us all to be invested in the same thing that we love doing so much?”

Identifying himself as “Mr. Super L.A.,” Alfaro has found his place back in the city of his youth. Now, just as in the fourth grade, he thrives in the areas where he is the odd man out, where he is challenging others to question their reality.

“The goal is to create the world that you want to see,” said Alfaro. “That’s always, always, always a challenge.” 🌟

Isabel Pellegrino was an intern in the NEA Office of Public Affairs in fall 2018.

▼ Medea (Sabina Zuniga Varela) looks at the night sky with her son Acan (Jahnangel Jimenez) in the Oregon Shakespeare Festival’s production of Alfaro’s *Mojada: A Medea in Los Angeles*. Photo by Jenny Graham



NOT YOUR AVERAGE



Inside the American Visionary Art Museum. Photo by Shawn Levin

VISIONARY ART MUSEUM

The American Visionary Art Museum in Baltimore, Maryland

BY SOPHIA SALGANICOFF

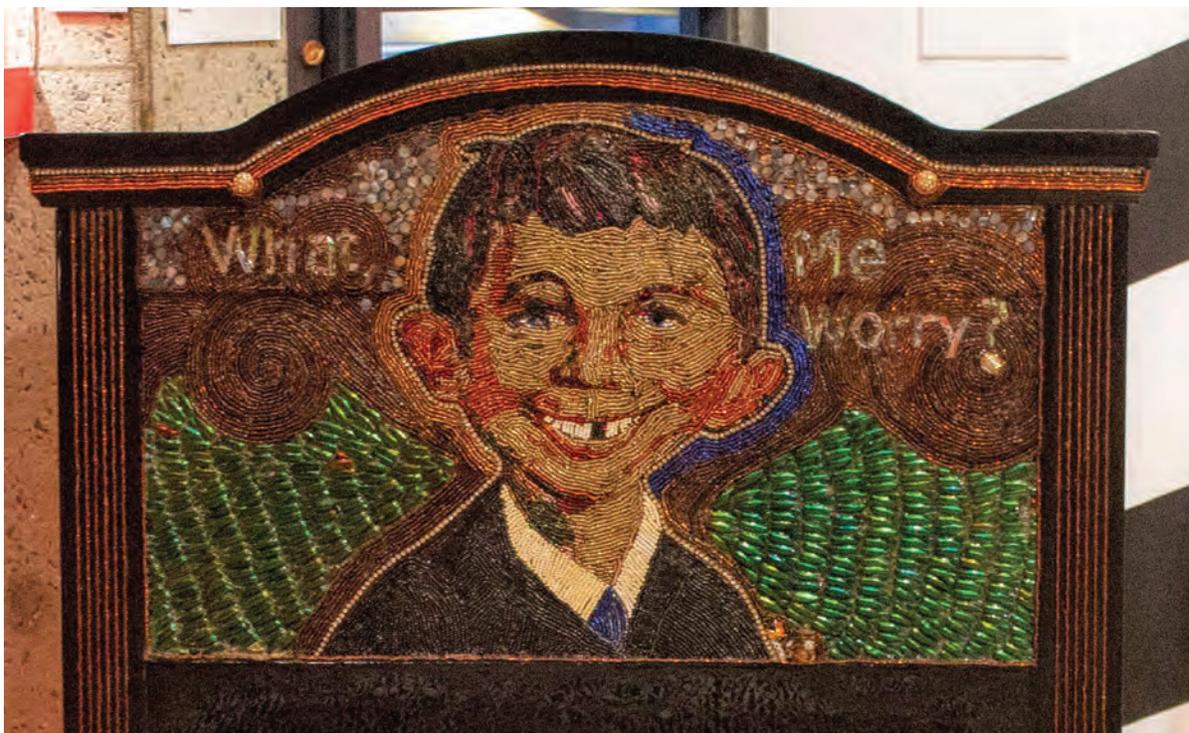
The American Visionary Art Museum (AVAM) is nestled like a glittering jewel in the Federal Hill neighborhood of Baltimore. There are no white walls and solemn security guards telling children to quiet down. The gift shop stocks practical jokes and novelty sunglasses. In the permanent collection, a bedazzled bed frame featuring Alfred E. Neuman sits directly across from the sculptural magnum opus of a terminally ill mental patient, which was carved from a single piece of applewood. Neither work seems out of place. As the nation's premier museum for visionary art, AVAM has made it a central exercise to pair exuberance with education when contemplating and curating life's mysteries. In the process, it has elevated self-taught artists within the American canon, and showed just how much fun art museums can be.

Visionary art goes by many names: self-taught art, outsider art, and its original French counterpart, *art brut*. AVAM defines visionary art as work created by self-taught artists, whose "works arise from an innate personal vision that reveals foremost in the creative act itself."

The museum itself grew from the personal vision of founder Rebecca Hoffberger, who had no previous museum experience before she established AVAM. Hoffberger left her hometown of Baltimore at age 16 to study under acclaimed mime Marcel Marceau in Paris, founded her own ballet company by age 21, established field hospitals in Nigeria, and spent several years practicing traditional healing practices in rural Mexico (all while raising two daughters). By 1984, Hoffberger had moved back to Baltimore, where she was working as the development director of People Encouraging People, a nonprofit providing transformative mental health rehabilitation at Sinai Hospital.

Hoffberger was intrigued by the intuitive creativity flowing from her patients, especially the art they created despite the lack of any formal training. "I'm very interested in where a fresh thought comes from," said Hoffberger.

▼ *What Me Worry?*
Bed by Patty Kuzbida
in Baltimore's
American Visionary
Art Museum. Photo by
Sophia Salganicoff





▲ American Visionary Art Museum founder Rebecca Hoffberger at the entrance of the museum. Photo by Sophia Salganicoff

▼ The sculpture *Cosmic Galaxy Egg* by Andrew Logan is located outside of the American Visionary Art Museum. Photo courtesy of American Visionary Art Museum



At the time, there was still little interest surrounding self-taught artists in the United States, and only a dozen or so visionary or outsider art spaces in existence worldwide. “For a long time before we opened, the outsider art movement was really controlled almost exclusively by four major galleries and they tended to show the same top 12 artists amongst them, and the prices went up, up, and up,” said Hoffberger. Undeterred, Hoffberger and her husband LeRoy traveled the world learning about visionary art, and opened the doors to AVAM in 1995. In 2004, they doubled their campus to its current 1.1 acre “urban wonderland.”

Today, people come from all over the world to see the museum and learn from its unique presentational and organizational structure.

There are now more than a dozen museums, galleries, and art spaces centered around visionary art in the United States, largely in response to the success AVAM has seen. Part of the museum’s success is that, despite running on a budget that is a fraction of its local counterparts, AVAM is the only museum in Baltimore with rising attendance rates.

One of the reasons that Hoffberger believes her museum has become so successful is because of its accessibility. “I had the greatest edge of not going through an art

history education,” she said. “You don’t want to write for your peers who went through the same linguistic educational system. You want to think about how you express and make connections with regular people walking in the door.”

The museum curates and presents art in a format that transcends intergenerational barriers that often plague traditional museums, hoping that everyone from five to 85 will learn or see something they never have encountered prior to visiting AVAM. Primary among its educational goals is to “expand the definition of a worthwhile life.”

The Visionary Art Museum is not about, “Let me tell you why this is an important era in art,” said Hoffberger. Instead, she said, “It’s very oriented to wonder; what it is to be a human being, meaning all the negative traits that human beings have long had and struggled with as well as their best characteristics.”

The unadulterated testaments to joy, sadness, and humor hanging from the walls of the museum are not tempered by hyper-conceptual artistic trends popular within but not necessarily outside of the art world. Annual exhibit themes range from this year’s *Parenting: An Art without a Manual* to previous exhibits like *Race, Class & Gender: Three things that contribute ‘o’ to CHARACTER, because being a schmuck is an equal opportunity for everyone!*

Although Hoffberger often has a hand in exhibition curation, there are no permanent curators on staff, allowing guest curators to contribute their own unique voice to the already unique museum. Visiting curators have ranged from *Simpsons* creator Matt Groening to Ariana Huffington to Archbishop Desmond Tutu. Due to the relatively small size of the budget, staff members often wear many hats over the course of a year. At other museums, most large-scale temporary exhibits take years to plan, but according to Hoffberger, AVAM staff have always been “on time and on budget” with their grand exhibitions, putting them together in roughly nine months. This is even more impressive when you consider that the majority of the administrative staff, like Hoffberger, has no traditional background in museum studies, although most have experience in the arts.

While AVAM has significantly legitimized and raised the profile of visionary art in the United States, its contributions to the local community of Baltimore are also significant. “More urban museums present as fortresses saying, ‘Stay out, we have valuable things

inside,” said Hoffberger. “Ours has always been a wonderland that you come up to at 3am and hug the *Cosmic Galaxy Egg* outside and you could walk on our property or you could skateboard here and be welcome to do so.”

AVAM demonstrates this through an extensive commitment to education and grassroots community initiatives, including the famed Baltimore Kinetic Sculpture Race, its annual Martin Luther King, Jr. Day celebration, apprenticeship programs, neighborhood movie nights, and more.

Social justice and grassroots education inform almost every facet of the museum, including the exhibition themes, community outreach events, and even the mosaic adorning the main building. The mosaic, titled *Shining Walls / Shining Youth* is the result of the largest apprenticeship program for incarcerated or at-risk youths in the country, according to the museum. It is dedicated to LeRoy Hoffberger, who passed away in 2013. The program “encourages teamwork, pride in creating something both exquisite and lasting,

and results in real job skills, useful for the rest of their lives,” according to the museum. This project, along with the museum’s other community initiatives, has created a deep sense of respect and interchange between the Visionary Art Museum and the community in which it exists.

Hoffberger recalls the doubt cast in her direction during the beginning stages of AVAM, but was willing to take the risk of following her intuition to present those artists who had been marginalized by more conventional art museums. Though AVAM may lack the size and budget of other art museums, its impact cannot be denied.

Or as Hoffberger quoted friend Dame Anita Roddick, “If you think you’re too small to make a difference, try going to bed with a mosquito.”



Sophia Salganicoff was an intern in the NEA Office of Public Affairs in fall 2018.

▼ In the summer, the museum invites the community to watch films inspired by its exhibitions at their outdoor theater. Photo by Nick Prevas



REALISM ON THE REEL

THE CINEMATIC VISION OF RICHARD LINKLATER

BY TEDDY WANSINK

Filmmaker Richard Linklater.
Photo by David Brendan Hall



If a story seems like it cannot be turned into a film, Richard Linklater is the one to attempt to do just that. A coming-of-age film shot over the course of 12 years? Try *Boyhood*. A Philip K. Dick sci-fi novel adapted to surreal animation? *A Scanner Darkly*. A plotless, 90-minute conversation between a man and a woman? How about three—*Before Sunrise*, *Before Sunset*, and *Before Midnight*. Linklater is one of the few filmmakers with both a daring vision and the drive to execute it.

From his youth, Linklater was hardwired to make movies. Not only was he passionate about writing from an early age, but he also had a knack for working with technology. “I had a certain patience and a technical ability that I always trusted,” he said. “As a kid, I was always building things with my hands.”

Linklater combined these talents in his early 20s by making films on a shoestring budget. His breakout feature *Slacker* only cost \$23,000, and was supported by the Southwest Alternate Media Project through a National Endowment for the Arts regional grant. To keep expenses low, he shot the film on location around his hometown in Austin, Texas, and used a cast of amateur actors. The modest film ended up becoming a cult classic and grossed \$1.2 million at the box office. *Slacker* showed the possibilities behind low-budget film and inspired a number of independent filmmakers to pursue their own features, perhaps most notably, Kevin Smith’s *Clerks*, which draws from *Slacker*’s naturalist approach.

Since then, Linklater has gone on to become one of the most versatile directors working today. His expansive 21-film catalogue has earned him recognition from audiences and critics alike, not to mention Oscar nominations and numerous awards like Golden Globes for Best Director, Best Picture, and Best Original Screenplay. He’s directed nostalgic teen movies like *Dazed and Confused*, shot entire films that take place in a single room like *Tape*, and experimented with rotoscoping—an animation technique in which artists trace over the film frame by frame to create an eerie, lifelike image.

Linklater’s catalogue is certainly diverse, but he affirms that his goals as a filmmaker have stayed intact throughout his career. “The impulses are the same now as they were in my

early 20s,” he said. “You’re trying to discover something. It’s just a process of discovery and articulation.”

For Linklater, discovery begins with finding a new way to tell a story. “I am never too satisfied with the status quo,” he said. Instead of adhering to the same old frameworks as past filmmakers, he values “trying to invent or break some ground—not for its own sake, but for the sake of a new kind of story you’re trying to tell.”

One way in which Linklater distinguishes himself from blockbuster filmmaking is his drive for realism. While a typical thriller or action film may strive to feel somewhat believable, the goal of those stories is ultimately to distance the audience from their everyday lives, or as Linklater puts it, to “take them on an adventure somewhere else.” Those films are creating an alternate world for the audience—one that gives up some realism for the sake of escapism.

Linklater, however, takes the opposite approach. “[Realism] is my default position,” and it shows in the structure of his films. His movies shine a spotlight on the unremarkable, ordinary parts of everyday life, often throwing plot out the window to focus instead on the characters—their conversations, their relationships, the seemingly insignificant moments that end up shaping them the most. “I want it to feel like [the film is] really close to you, like ‘Oh, this is what life really might feel like if I was in this situation.’”

This naturalist vision, however, is not easy to execute. In making a film that reflects “real” life, countless factors can get in the way. “On each project, I’d like to feel that there’s something kind of insurmountable about it—some puzzle you have to solve or some element you have to crack or the whole thing doesn’t work.”

Sometimes this puzzle arises out of practical issues. Film is an art form, but it’s also an industry, meaning time and money are always a top priority. “This happens to me quite a bit—that the ambitions of the film and what you want for it so far outstrip your schedule and budget,” he said. “That is a recipe for frustration.” The puzzle then becomes how to work the story around the practical limitations of film.

This was much of Linklater’s concern when envisioning his film *Boyhood*. “Just the idea of *Boyhood* was me solving a problem, the



▲ A scene from Linklater's film *Slacker*, with Scott Marcus, Teresa Taylor, and Stella Weir. Photo by Debbie Pastor

problem being I want to depict a kid growing up. Most childhood movies are about one little section of their lives, because you can't ask a seven-year-old, 'Oh, now you're 14. Act like you're 14.'"

He hit a roadblock. His vision for an authentic coming-of-age story seemed at odds with the possibilities of film. But then, he had an idea—one that was outrageous, but feasible. "Why can't you just film a little bit every year? It will be this longitudinal project. I can film a little bit, and then at the end of the 12 years I'll have my one film. It will tell the story I want to tell from all of these people, the parents and children, over 12 years. And it will solve my problem technically."

This ambitious vision ultimately paid off. *Boyhood* was released in 2014 to widespread acclaim and received six Oscar nominations and one win for actress Patricia Arquette, in part because of the film's daring concept and impressive execution.

Even when he finds a way to make a story work on a practical level, Linklater still runs into problems in crafting the idea into a

compelling narrative; there's no use in collecting all the footage if the ideas don't line up in the end.

This is precisely what Linklater had to overcome when shooting his upcoming film *Where'd You Go Bernadette?*, set to be released this spring. Based on Maria Semple's book of the same name, the film focuses on an agoraphobic architect and mother named Bernadette Fox, who goes missing prior to a family trip to Antarctica.

"We're in the Arctic. We're shooting in water. We're traveling around," he explained. "The film's got a pretty large scope and yet, it's this intimate family drama. The bigger challenge was how to tell a portrait of a complicated woman, an artist who has stopped creating."

While the source material tells the story mainly through a series of documents like emails and voicemails, Linklater began to question if this epistolary format would translate to film. He ultimately decided that, "a literal adaptation is not an option."

To understand how he was going to make the story work, Linklater had to start from the basics. This meant he had to find what was at the core of the novel, asking himself, "What about this book do you want to express in the film? What's compelling about this? And what will work as a film?" Thanks to help from a team of co-writers, Linklater was ultimately able to craft a screenplay that, he hopes, retains the core themes of the novel using the structure of a film.

Although Linklater modestly claimed, "I've had some good ideas over the years that I've been lucky enough to articulate and play with," it's not enough for him to simply tell his own stories.

Even before he gained his own footing as an independent filmmaker, Linklater founded

the Austin Film Society (AFS), a nonprofit dedicated to supporting independent film in Texas. “Something that I think is so important is the film culture—that film is treated like the artistic medium that it is.” The AFS became his way to support the local community of filmmakers that gave him his foundation.

When the society was first getting off the ground in 1985, this meant screening independent and experimental films that could not find widespread distribution. Since then, with support from the National Endowment for the Arts, the society has expanded its resources considerably, constantly finding new ways to make film accessible. It now funds Texan filmmakers through its AFS Grants program, educates students through the afterschool program AFS Film Club, and trains filmmakers in the organization’s 20-acre production facility Austin Studios.

Part of why Linklater puts so much effort into these programs is because he empathizes with the plight of independent filmmakers. “Aspiring filmmakers can use all the help they

can get,” Linklater said. “People see a little film and go, ‘Oh, you know, that was easy.’ No—that’s the hardest kind because you’re the ringmaster. You’re having to coerce everyone, charm everyone, outwork everyone, somehow instill belief in people.”

The Austin Film Society therefore serves as a way to keep Linklater connected to his roots and support a new generation of filmmakers. “I feel I can be more proud of that than I can of my own work in some ways,” he said.

Whether Linklater is experimenting with a new cinematic technique or creating a new resource for aspiring filmmakers, he is constantly seeking a new way to tell stories in film. He’s not just bringing stories to film; he’s changing the story of film itself. 🎬

Teddy Wansink was an intern in the NEA Office of Public Affairs in summer 2018



◀ Austin Film Society’s lead film programmer Lars Nilsen interviewing Richard Linklater. Photo by Charles Ramírez Berg

Investing in Creativity

Meow Wolf's New Vision of Artistic Space

BY REBECCA SUTTON

All photos courtesy of Meow Wolf

Performers in *House of Eternal Return* in Santa Fe, New Mexico, the first permanent installation by Meow Wolf.



all it installation art. Call it immersive storytelling. Call it theater, or theme park, or just straight-up weird. Meow Wolf can accurately be described in innumerable ways while still remaining totally indescribable. With its psychedelic, pop art, interactive environment, no single term can fully capture the Meow Wolf experience.

Meow Wolf was founded in 2008 as an art collective in Santa Fe, New Mexico, to create space in the city's art scene for the group's extravagant ideas. "We wanted to do crazy things," said Caitly Kennedy, a Meow Wolf cofounder and one of the group's four art directors. "We wanted to do things that galleries couldn't sell. We wanted the self-determination of doing our own thing without having to ask for permission."

Initially, Meow Wolf created temporary installations, including *Nucleotide* (2013), which re-envisioned a coral reef as a world of sparkle and sound; *OmegaMart* (2012), a realistic supermarket that stocked products generated by artists and local students, including "Giant Sponge in a Box for Cows that Have Been Abducted"; and *The Due Return* (2011), which Meow Wolf describes as "an inter-dimensional

ship settled on an alien landscape." It was the \$200,000 *The Due Return* generated in ticket sales that made Meow Wolf realize there was potential to create something bigger, something bolder, something permanent.

House of Eternal Return opened in 2016 in an old bowling alley owned by *Game of Thrones* author George R.R. Martin, who purchased the space specifically for Meow Wolf. The premise for the 20,000-square-foot installation is the mysterious disappearance of the fictional Selig family, all of whom have vanished after conducting a secret experiment in their home. Visitors are invited to explore their house, rifle through their diaries, open their cupboards, and snoop through their medicine cabinets. As visitors dig deeper, they'll discover portals into other dimensions, which is where, in the words of Lewis Carroll, things become "curiouser and curiouser." Each space offers its own wild expedition for the senses, from dayglo cityscapes to iridescent tree forts to comic art that has seemingly exploded onto every inch of wall. There is no map for visitors to follow, and nothing they can't touch or explore as they try to piece together what happened to the Seligs. *House of Eternal Return* is not just an exhibition; it is an entirely new model for what the arts can be.

▼ *House of Eternal Return* initially appears to be a typical Victorian home.





▲ *Green Coyote* by Don Kennell welcomes visitors to Meow Wolf's *House of Eternal Return*, which is installed inside an old bowling alley.

Since it opened, *House of Eternal Return* has become nothing short of an artistic phenomenon. It has welcomed more than a million visitors, generating millions and millions in ticket sales. In a city with no shortage of art museums and galleries, it's consistently listed as one of Santa Fe's must-see attractions by outlets ranging from CNN Travel to SantaFe.Com. More than 200 artists now form Meow Wolf's ranks, all of whom receive salaries and benefits, including healthcare. The group's mind-bending success has led to major expansion efforts: Meow Wolf will open an entirely new exhibit in Las Vegas in 2019, and a third location in Denver in 2020, both of which will be roughly triple the size of the

Santa Fe experience. In each city, hundreds of artists will be employed to create the fantastical realms that are Meow Wolf's hallmark.

Meow Wolf CEO and cofounder Vince Kadlubek said part of the reason he thinks Meow Wolf strikes a chord is because it appeals to one of the most basic human drives: curiosity. "We create an opportunity for people to be explorers, and to be scientists," he said. "When you come inside of a Meow Wolf exhibition, you're finding clues, you're discovering rooms, you're venturing into unknown spaces. That excites a part of humans that we have long forgot about. At the heart of it, we're all scientists."

The collective makes sure that the deeper one wants to dig, the more one will find, or "that your interest is rewarded every time," said Kennedy, who as art director, is partially responsible for guiding artists to develop multiple layers of engagement. For instance, she said, you might first marvel at a room in *House of Eternal Return*. But then you might notice an interesting texture on a wall. Upon closer inspection, the texture reveals itself to be a group of mice, one of which has a tail that can be pulled to uncover a diorama. "We take the illusion as far as we can to satisfy our own vision of it," she said.

This level of detail "allows [visitors] into the art in a way that they end up feeling a certain ownership of discovery that is, I think, very akin to making the thing," said Kennedy. "We love the idea of being able to let not just more and more artists into the creative experience, but more

► The kitchen of *House of Eternal Return*, which is home to the fictional Selig family.



and more viewers into as similar an experience as possible, and to open their ideas of what they could do.”

This is essentially what Kadlubek has sought to make the heart of the whole Meow Wolf experience. “We’re trying to bring that creative spark back to the general population, back to families and kids and people that don’t feel comfortable inside of museums or galleries or at art fairs or festivals,” he said. “[We’re trying to] bring that creativity to them in a way that is new and accessible and welcoming, and within a context that can be understood and enjoyed.”

Meow Wolf’s quest to revitalize our creative selves extends beyond its exhibitions. The group runs the David Loughridge Learning Center, which hosts artmaking workshops and open studio time for youth, as well as special events for teens, adults, and people with disabilities and addiction. Meow Wolf also frequently collaborates with local schools, working with students to create artwork for their school building or sometimes even for Meow Wolf exhibitions. The organization also awarded \$500,000 to local charities and schools in 2017, hosted 8,000 students during field trips, and gave out 2,000 free passes to community members unable to pay the *House of Eternal Return*’s entry fee.

But just as visionary as Meow Wolf’s maximalist approach to creativity is its commitment to changing attitudes and practices when it comes to art and economics. Kadlubek hopes that Meow Wolf’s success will resonate with policymakers and business owners, and “awaken them to the actual dollar value of creativity,” he said. “Creativity’s not something that we can feel sorry for. It’s something that we should invest in because it’s going to return on that investment.”

Part of this investment is making sure that artists have the resources needed to financially survive. In addition to providing all Meow Wolf members with a living wage, the *House of Eternal Return*’s gift shop sells work by 60 different local artists, who receive 60 percent of the profits. And in 2017, Meow Wolf awarded \$250,000 in grants to DIY art groups—groups that “feel left out of the established fabric of arts and culture,” said Kadlubek, or that might not qualify for funding from more traditional grantmaking organizations. “These are the spaces where a real, vibrant, incredibly important creative culture is being birthed in many cities across the country,” Kadlubek said. “That’s why we started the DIY fund: we didn’t see anybody else coming out and supporting these community spaces.”



At the same time, Kadlubek hopes that Meow Wolf will help disprove the notion held by some artists that capitalism is a dirty word, or that making art with mass market appeal somehow cheapens the work. It’s an idea that didn’t come naturally to him or other Meow Wolf members: the collective at one point discussed burning the profits from *The Due Return* in a bonfire. But both he and Kennedy are hoping to pave a path forward where the art and business worlds can be bridged more frequently and with less angst. “The starving artist is romanticized, both by society and by artists,” said Kennedy, often to the detriment of both. “If you do find a way to support yourself financially and have health insurance, that doesn’t necessitate that you are leaving behind your culture, or that you’re stepping out of the artist’s lifestyle.”

Eventually, Kadlubek hopes that Meow Wolf’s efforts, from their installations to their business model, will help spark a cultural shift, one where celebrating creativity and imagination is simply matter-of-course. “More buildings should have more murals. More businesses should be thinking about how they’re creatively expressing themselves. And more artists should be hired on to your team because artists are valuable,” Kadlubek said. Although Meow Wolf has come a long way since its early days, Kadlubek said it has held tight to its original mission: “It’s [about] bringing forth more creativity into the world. More color, more imagination, more expression.” 🌈

▲ Meow Wolf’s *House of Eternal Return*.



MUSIC AND THE MIND

The Music-Science Handshake of Sound Health

BY VICTORIA HUTTER AND DON BALL

▲ National Institutes of Health Director Dr. Francis Collins performs with opera singer Renée Fleming during a Sound Health: Music and Mind performance in 2017. Photo courtesy of NIH

Music has always been seen as having healing properties—from ancient societies using music to unite communities and keep them healthy to singing as a way to soothe colicky babies. Much of the literature on the subject, however, has been anecdotal rather than scientifically based. But a new initiative called Sound Health hopes to change that.

A partnership of the John F. Kennedy Center for the Performing Arts and the National Institutes of Health (NIH) in association with the National Endowment for the Arts, Sound Health aims to explore the impact of music on health, science, and education, and how the brain processes music. A unique collaboration between a government scientific research agency and an arts presenting organization, Sound Health brings musicians and scientists

together to present and demonstrate research results during an annual two-day event at the Kennedy Center.

The initiative came to being through a fortuitous 2015 meeting between Renée Fleming, internationally celebrated opera singer and artistic advisor at large for the Kennedy Center, and Dr. Francis Collins, director of the NIH. As Collins noted to NEA's Director of Research and Analysis Sunil Iyengar in a 2017 interview, the goal of the initiative was "to say, 'What could we do as the world's largest supporter of biomedical research, to try to provide some kind of path forward that would further increase the scientific credibility and the potential power of music therapy?'"

"All these anecdotal stories about our music and what it does—science has to validate it," noted the legendary percussionist Mickey Hart, multiple Grammy Award winner and former member of the Grateful Dead, in a recent NEA interview. He was involved in the Sound Health initiative in 2018, participating in a workshop at the Kennedy Center on how rhythm impacts language and healing with fellow musician Zakir Hussain, an NEA National Heritage Fellow, and Dr. Nina Kraus, a professor of neurobiology and otolaryngology at Northwestern University. "That's why we're here, because this is a music-science handshake."

"The medical profession, as in any profession that deals with academics, needs proofs," concurred Hussain, a master musician on the Indian percussion instrument tabla. "In ancient worlds like India or Africa, they already know certain things that help center us, keep us healthy, and in some ways heal us. And [musicians] talk about it in our own way, but that's not the language of academia. It's like taking a theorem and figuring out how to prove it, so it will eventually legitimize the information that already exists."

For both Hussain and Hart, the increasing interest from scientists into the physical workings of music and rhythm reflects their own longtime musings on how the brain and music interact.

Music, Hart said, "goes to the brain, the master clock, and now we're able to read the master clock. We're able to see what neurons are firing when certain rhythms are played, so now we're able to actually see the super organism, which



▲ Dr. Nina Kraus at Sound Health's Say It With Rhythm! event at the Kennedy Center in September 2018. Photo by Jati Lindsay

is the brain." Hart has worked extensively with scientists over the years to delve into how music affects people physiologically. He has collaborated with Nobel Prize-winning astrophysicist George Smoot on how to convert light wave traces from the Big Bang into sound waves to make music, and with leading neuroscientist Dr. Adam Gazzaley at the University of California, San Francisco to better understand how specific rhythms can stimulate areas of damaged brains.

During the Sound Health workshop that Hart and Hussain participated in with Kraus, they looked at the implications of rhythm on language. "There is rhythm in every kind of music," Kraus noted during the workshop, "but

▼ Mickey Hart performs at a free Sound Health: Music and the Mind event on the Kennedy Center's Millennium Stage. Photo by Jati Lindsay





▲ Zakir Hussain at Sound Health's Say It With Rhythm! event. Photo by Jati Lindsay

▼ Renée Fleming (center), one of the co-founders of Sound Health with Zakir Hussain (left) and Mickey Hart at the Say It With Rhythm! event. Photo by Jati Lindsay

there is also rhythm in speech.” By tracking how the brain reacts to rhythm, scientists can better understand how the brain reacts to speech and language development. In a study of low-income children, Kraus said, “we found the kids who were engaged in steady, continuous music-making were the kids who maintained their age-normed reading scores. There’s an important connection here: music therapy is another way of supporting language development.”

Hussain noted a similar connection between music and rhythm and learning during his NEA interview. “In India when you’re a child, there’s

music in the house, and you’re taught songs and rhythms, so the stimulation is amazing. And you see all the Indian kids in this part of the world winning spelling bee contests and creating incredible programs for the computers and being scientists and doctors, and it’s awesome.”

A better understanding of how music affects the brain could lead not just to better education outcomes, but to more effective use of music therapy. This is an area that the National Endowment for the Arts has increasingly focused on in recent years. For example, the NEA convenes the Interagency Task Force on the Arts and Human Development, which brings together 19 federal agencies and departments (including NIH) to explore research gaps and opportunities for understanding how the arts can improve health outcomes throughout the lifespan. In collaboration with the Departments of Defense and Veterans Affairs and state art agencies, the NEA also developed the initiative Creative Forces: Military Healing Arts Network, which incorporates creative arts therapy into medical treatment for military personnel coping with traumatic psychological health conditions, as well as their families and caregivers.

When Fleming and Collins were first discussing what they could do together, they settled on what Collins described as “the growing field of music therapy,” which has proven beneficial to a wide variety of health issues, ranging from autism to Alzheimer’s disease. “[Medicine and music] have a lot to say to each other,” he noted, though they “haven’t necessarily been in the same room as maybe now they can be.”

Fleming, who has participated in Sound Health events at the Kennedy Center in 2017 and 2018, is hopeful that the project will continue to grow and provide the necessary research to better understand how music can improve people’s health. In a 2017 podcast interview with the NEA, she stated, “One of the goals of this whole collaboration is to further music therapy as a field, as a profession, and it has to do with the science.” She imagines a day when we might be able to explain why someone who might be unreachable through verbal or physical cues sometimes comes alive when hearing a familiar song. “It’s going to be a while before science connects those two dots in a meaningful way,” she said. “But in the meantime, we see that it works.”





Igniting the Imagination

Using Creativity to Overcome the Opportunity Gap with Big Thought

BY PAULETTE BEETE

All photos by Stephanie Drenka, Big Thought

According to Byron Sanders, president and CEO of the education nonprofit Big Thought, creativity is not just an important workforce skill; it's *the* most important workforce skill of the 21st-century. For proof, he noted that the U.S. Department of Labor has reported that it is most

likely that the jobs that will be available over the next five to ten years don't even exist yet. In other words, creativity and imagination are not only key characteristics of productive members of the future workforce, but are necessary tools for shaping what exactly that work will be.

Creativity, however, is a skill that must be nurtured. And while Sanders believes we're

▲ Dallas City of Learning, a citywide initiative to stem summer learning loss, connects students and families to free and low-cost summer opportunities through a digital catalogue, community partnerships, and series of family-friendly events.

all born with “an inherent ability to create, to produce, to do extraordinary things,” it’s also true that we don’t all have access to the resources necessary to achieve our highest creative potential. That disparity between access and achievement is known as the opportunity gap. Big Thought wants to close the opportunity gap by providing gateways for all children—particularly those in low-income communities of color where the opportunity gap is most dire—to participate in arts-based activities that will cultivate their curiosity, their ability to work collaboratively, and, most importantly, their creativity.

Sanders believes that arts learning is the best way to foster creativity because it teaches students how to be open-ended thinkers. “The reason why art is so important is because you’re starting at a place and you don’t know what the creation is going to be at the end of it,” he said. “[When students engage with] the arts, they use the experimental method, but without any guarantee, so that builds a different framing of their work.”

Roughly 150,000 students in the Dallas metro area each year participate in an arts activity delivered or facilitated by Big Thought, which partners with school districts, the county juvenile system, other city agencies, and nonprofits to deliver after-school and summer programming.

▼ Big Thought’s youth development programs offer young adults outlets for creativity and places to express the power of their voices.

One of their projects, Creative Solutions, is a partnership among Big Thought, the Dallas County Juvenile Department, and Southern Methodist University (SMU) that works with young offenders on probation. Over the course of seven weeks, participants—who are referred to as working artists—follow one of three tracks: performing arts, visual arts, or digital arts. They are paid a stipend for their time, and at the end of the program, they are expected to deliver a product, whether that’s a series of visual artworks, a performance, or short video interstitials that are shown as part of the performance. Students learn skills such as set design, carpentry, and digital photography and editing, while also working on their emotional intelligence skills, such as empathy, motivation, and communication.

Along with directly aligning creativity with workforce development, this focus on emotional intelligence is another aspect of Big Thought’s unique approach to arts education.

“The core skill sets that macroeconomists, CEOs, futurists are all saying young people need to be learning today are two key things. One, how to channel creativity toward productivity. And two, how to build complex human relationships,” said Sanders.

To the Big Thought way of thinking, for an arts education program to be truly transformative, it not only has to stimulate creativity, but it must strengthen participants’ social and emotional well-being. This provides a foundation from which to foster so-called “soft skills” such as empathy, which are crucial in building relationships with colleagues, consumers, and other stakeholders.

“In teaching social and emotional well-being, what we’re doing is we’re laying the foundation for people who can step into a workplace and understand how humans work, and then work together in teams and have more productive economies and things like that,” Sanders said.

Big Thought understands that raising a generation of creative workers is a big task. For this reason, through their Dallas City of Learning (DCL) initiative, Big Thought extends its reach through a network of more than 500 partners all engaged in the work of providing summertime creative experiences for local youth. The project aims to stem the “summer slide,” which Sanders explained as “this whole notion that kids from low-income communities regress three months over the summer. If that’s compounded, that’s not very good over 13 years [of elementary and secondary education].”



Supported by a National Endowment for the Arts Collective Impact grant—which funds longer-term, large-scale projects that use a collective, systemic approach to provide arts education to students—DCL is a digital interface that allows users to simply type in their zip code to find a range of free and low-cost creative programs offered nearby. They can also search the platform by broader groupings such as designing and making, performance, and storytelling, among others. The goal is that through a mix of camps and other activities, students will be able to spend at least 30 hours of their summer break working out their creativity muscles. Together, these varied experiences will equip participants with a portfolio of skills that will serve them as they pursue higher education and employment opportunities down the line.

Offered by groups ranging from the Dallas Public Library to the Girl Scouts to the Dallas Holocaust Museum, and of course, Big Thought itself, the activities offered through DCL cover all aspects of creativity. For example, students can register for Big Thought’s regular field trips to the Dallas Museum of Art, which expose them to different forms of artistic expression while encouraging them to embrace that expression as an everyday part of their lives. Students can also explore areas such as ethics, the environment, and coding, all from a creative and arts-based point of view.

Big Thought is already seeing results from DCL. According to a study conducted by the SMU Center of Research and Evaluation, students demonstrated higher GPAs after spending a summer participating in DCL activities. Sanders characterized the findings as “an early indicator proving that the hypothesis is true. If you can provide at least 30 hours of high-quality summer learning, then young people will be able to start in an academically stronger place, particularly those who come from low-income communities.”

To add even more value to DCL, Big Thought is working directly with corporate partners to pin down exactly what creative skills make a candidate a good fit for a particular company, whether for an internship or a full-time position. While this iteration is still in development, ideally students will soon be able to use DCL not only to enrich their summertime learning, but also to plot out specific pathways of skill-building experiences that can lead to careers in sectors such as finance, engineering, and technology.

Sanders’ hope for the DCL 2.0 is that, “[Students will] now have a digital portfolio



that allows them to get access to an internship, a co-op, or potentially even a career right off the bat. It’s not just, ‘I could find a really cool experience.’ It’s ‘I’m finding a cool experience and it’s on a very curated and dynamic pathway toward something for me to have a really high and exciting expectation for.’”

While it is gratifying to see young people in the Dallas community benefit from its programs, Sanders is hopeful that Big Thought can make an impact far beyond the local area. The goal is to build awareness around the root causes and policy issues surrounding the opportunity gap. One way the organization hopes to accomplish this goal is through a series of policy conversations “with people who have the ability to affect what matters to school districts,” said Sanders. He also wants to work with principals and teachers to help them understand the importance of social and emotional learning and its link to creativity, so they can be encouraged to embed the learning of those skills into the school day.

“If we can embed these concepts, methodologies, pedagogy in the institution of school itself, or in the juvenile detention system, then we can plant the seed for a legacy that lives and grows much further and faster than what Big Thought itself as an organization can do,” he said. “That’s our big dream.”

▲ Learning, creativity, and fun come together in Big Thought after-school programs like Thriving Minds, which offers opportunities that reinforce academic content and instill crucial social and emotional learning skills.



Natasha Diamond Walker, Xin Ying, and Lloyd Knight use virtual reality as they perform in front of a green screen as part of the Martha Graham Dance Company's collaboration with Google. Photo by M.J. Newman

How does an artist who emerged in the 1920s remain a guiding light today? How does a vision for American dance, born in the era of vaudeville and silent movies, lead dance into a future of virtual reality and Kinect cameras? The work of modern dance revolutionary Martha Graham offers us a moving case in point of how an artist can speak to her time as well as ours.

Born in 1894, Graham was a student and performer—and later on a teacher—with Denishawn, a dance school and company led

by Ruth St. Denis and Ted Shawn. Their dances combined the showmanship of vaudeville with a visual and spiritual exoticism based on their interpretations of ancient cultures such as Egyptian, Indian, and Aztec. Graham left the organization in 1923 and started her own school three years later. It remains the oldest continuous dance school in the United States.

As Graham developed her revolutionary style of sharp, angular movements fueled by emotion, she sought to create an authentically American form of dance. She has frequently been referred to as the “Picasso of Dance,” a nod to her bold vision and unparalleled influence.

A LEGACY OF INNOVATION

The Martha Graham Dance Company's Embrace of Technology

BY VICTORIA HUTTER

Janet Eilber, the artistic director of the Martha Graham Dance Company since 2005, has continued Graham's pioneering spirit, experimenting with and extending Graham's core collection of works. As part of these efforts, Eilber has embraced technology, making the company as innovative offstage as it is when seen by live audiences.

For example, in an effort to discover new platforms for Graham's technique and dances as well as more ways for audiences to engage those works, the Graham company was the first to webstream rehearsals and to have concert program notes accessible via smartphone.

Since 2011, the company has also worked with Google on different projects, bringing together two visionary companies in their respective fields. In that initial year, Google approached Eilber about their interest in a Google Doodle to celebrate the 117th birthday of Graham's birth. The doodle featured a dancer vaulting through five classic Graham poses, capturing "seven decades of American innovation into 15 seconds," according to the Martha Graham website.

The Graham company partnered again with Google to create the Martha Graham Dance Company's collection on Google Arts and Culture. Organized by former company member

and director of Martha Graham Resources, Oliver Tobin, the collection is the first of a dance company to be featured on the Google Arts and Culture app. Supported by the National Endowment for the Arts, the project transformed digitized films, videos, and photographs into online exhibitions, charting more than 90 years of innovation. Through the project, Eilber wants to remind visitors why Graham was considered radical in her time. “Modern dance is such a young and ephemeral art form that it has no tradition of reflection on its past or its historic influence,” she said.

The exhibitions are also inspiring the dance company to look into new technological approaches to providing education to a new generation of dancers. Initial experiments have taken place with motion capture suits to create virtual reality avatars of the dancers. The ultimate goal is to be able to use that technique to capture a 360-degree virtual reality, allowing students to view the movements from all sides. The dream is to eventually have an education portal that students can use to study dance.

Most recently, Graham’s historic influence extended into the realm of alternate and virtual realities. In May 2018, the Martha Graham Dance Company was invited to participate in a two-week residency with Google technologists, media artist Tyler Henry, and visual artist SoHyun Bae to explore Graham’s work in settings that were significantly infused with technology.

In a May 25, 2018, article in the *New York Times* about the residency, Google’s project lead, M.J. Newman, noted the company’s “forward-thinking mentality” as the reason that Google chose the Graham company. “The Graham Center has always been very eager about being on the cutting edge of technology and looking for what’s new,” he said. “They were the first ones that jumped into my head.”

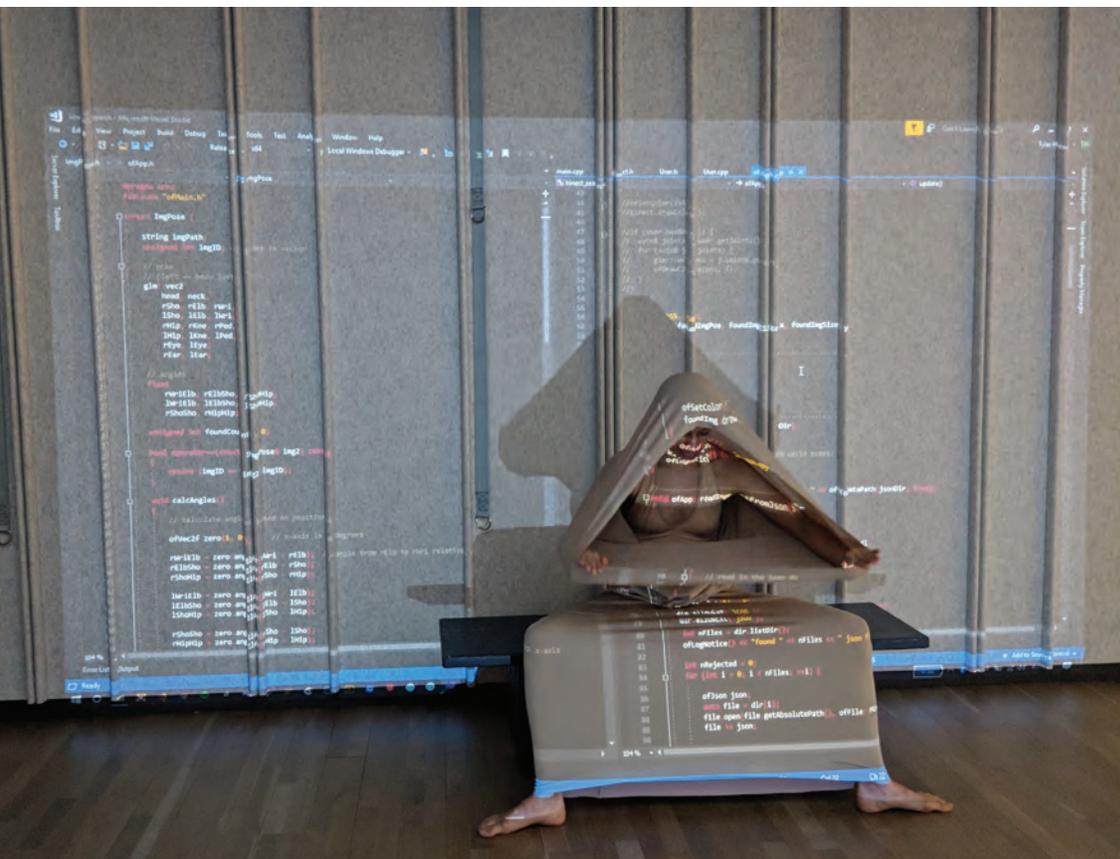
One of the experiments in the residency involved Graham’s iconic work *Lamentation*, a solo dance piece for a woman shrouded inside a tube of pliant fabric that is manipulated in expressions of grief and anguish. The work was performed by Natasha Diamond-Walker in the traditional costume (albeit a nude color rather than the original lavender) that incorporated two layers of technology that extended the visual and emotional impact of the piece. The technologist, Henry, used chronophotography, a technique going back to the Victorian era that captures movement in several frames that can be sequenced for animation or layered within a single image. Through Henry’s use of the technique, Diamond-Walker’s movements left behind diaphanous ripples like flower petals.

Henry also had a Kinect camera, a motion detection device that was programmed with videos of other dancers performing *Lamentation*—including Graham herself—that became part of the real-time performance.

Diamond-Walker’s gestures triggered the data system so that for a few seconds she would be dancing with artists from the past.

Diamond-Walker describes it as a “very supernatural feeling, a little bit ghostly.” She added, “It had a sort of interconnectedness through the generations for me. It was very emotional to actually be performing [*Lamentation*] and seeing other people moving through those same emotions at the same time with you. It was really something I had never experienced before and definitely informed my movement as I was going along.”

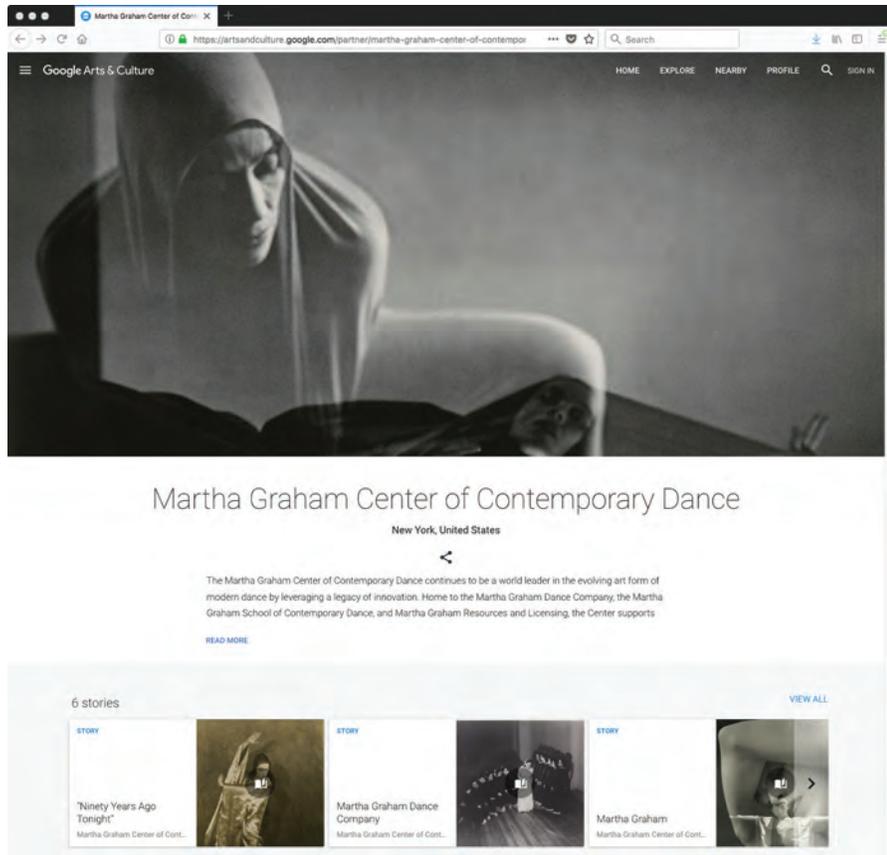
▼ Natasha Diamond-Walker performing Graham’s iconic work *Lamentation*, incorporating two layers of technology as part of the Google artist residency. Photo by M.J. Newman



In another venture in the residency, Diamond-Walker wore virtual reality headgear that had been loaded with a virtual environment called Pelvic Terrain that SoHyun Bae created using Google's Tilt Brush, a virtual reality tool that lets users draw in 3D space. While Diamond-Walker explored the virtual environment with her eyes and body, three other dancers without any gear joined her, taking cues from her to inform their own movements.

Would Martha Graham have approved of these ventures? Diamond-Walker thinks so. "When I think of Martha Graham, I think of her as a very forward-thinking innovator [who might have thought] 'What's next? I created *Lamentation*, it's been around for X amount of years, what can now be done with it aside from putting a picture of it on a T-shirt or a backpack?' So I think that she would have definitely been in support of experimenting and discovering through what I was doing."

Eilber agrees. "The main focus of our work today is to honor Martha's 'appetite for the new'—her legacy of innovation," she said. 🌐



▲ A screen shot of Google Arts and Culture's Martha Graham Collection, supported by the National Endowment for the Arts.

◀ Martha Graham Dance Company member Xin Ying wired for virtual reality improvisation by media artist Tyler Henry. Photo by M.J. Newman

Street Symphony musicians perform Handel's *Messiah* at the Midnight Mission in Los Angeles' Skid Row. Photo by Kat Bawden



In our special online audio features,

we look at the Street Symphony in Los Angeles, which brings music to incarcerated individuals as well as those experiencing homelessness; talk with the founders of the Burning Man festival in Nevada's Black Rock Desert; and examine the innovative organization Sustainable Native Communities Collaborative, which is changing the dialogue around culturally responsive design and architecture in Indian Country.

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