

### What is INNOVATION?

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### **ABOUT THIS ISSUE**

The dictionary defines innovation as "something new or different introduced." This simple definition, however, belies the complexity of the subject. For starters, just how measurably new does a dance style or way of painting or design methodology have to be for it to be considered innovative? Is innovation one of those things where you just know it when you see it? Does there have to be consensus across a discipline? And how exactly is innovation related to creativity? Which one's the chicken, and which one's the egg? Does innovation have any relationship to tradition or collaboration? And if—as the zeitgeist has it—innovation is crucial to our collective future, is it a skill we can even teach the next generation? These are the questions we posed to the diverse roster of artists we spoke to for this issue from the fields of theater, dance, design/architecture, music, filmmaking, visual arts, and graphic arts. Here in their own words are their answers—thought-provoking, challenging, and yes, innovative.

All the interviews in this issue were conducted by Don Ball, Paulette Beete, and Rebecca Gross. Online audio/video interviews on innovation were conducted by Adam Kampe and Josephine Reed and can be found at **arts.gov.** Don't forget to visit our Art Works blog on our website to comment on this issue or to share information on arts in your community.

### ABOUT THE COVER

Cartoonist Josh Neufeld created the cover. He is a Brooklyn-based cartoonist who works primarily in the realm of nonfiction comics. He has written and illustrated A.D.: New Orleans After the Deluge and the Xeric Award-winning graphic travelogue A Few Perfect Hours (and Other Stories from Southeast Asia & Central Europe), and illustrated the New York Times bestseller The Influencing Machine: Brook Gladstone On the Media. He was a longtime artist for Harvey Pekar's American Splendor, and has had his art exhibited in gallery and museum shows in the United States and Europe. Neufeld's views on innovation can be found on page 23.



### **INTERVIEWS**

3 JAWOLE WILLA JO ZOLLAR 16 MAYA LIN

7 JULIE TAYMOR 19 SAM GILLIAM

10 CARL STONE 21 CHRIS MILLER

14 FRED DUST 23 JOSH NEUFELD



a native of Kansas City, Missouri, founded Urban Bush Women (UBW) in 1984 because, as she put it, "I wanted a company [that had] shared values around making work. I really didn't have any definition of what kind of work, but I did know that I wanted to look at the folklore, the religious traditions, and the culture of African Americans and the African Diaspora." Often characterized as a dance company, Zollar's work for UBW is more complex than that, incorporating layers of visual imagery, props, and human-made sounds with dance steps. Zollar, also a tenured professor in dance at Florida State University, has garnered numerous awards, including several NEA choreography fellowships, a Guggenheim Fellowship, and a USA Artists Wynn Fellowship. Urban Bush Women has also received grant support from the NEA, including a fiscal year 2011 grant to support a collaborative work by Zollar and fellow choreographer Nora Chipaumire. Here, in her own words, Zollar discusses her take on innovation and her hopes for the future of contemporary dance.

### The Urban Bush Women's performance of Zollar's Batty Moves. PHOTO BY AYANO HISA

### **INNOVATION IS...**

I think of innovation as trying new things and trying new ideas, building up off of what you know, but always kind of questioning. There are not a whole lot of new ideas, but are there unexpected ways that you might have an idea come to life? I like work that makes me think, and so I'm always interested in new ways to do that.

Sometimes [innovation is] risky and sometimes it's scary. Sometimes it's provocative in ways that people are uncomfortable. And, for me, that's what's exciting because it's making me think about something in ways that I hadn't thought about it before. I



don't have to like it and there may be work that I [decidel I'm not interested in. But that doesn't mean that it's not innovative. So I think that the very nature of it—you don't know what it's going to be—I think that's worrisome to people as opposed to exciting.

### **ON COLLABORATION AND** INNOVATION

There's a man named Keith Sawyer who's written a book *Group Genius*, and he has this quote that I love. He says that, "Collaboration is the secret to breakthrough innovation." And I love that quote because, when you're collaborating with someone who thinks



differently than you, who solves differently than you, I think you both end up going to a growing place where you're both pushed. I know the ways that I can solve things just on my own, but when I've got somebody whose brilliant, creative mind solves it very differently than how I solve it, and they watch me solve things very differently, then I think we grow together. What I see is that collaboration is not compromise. That's collaboration, I think, at its worst. Collaboration is about trust and learning together, where you create an environment where you can both learn from one another and then grow to create this thing that is a dynamic entity based on this new relationship with one another.

### A SHORT LIST OF INNOVATORS

Certainly, Bill T. Jones, you know, because Bill has worked through so many genres. Now, he's becoming the king of Broadway. But he does concert work, he does opera, he's now doing Broadway musical theater, and he constantly innovates in every form that he goes into. He's definitely someone whose work I pay attention to as an innovator. I certainly think of Liz [Lerman] as an innovator in the work that I saw, *Origins*, and in her work with scientists. I [think] that scientists are actually closer to artists. They really get artists, more so than a lot of academics, and so I was really just moved by the work she did with them.

However we tell the narrative of the United States, I think the innovators that are in the arts are the under-told story, because I think the innovation in the arts field that comes out of the United States is really spectacular. I'm going to get on my soapbox, but our government, to me, is missing a crucial opportunity. We're entrepreneurs. We hire people. We create jobs. We build this uniquely American form like jazz that there continues to be innovation in. If I go into the jazz arena for innovation, certainly Jason Moran, who got the MacArthur last year, [is] brilliant. [There's] Vijay Iyer and his musicians. There's just so much innovation. I could talk to you for about 30 hours straight on the people who I think are just doing fantastic work.

### "WE DON'T TIE OUR INNOVATION TO WHAT OTHERS HAVE DONE."

I think that one of the things that we don't do [in dance], and they do this in other fields, is we don't tie our innovation to what others have done. I just went and saw this [artist] recently, and he talked about how he was so moved by the color palette of Gauguin. So he used that color palette to explore a particular idea. You don't hear choreographers saying, "I was so moved by Mark Morris' structure for Mozart that I really wanted to come in the studio and explore that structure and then find out what would be new about it." I think that's a problem, because then our field becomes ahistorical. I'm interested in how we are influenced, that we give ourselves permission to say who we're influenced by. Then that allows our canon to build, and I think it allows audiences to understand something more about us. One of my passions is I would love to be a docent for dance. We in the dance field, we say, "Well, people should just get it." We don't have a catalogue that might give some historical overview of the work, of the artist's work, and where they are in this moment, and what that's informing about this present moment and what the influences are. It's something I'm very passionate about because I think it's a big missing opportunity in our field, and hopefully it will be a place where people begin to really innovate... about how we, in the dance world, particularly the abstract, contemporary world, talk to the world about who we are without feeling like we're dumbing down.

### **NEXT STEPS**

What I'm really interested in right now is something we're calling Project Next Generation. I'm bothered by the fact that if I ask people within the dance world to name five to six choreographers, African-American choreographers with a national reputation, most can't get to six. And that, to me, is troubling. Some of them can't even get beyond four. So we're missing the voice of African-American artists; we're really missing a voice that's a vital part of America.... I want to first have a field convening to figure out why and to do the research to figure out what is [the barrier]. Is it support? Is it that women give up earlier to have families? Is it that some artists are able to find wealth and a lot of artists of color, women of color, are not? Is it that we don't have [a partner that supports us]?

We want to have a convening around it, and then one of the things I want to do is a choreographic lab that really looks at these different ways of making work, again focusing on the voice first and the craft second. The voice and the vision first. What is the innovative, unique thing about a person that can inform their choreographic voice? And then how do we craft that?

> If you look at children and you ask children to choreograph, they don't know any rules. They do the wildest things because they're not thinking about craft.

### WE NEED PERMISSION TO BE **INNOVATIVE**

I think it's about how you can create a container, as I like to call it, where people have permission to allow their vision to emerge. Students need a lot of permission because they have thoughts and feelings that maybe they're different than what they're seeing everyone else do, so they don't give themselves permission to explore what's unique about who they are. So I like to create an environment where there's permission and then, once you have permission, then we can go into the crafting. I think sometimes people go into the crafting first and then people think they... have to follow certain kinds of rules and I think it diminishes their voice and diminishes their innovation. If you look at children and you ask children to choreograph, they don't know any rules. They do the wildest things because they're not thinking about craft. They're following their vision. I think that the craft, if it's taught too early with too many rules, I think it diminishes innovation.

You have to create a scenario where you're asking [participants] to take a risk and, when they fail, you don't go, "All right, you didn't do that right." My background's in theater so I like to use theater games. One lovely thing about theater games is that they're often set up so you're going to make mistakes and you're going to fail so that you learn that it's okay. I like to start off with play. It's just play, but it's play for an ultimate purpose. Play, for me, is the way that people learn. [If] you're playing hopscotch, okay, so you didn't win that game, [but] you don't get your head chopped off, you know? You continue to play.



has consistently defied cultural expectations and tested technological limits, reinventing storytelling in the process. She is perhaps best known for her 1997 Broadway hit The Lion King, which earned her Tony Awards for Direction and Costume Design. Based on the Disney movie, the musical utilizes masks and puppetry, an art form Taymor studied while living in Indonesia and Japan as a young woman. Her 1996 multimedia off-Broadway production, Juan Darién: A Carnival Mass, earned two Obie Awards, while early stage works such as The Tempest, Liberty's Taken, and Transposed Heads were recognized with a 1991 MacArthur Fellowship. Taymor has also brought her imaginative touch to other media. She has directed operas such as The Magic Flute and Grendel (which she created with the help of a 1988 National Endowment for the Arts grant), while her filmography includes Titus (1999), Frida (2002)—which won Oscars for Best Makeup and Best Original Score—Across the Universe (2007), based on music by the Beatles, and The Tempest (2010). We spoke with Taymor by phone to hear her views on artistic innovation, and how it has shaped her career.

### **DEFINING INNOVATION**

Innovation is using your imagination to go to places that people haven't visited before. It's really taking something that might be familiar and then transforming it. A lot of it has to do with transformation and creating a new taste, a new feel, a new experience. I love to blend forms, so my cinema is very theatrical, my theater is very cinematic. I utilize a lot of different mediums as I move from theater to opera to film. I'm constantly experimenting with both high and low technology.

Innovation isn't something I seek out. I look at the story I want to tell, and I say, "What's the best way to tell that story?" Often you're moved by the medium itself, by the way [the story] is being told. Especially in theater, the art of how you tell a story is often as meaningful to the audience and as moving to the audience as the story itself. So it's a balancing act where the technology or the physicality or the art of it can possibly supersede the storytelling. But the craft of directing is to make that balance.

### ON CULTURAL INSPIRATION

I've always traveled. I went to Sri Lanka when I was 15, and lived with a family there and traveled through India. Elliot [Goldenthal] and I spent time in Mexico when we were working on Juan Darién. I'm doing a piece in Brazil, so I've been to Rio.... Other people's cultures inspire me tremendously. Being open to what I see and hear and smell and eat, and keeping my senses wide open to all different forms—it's how I am inspired.

When I lived in Indonesia for four years, I would look at traditional Javanese shadow puppetry and how they were using oil lamps to light the leather shadow puppets. I watched as the new puppeteers, dalangs, were changing to electricity because of convenience. That may have been innovative for those artists, but as an outsider I felt that something was lost. So my first theater piece, *The Way of Snow*, moves from leather shadow puppets and oil lamps into an electric light bulb lighting plexiglass, high-colored puppets. The story was about modernization, and the technique I used showed what gets lost.

There's something about wood and leather and fabric and silk and shadows and fire that are beautiful to feel and see. Sometimes, technology in its packaging is cheap-looking, and it's not organic in any way. All of our computers and iPhones and iPads and tele-

visions are not particularly aesthetically pleasing, but the content and the creativity that comes across in what people create is mind-blowing. So you gain that immediacy and extraordinary digital effects. On the other hand, you lose a kind of humanity. I don't want to lose all of the extraordinary benefits and beauties you get from things that were created thousands of years ago.

I'm always trying to create something new. Not just [with] technology, but in the story. I don't really think people need to see something they already know before they came to the show. If I go to the theater, I want to have a new experience. Even if it's a story I know, I want it to be told in a way that I never expected. I'm always trying to take people to places they didn't even know they wanted to go. Sometimes that can be very difficult when you're in a commercial arena, because people want to make sure that the audience is happy right away. But to break ground and be innovative takes time and it takes patience, and it really is work. The audience may at first not know what they think. But over time, it does pay off. "The bigger the risk, the bigger the payoff" is a very good motto in that world. If people don't take risks and we don't innovate in how we tell stories, whether it's to children or adults, then we're not progressing as humans and we're not progressing as artists.

The first theater artists were shamans, which are doctors of the soul, of the spirit. That's where the origin for theater came from. They were there to understand loss, birth, death, illness, and to take people through the passages of their life. That is something that I hold onto forever: what's it all for, where did it come from, what is its major function? The fun part is how do we tell it in a way that will reinvigorate the story or inspire people to look at that great Shakespeare play from a different point of view?

### AN ENVIRONMENT FOR **INNOVATION**

I don't think you can teach [innovation]. I think you can support it and encourage it. But it really requires the artist or the individual to have the desire to go out on a limb and take risks and be exposed and do things that aren't necessarily safe in artistic terms. You've got to be willing to challenge yourself and others. So the environment for innovation is more critical than anything. I think that you can say, "You are free to go wherever your imagination can take you within the limitations of these means, with what we give you or what you have." But you can make so much: limitation is freedom. You have to encourage people to feel that within those limitations, there are tremendously different directions that you can go.

### **TESTING LIMITS IN THE PUBLIC EYE**

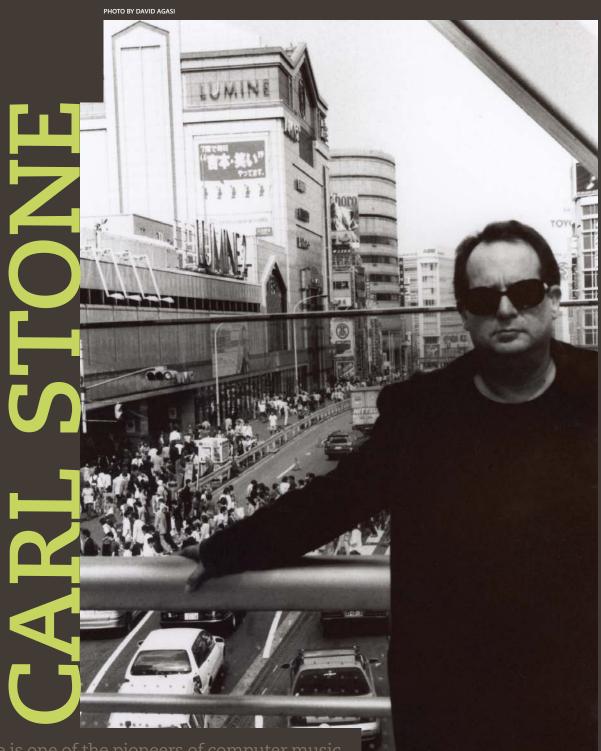
We are so commercially minded that when we think "failure," usually it's [in] box office [terms]. I received the Susan B. Anthony "Failure Is Impossible" Award recently up at the 360|365 Film Festival [in Rochester, New York]. What it meant was that in her lifetime, Susan B. Anthony tried to achieve the right of women to vote. She never saw it in her lifetime. So someone's failure to make one thing work may be an incredible success further down the line.

It's very tough, especially now, for theater people to be in front of everybody with blogging, and the immediate response that people have without thought, without letting things percolate or develop. It's going to be very tough for people to be innovative. It's going to be worse than it ever has been. For instance, when we did *Lion King* in Minneapolis, we broke down the first week. We couldn't do thorough run-throughs, and we had to write new scenes. But nobody knew about it except for the audience that was there that night. We're in a different time.

I think it's critical that people keep a certain amount of direction and focus during that [online] bombardment. Otherwise, you could fall apart. People are going to need tremendous support—all kinds of artists—not to fall prey to the outside pressure. That's one of the hardest things in the performing arts, and more difficult now for everybody.

The Lincoln Center Festival 2006 production of *Grendel*, composed by Elliot Goldenthal with libretto by director Julie Taymor and J.D. McClatchy, based on John Gardner's 1971 novel. PHOTO BY STEPHANIE BERGER, COURTESY OF LINCOLN CENTER





known for his sampling and manipulation of both recorded and live music. Born in Los Angeles, he studied composition at the California Institute of the Arts with Morton Subotnick and James Tenney. He has been a composer of electro-acoustic music since 1972, performing live with his computer as his instrument since 1986. He has received grants from the Rockefeller Foundation, the Foundation for Performance Arts, and the National Endowment for the Arts, and was commissioned to compose a work for the 1984 Olympic Arts Festival in Los Angeles. He divides his time between California and Japan, where he is on the faculty of Chukyo University. We talked by Skype with Stone several days after his performances at the Getty Center in Los Angeles as part of the Pacific Standard Time exhibition series.

### WHAT IS INNOVATION

I guess innovation to me is the development or the creation of either techniques or processes or technologies that somehow move artists or performers or audiences forward. I know some people say innovation should be sort of large and earthshaking; I believe that innovation can be incremental.

I think that everything that I've done, in the broad scheme of things, might incrementally push things forward. But at the same time, I really can't take credit for anything that I've done as being the only person, or even the first person, to do it. I found out—especially when I was in my formative years and really thinking about new approaches and new strategies for composing and for performing—that basically everything I had done was being done, or had been done, by an elder or by a colleague on another coast.

I'd like to think of myself as forward-looking, and I'd like to think that I've done my part in moving the aesthetic forward. But I can't honestly claim to be a true innovator in the way that some other people have, like John Cage. He caused us to challenge the fundamentals of what is music through his approach to breaking down the barrier between performer and musician and composer; the barrier between performer and audience; and also very concretely in his development of the prepared piano. Which is a brilliant innovation I think, because it allowed one piano to then serve as an entire percussion orchestra.

### THE MUSIC I MAKE

I try to reach out amongst many different genres; rock or traditional music from numerous cultures around the world; or from classical music or from pop or wherever...and what kind of music that becomes is something that I to this day cannot tell you. I mean, it's a big problem for record stores, or even for iTunes or Amazon, to come up with a category for what I do. It's not exactly classical music; it's not classical electronic music like you would find in Europe. It's not improvised music as it's defined. It's not jazz, it's not rock. What is it? I don't know.

My basic technique is what's come to be known as sampling. That's where found or selected musical materials serve as a compositional starting point for what I do. I perform most of my music myself, using a laptop, and I do it in real time. I use improvisation, but usually within a kind of overall composed structure, where I fill in the details in an improvisational way. I use repetition a fair amount, and I often limit my musical materials. This has caused me to be what I consider to be kind of miscategorized as a minimalist composer.

I'm interested in technology. I mean, I'm interested in technology as an inevitability of my process; it's not its raison d'être. It's just something that I kind of have to do in order to make the music that I want. And I want people to forget that I'm using a computer. I'd like people, when they either listen to a recording or go to a concert, to at some point just stop thinking about the process that's being used, the technical process, and listen to it simply as music qua music.

I use recorded sounds, very often music, as a starting point. And I'm interested in radical transformation. I especially work with time, and also with the spectra of sound. I'm interested in mathematics, and I'm interested in games; structures like palindromes and canons very often show up in my work.

[For] my signature pieces, I did become almost obsessed with some piece of music, or just some fragment of a piece of music, and then develop a composition around that, usually as a way to kind of explore what's going on in the music almost at the molecular level. I will delve in and find some process that allows me to explore the inner workings or the inner molecular dynamics of a sound or of a piece of music.

But that's not always the case; sometimes I do it the opposite way. I'll be programming and have sort of an idea of a process, an abstract idea of a process, and I'll build it in software, and then I'll plug music in and see what the results are. So in that case, it's kind of the complementary opposite where the musical material itself is not as important as what the process is; as opposed to pieces of mine where the music is really what it's about, and the process is a way of exploring it. I work both ways comfortably.

> I'd like people, when they either listen to a recording or go to a concert, to at some point just stop thinking about the process that's being used, the technical process, and listen to it simply as music qua music.



Pearl Alexander, Carl Stone, Makiko Sakurai, and Hiromichi Sakamoto performing Stone's composition "Darda," a "digital prayer" for the victims of the 2011 earthquake in Japan, performed in Tokyo in May 2011. PHOTO BY MORGAN FISHER

### **COLLABORATION**

The concert that I did last Saturday night [at the Getty Center] had pieces that involved other performers. And in one case, the piece "Hoang Yen," which Gloria Cheng performed, she had a score that I wrote for her. And I'd take her performance in real time and I'd process it. And so the piece developed slowly. She doesn't really change that much what she's playing based on what she hears. She's following a score.

Another piece, "A Te Geuele," which I did with the *pipa* player Min Xiao-Fen, that's virtually improvised. We had a kind of graphic score, and we agreed how we would start and how we would end, and a certain

couple of points in the middle. But all the other details were completely open; and we're listening to each other and reacting to each other. But again, I am sort of capturing her sound. I'm cutting it up. I'm repeating it. I'm moving it around in space. I'm processing it: radically at times and subtly at other times.

It's only been in the last ten years, since I moved to Japan, oddly enough, that I started really improvising and developing my chops, to use a jazz musician's term, as an improviser. Before that I would improvise, in the sense that I would write these pieces and then I would fill in the details as I performed them. But 99 percent of them were solo works or works for other artists, like a dancer or choreographer or whatever.



But in the last ten years I've done a lot of collaboration, real-time collaborations, with other musicians. We improvise together, like a jazz unit. The thing that's sort of maybe a little bit unique is I'm usually sampling them as they perform.

### **FELLOW TRAVELERS**

I think [the tie between my sampling and hip-hop] developed out of a zeitgeist, and not because I was listening to early hip-hop; and certainly I don't think any of those early hip-hop guys were listening to me. I've been pretty much under the radar in terms of popular culture. It was a zeitgeist that was enabled by the technology of the LP record, first of all, and the

CD recordings, computers...a kind of post-modernist aesthetic where materials from the arts themselves were used as functional stepping stones and building blocks for new works of art. It goes back to sort of the early hip-hop artists like Robert Rauschenberg or Andy Warhol, in a sense. They were hip-hop artists too because they took signifiers from popular culture, and they made something new from it.

I think of artists in sort of similar sonic territory—thinking broadly, and not just focusing on one aspect of my style—I feel kindred with an artist like Otomo Yoshihide and some of his work; maybe not so much what he's doing now but what he was doing back in the '90s. There's a Bay Area artist by the name of Wobbly, and a British artist who goes under the moniker of People Like Us. [And there's] Ikeda Ryoji, unsung father of glitch music, because he took sounds that were the detritus of digital music—all the errors, the clicks, the pops, the errors that exist in digital recording technology—and he turned them into music.

My teacher, Morton Subotnick, would be another person who I consider to be an innovator, even today. He's well into his 70s, but pioneering new interfaces for performance. He was doing that back in the '60s, with new approaches to live electronic music, and especially using electronics as a way of integrating with a live instrumental performance. Luc Ferrari, because of what he did bringing the world soundscape. He adopted some of the ideas from R. Murray Schafer, and has caused us to look at the soundscape of the world through his use of field recordings in composition and music making.

And then, he's not maybe always thought of as an artist, he's a programmer, and that would be Tim Berners-Lee, who is the chap who basically developed hypertext. This is an incredibly important development not only in networking but communication technology; and I think ultimately in artistic communication as well. That concept, and what he enabled through that, has been true innovation.

To hear some of Carl Stone's music, scan the QR code to the right.



# Fred Dust

As a young art history major and practicing artist, Fred Dust probably never imagined a future in which he'd be leading something called "Systems at Scale." But that's exactly what he does as a partner at groundbreaking design firm IDEO. Dust has done everything from helping the American Red Cross redesign its donation experience to collaborating with staff and patients at the Mayo Clinic to re-structure their service models. Another recent project is helping design the newly authorized Consumer Financial Protection Bureau from A–Z, including its branding, culture, and user experience. In his own words, here's Dust on the importance of constraints, collaborations, and perspectives.

PHOTO COURTESY OF IDEO

### **INNOVATION AND DESIGN**

One of the reasons that I moved from art into the world of design was because...I basically felt like I wanted some rules, [a way to] think about creativity that put constraints around the ways you could speak, and made you make sure that you were engaging with the public that you were dealing with. What's funny is that when I was an artist I often got most of my inspiration from design. And now that I'm a designer I get most of my inspiration from art.

[I went into architecture thinking I] would use architecture to come back and think about how you might practice in the world of arts. What I got really engaged with though was the idea of architecture and the fact that—if done well and if you paid close attention to the people you were designing for—it actually could change people's lives and do it in a profound and dayto-day way. I practiced architecture for a short period, [and then] went to IDEO mostly because it felt like you could take that idea of design and stretch it even further. The work that I do now is focused more on design and how it actually influences and impacts large-scale systems. Often when people think about design, it's about a building or you think of a product or a phone, but we realized that you can also design services. You can design the way people actually interact with things and with each other. You can design cultures.

[Innovation is] kind of synonymous with the way that I look at design. What's interesting to me is that design does a couple of things. One is it takes problems with real constraints. You have to think about how you're going to design an experience that's really going to engage with the consumer. How are you going to rethink a healthcare experience so that the patient is happy? So you have very real constraints around it. Innovation is saying, "How do we actually do something new within this kind of space, using the design methodology to do it?" And our methodology is twofold. It's human-centered, which means that we spend a lot of time looking at people that we're designing for. We have anthropologists and psychologists and sociologists and designers out in the field, understanding who we're designing for. And then basically at some [point] saying what would really help improve a situation; how do you actually make a breakthrough around it? Sometimes those things are actually quite simple and quite small. Sometimes they're seismic. You have to rethink a whole system. And so I think, by nature, the innovation process for us is about reinventing things and making them work a little better for the people who have to use them and make them.

### **SEISMIC SHIFTS**

In the art world and in the design world, I think we're all seeing a time of seismic change. The fact is [that] technology is meaning whole different ways of engaging with the world, and it's actually shifting our behaviors. Plus, culturally and politically we're seeing seismic shifts. And, I think, innovation is a tool to kind of adapt ourselves to what the world is bringing us, to create a good place for change.

Marina Abramović, the performance artist, did [a show] at MoMA in New York. She did this piece where she was staring at anyone who would sit in a chair across from her. [MoMA] would post photos of the people that she was staring at on the MoMA website. One of the things I thought was amazing [was] basically the idea of the artist using social media as a way to distribute the work. But then there was this whole other subculture for people who took those photos, and they created this website called Abramović Made Me Cry...and they took all of the photos from the MoMA site where people were crying, and they created their own web installation. So what that points to me is this moment where we're seeing people take control over content and distributing it in whole new ways. That's actually true in the art world, and that's the same thing for us in the world of design.... I think

innovation is a way for us to say if we know [new developments are happening—how do we either use them to our best effect, or how do we understand them and make sure [they aren't] hurting us in some way?

### **DIFFERENT PERSPECTIVES**

We believe at IDEO that the collaborative practice, that more eyes, more people looking at a problem, and more people thinking creatively, means that you're more likely to get a better idea.... I think one of the most exciting places that we've gotten to in the world of design right now is the idea that we don't have the same kind of designer talking to the same kind of designer, and that we don't necessarily have designers just talking to designers. So on our teams we will have a traditional designer like an architect. We might have an anthropologist. We might have a field expert, somebody who knows a lot about a certain kind of area or industry. But we'll also have a writer. We'll put a filmmaker on a project. It's those kinds of collaborations, when you get a disparate [group] of people onto a project, that you get really different kinds of perspectives on the problem. And then you get really different kinds of outcomes. So I think one of the most exciting things about where we've gotten to today is around the idea that [collaboration] doesn't mean three different kinds of designers...but rather really different kinds of people who are bringing their perspectives to the problems.

I think we tend to think about innovation as something that's all new. [I]n a lot of work that we do around designing new technologies or new technology systems or social media systems for people... what you might be trying to get people to do might be something that they've [already] wanted to do.

Take something really simple like Craigslist, which is a pretty brilliant idea, really simple. What it really does is it blows up the idea of bartering or garage sales, things that we always did. It just lets us do it in a new way. So the behavior is actually in our history. Sometimes it might be a new thing to support treasured behaviors that we have.

To be honest, it's heartening. Because what it says to me is that there [are] many new ways of doing things but the reality is there may be kind of baseline things as humans that we actually are always going to be seeking, just maybe using new tools to get there. I find it encouraging.



shot to fame when she won the design competition (supported by NEA funding) for the Vietnam Veterans Memorial in Washington, DC. A native of Athens, Ohio, Lin went on to earn her master's degree in architecture from Yale in 1986, and has received numerous prizes, awards, and honorary doctorates, including the National Medal of Arts in 2009. Throughout her career, she has moved fluidly between the realms of art, architecture, and memorials, maintaining a steady focus on the landscape and environment. Whether designing sculpted outdoor earthworks or private residences, Lin reinterprets the world around us into visually stunning, intellectually compelling pieces. She is currently at work on her final memorial What Is Missing?, a multiplatform piece which will call attention to current environmental issues. In her own words, Lin discusses her creative process and the "tripod" nature of her body of work.

### **ON INNOVATION AND** CHANGING PERSPECTIVE

Innovation could be everything from pure invention to getting us to look at materials that we think we know and getting people to rethink [them]. I like to co-opt the familiar. I like to debunk simple assumptions, sometimes about the everyday. For instance, a lot of my artworks focus on the environment. If I look at a river, I look at the entire length of the river. We tend to pollute what we don't see and what we don't own. Based on ecological terms, what's downstream from you? None of my concern. What's upstream? People focus on what they can see. So I started a whole series on rivers that tries to get you to think of a river as a living unified organism. In order to protect it, you have to see it in its entirety. Getting us to see the world around us in a new light is a key part of my definition of innovation.

I'm almost heartbroken that we've taken art out of primary education in schools. It's a voice, it's a language, it's a way of expressing ourselves. Whether you become an artist or not, I think we all will benefit from letting art teach us how someone else looks at something, how someone reacts to something, how sometimes you can't quantifiably understand what art is doing. If any art form, anything, gets us to take a moment's pause and look at something afresh, that's got to be a good thing.

### **DICHOTOMIES**

I always try to focus back to the personal, the individual, the one-on-one. I think that's very unusual for someone who works in fairly large, very outdoor, very public spaces. You begin to flip the private into the public realm. That happens throughout my body of work, where there are real dichotomies [and] ambivalence. I like being on the border of things; I like to live right on the boundary between opposing things. There's a tension there that I like. Science and art. Art and architecture. East and West. How can I make a rock feel lightweight? How do I make a rock wall look transparent? It's opposites. It's things that, again, you might not be considering. Public monuments that are exceedingly private. That's something that happens throughout my work. I tend to balance between left side and right side of the brain thinking.

### ON WRITING, ART, AND ARCHITECTURE

I start with writing, with all my works. That's something that has been a part of my work from day one. I tease out some underlying goals before I ever try to imagine what the shape or the form is going to be. And I study and I research and I research and I study, and then I try to forget consciously all that I have learned. Then I start making.

[Art and architecture] complement each other. For me, making art is like writing a poem. It's quick. It's a singularity of thought that has to be pure and has to be strong, whereas architecture is more like writing a novel. Of course it is an art as well, and you have to make sure the main theme is working. But you also have to literally get the mechanics of every sentence and every paragraph and every chapter. They're very, very different forms of tapping into the creative processes, and I love both. That, I think, is also that left side/right side of the brain thinking, which I go back and forth on. Do they inform each other? Absolutely. Do I like to keep them separate? Absolutely.

When I'm making art, though I'm studying and analyzing scientific data, in the end it emerges more from the hand. [With] architecture, you have to get to the soul of it. But at the same time there is so much detail and so much minutiae. You have to be careful you don't get lost in the minutiae. You have to pull and tease the soul out and keep that pure and strong. At the same time, there are millions and millions of details you have to worry about. The monuments are the in-between ground for me. They balance.

### THE TRIPOD OF FORMS

I am proud of [the Vietnam Veterans Memorial]. But since I didn't really want to spend my life making just memorials, I knew I had to define myself outside of that arena. I do think as a society we love to compartmentalize. We like to specialize. I knew it was going to be a longer time for me to create, both in my artworks and in my architectural works, enough of a balance for people to begin to see my body of work as a tripod, with the memorials sort of being in between art and architecture. [The memorials] are a functional art, but their function is purely symbolic. I just had to be patient in order to begin to produce a body of work in all three realms, so that people could recognize how committed and serious I was [to each realm]. One could always argue that [memorials are] going to be my most public work, and that many people will only see that of me. But in the end, I do what I'm compelled to do. I have made things my entire life, and will continue to do so.... Someone gave me really good advice: don't worry how they compartmentalize you, just keep doing the work you're doing. I've continued along that line.

Formalistically, I jump. I think that's where it's a little unusual, that part of my brain is always working on some architectural projects, and then I can go into the art end of the studio. That's the juggle. Even when I give a lecture about my work, I will talk about all three, because to talk about one without the other two is almost denying and cutting me into a third of who I am. I always start my lectures saying, "My work is a bit like a tripod, and if you remove one of the legs I will not stand up."

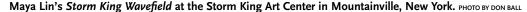
I never got up one day said, "I'm going to do this, this, and this." It's just that I couldn't stop making in all three categories. My greatest fear [is] that I'd be schizophrenic; that the three realms would not share, would not talk, would not be coming from the same head, in a way.

### **FOCUS ON ENVIRONMENT**

For me, what has remained, and has really gotten refined, is this focus on the environment. It's probably

the first thing I ever cared about. My parents can never figure out how it happened. In third or fourth grade, I was boycotting Japan to save the whales. I was sitting in the parking lot of the A&P with a petition to stop seal trapping. I was going to go to Yale and become a field zoologist. I was growing up in Ohio in the '60s and '70s...and all of a sudden you look at the Clean Air Act, the Clean Water Act, and how much legislation changed the landscape. That was a very formative moment for me. Ironically, the Vietnam War was going on, and [the Civil Rights movement]. I was so concerned about how one species could be doing such damage to the rest of the planet without feeling obliged to alter and change. I've always felt that way. Maybe that's the static point in my life.

Can I do something in my lifetime that can help change the way we are, whether it's war or whether it's the environment? Can I help, in a little tiny fraction, make it better here? If I could do something to help us stop degrading the planet, if I could help in any way—that's what I'm striving to do. I'm extremely optimistic that way. I believe that art can sometimes change the way people think. This is why my final memorial is devoted to raising awareness about what we are losing in terms of biodiversity and habitat. It focuses on what we are losing and also focuses on what can be done to help.





### am Gilliam

Some of Sam Gilliam's artwork hanging in his studio in Washington, DC. PHOTO BY MAX FRIETCH

Sam Gilliam is probably best known as the first artist to present a painting on canvas that was not on stretcher bars, but was instead draped on the wall or from the ceiling. Born in Mississippi, Gilliam grew up in Louisville, Kentucky, and attended the University of Louisville before moving to Washington, DC, where he still lives. Associated with the Washington Color Field art movement, Gilliam works in various media to create abstract interactions that test the boundaries of shape, texture, and color. His work is found in numerous museums internationally, as well as in many public places such as subway stations and airports. Gilliam has received several National Endowment for the Arts grants, including one the first year they were given in 1966. We spoke with Gilliam by phone in December 2011.



I don't know if innovation is really what art is about. Innovation seems to be the last person standing, and art is more a cooperative involvement. So I think that we have to think about innovation as what is being done as a whole at a particular time that then tends to incorporate a wholeness of society. I think the idea of innovation and...[of] creativity is hereditary. I mean whatever environment that it is put in, it spreads.

### WHERE THE IDEAS COME FROM

I have a studio, and the studio consists of two other people, some of whom I've worked with 15 to 20 years. We hold conferences. We talk. We know what our objective is for our particular time. And everyone has a role to play. When we started together, the studio, we said, is like Ford Motor Company. I get to design and they get to work.

But the assembly line is more than the assembly line because they get to paint. They get to frame. They get to put things together. They are part of the whole operation. And, I think, that's the case with a number of artists, that it's their idea or their major participation. That there's a team of people that work to form the work itself.

[Art] involves a lot of thinking, and figuring out where to start. Then figuring out what the next step is, step by step. There's not a sight, an idea of where the end is. There's just the beginning. Of course, I'd actually say that your ideas come from the art collective, those artists that you've always been interested in and figuring out what they would do in those situations. That's what an artist is anyway. He's just a single member of a collective, the whole generation that went before. Many of the abstract expressionists like Pollock, de Kooning, Kline. David Smith. Mark Rothko. Barnett Newman. Clyfford Still. Georgia O'Keeffe.

[The idea for draping canvases] came about 1969 when I had a chance to do a show at the Corcoran [Gallery of Art], and there were three of us that were going to do the show. And we were just going to use the space of the rooms rather than putting individual paintings in. Using the large spaces meant that I reincorporated the idea of how many of the Washington Color Field painters' paintings were painted off the stretcher and then put on the stretcher. So I simply made mine bigger and eliminated the stretchers.

I think that you can see the influence of David Smith or the influence of Richard Long and people of that kind. They start in the environment rather than starting with a certain size sheet of paper or a certain prenotion. And this is the idea of putting yourself into the space, rather than [putting the] material thing into the space. And to develop environmentally rather than just thinking about making a drawing, making a painting.

I think it's the same whether it's performance, or performing particularly within a certain environment. I was influenced by a show at the Corcoran called *Work the Spaces* where you saw large content in large spaces. And that large content being relative to the same kind of thing where you've had [previously] small content by framed works, how the large sculptural factors equaled the space, per se, better than making small stamp-like objects to be put into a space and calling only that art.

The more open the experience is, the more that you can act or can express yourself. And it doesn't matter what the subject is—as long as you're applying yourself it becomes the model for what you think the solution is.

### **SOUTHERN INFLUENCES**

The older you get the more you think about what your beginning was like. So that I think the South has a lot of influence in my work. You can see that you're responding to an environment that you may not have necessarily thought was still present.

I think of the color of plants, spring plants. The color and the presence of trees. Things that were outside that I discovered. If you live in Washington you discover azaleas or you see forsythia for the first time. And at some point of discovery, you think back to the first time that you noticed color in landscape. What were the colors that you see? In the South it would be evergreen, or particularly in Mississippi, that evergreen forest. And it becomes the models for instructing you to do things.

### LEARNING EXPERIENCES

Nationally, I've created lots [of public art]. I've just completed an outdoor piece for the Takoma Metro Station [in Washington, DC]; that's a mosaic. I've also worked for mass transit in New York doing outdoor pieces. I've put draped canvases on the outside of buildings like the Philadelphia Museum of Art back in 1977. That was really the exciting part; that the environment was different because it involved weather.

That was a piece called *Sea Horses*. We'd worked during the day putting it up, went to dinner, and came back to look at it at night. It was being blown just at the advent of the hurricane. And then the next morning it was scattered over the bushes, all over the ground. I think that it was a learning experience. You had to learn how to keep it up, as well as learn to accept what happened if it was blown down.

But you never forget that as a concept, because someone said, "Either you've finished or you've just begun." That, I think, is an innovative idea, and is really the start of my thinking for the next few years. Either you've finished because there's some sort of accident. Or you've just begun, meaning you have to start over again.

## ${ m Chris}\ { m Miller}$



In his career at DreamWorks Animation, Chris Miller has been engaged with nearly every aspect of animated filmmaking. He worked as a story artist and voiced characters for projects such as Antz, Madagascar, Shrek, and Shrek 2, eventually becoming co-director for Shrek the Third. He most recently directed Puss In Boots, which received a 2011 Golden Globe nomination for Best Animated Feature Film. Below, the California resident talks about the creative forces at work in animation.

PHOTO COURTESY OF DREAMWORKS ANIMATION

### COLLABORATION NURTURES INNOVATION

The trickiest [part] for any filmmaker, any director, any writer is applying your point of view. You're collaborating with so many artists. [Puss in Boots] was at least 400 strong on the crew, with a lot of extraordinarily talented people. I learned to really keep an open mind and open approach when it comes to developing a story, and developing a look of the world, [while] making sure I'm communicating a singular pathway and keeping it on track. But always with an open heart, because good ideas can come from anywhere at any time.

I'm really attracted to the process of animation on this level. It is so collaborative and there are so many artists involved that inspire on a daily basis. That in and of itself can nurture an innovative process.

There's that core creative team that's developing the story and the look of the movie. For me, it's about working very closely with my story teams. I lean on them for content as much as I lean on my screenwriter, who's also in that circle. So there's a core ten, 12 people where

we really created a strong bond [and] strong trust, and then it just sort of extended out to an additional 375 people. It's amazing to me, especially looking back, that if you've got a good collaborative system going on, and you have that chemistry where everyone's on the same page and understands what direction we're moving in, how 400 artists can automatically feed into the singular path. It's a delicate balance, because I've seen it go the other way. I can watch an animated film that feels like it's put together by 50 voices, or a couple of dozen points of view. They're disjointed.

My wife, Laura Gorenstein Miller, is a choreographer. She has a dance company in Los Angeles, Helios Dance Theater, and I created a short for her recently. It was an opportunity to do something that was completely mine. I animated it, I designed it. It was nice... having something that was an utterly singular form of expression. And it was challenging. I'm so used to working with people and creating stuff with people that, I found myself, for a short time, feeling almost a little lost. Obviously I had Laura. What she offered me was something incredible. Most filmmakers would



A still from the DreamWorks film *Puss in Boots*, directed by Chris Miller. IMAGE COURTESY OF DREAMWORKS ANIMATION LLC, © 2011, ALL RIGHTS RESERVED

just love [to hear,] "Fill this two minutes of space. Here's the basic idea of what I need. Do what you want." It was strange to have that sort of singular responsibility, and for a while I struggled with it. In the world I'm coming from, we're pretty specific. We keep it open, we keep it loose, but we've very specific about duties and roles. It's strange to have total freedom, to make any choice you want, at any given time, with nothing else hanging over it.

### APPROACHES TO STORYTELLING

The most valuable to me [of my first jobs] was being a storyboard artist. I went to the California Institute of the Arts and studied animation there, and made some short films, and then I worked in some commercials out of school, and even animated a little bit. I realized pretty early on that it just wasn't for me. I wasn't disciplined in that way. It was so precise, and it moved too slowly for me. But I loved animation, I love storytelling, I love filmmaking. So when the opportunity came up to become a story artist and contribute in that way, it was so fulfilling. It's like going to film school every day. You get a crack at so many different aspects of filmmaking by being a story artist. You're the first to sort of visualize the scripts. The way we worked on the *Shrek* films too, we had so much latitude in terms of creating content and character interaction and character development, that you got a chance to be a cinematographer, a writer. You're blocking out scenes. You're thinking like an editor as you're storyboarding sequences. That was the best training ground to becoming a director.

Far and away the most important aspect of the storytelling [in *Puss in Boots*] was finding a personal story for the character, something where the stakes felt real, and the emotional journey that the cat was going through felt authentic and true and moving. That's something we struggled with and were challenged by all the way. If that didn't work, the whole movie would fall flat on its face, I think. Finding the emotional truth is the hardest thing. The animation is there to support that idea and make sure it's delivering on it. It's all about storytelling when you're making a movie, it really is.

Technology doesn't drive the filmmaking process; the filmmaking process is driving the technology behind it. New innovations are based on what story point we need to get across, and finding and discovering a new way to do that. I think that's the key to it. It's not a matter of someone in a lab coming up with a new special effect, and then saying, "How can we put that in the movie?" It's always the story that drives that stuff. I really feel like [Puss in Boots] is very successful in this way. It's even using 3D technology as an approach in the film. From the beginning, we never stepped outside of using it as another storytelling device or tool in the toolbox.

### **KEEPING THINGS FRESH**

I'm just striving to find an interesting approach to challenges. If it feels too familiar, I want to do my best to stay away from it, or change it or twist it in some way. I don't know if I can call myself innovative, but that's always my approach: to keep things fresh.

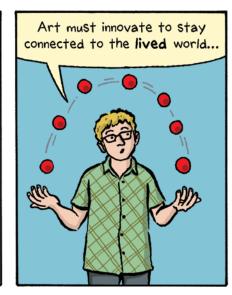
I think it's important that what you do relates to someone; it connects hopefully with an audience's personal experience in some way. I don't think that you have to tell a story, or create something that's utterly different in every way, shape, or form. It's the individual finding their own way of expressing themselves through whatever medium they choose. What makes it unfamiliar or unique or special is the point of view of the artist. That can take the familiar and make it fresh, interesting, innovative, different.

I don't know if [innovation] can be taught. I think it's got to be something that comes from a personal place and a personal experience. The filmmaking process is a great form of personal expression. [Innovation] won't necessarily come from being taught; it will come from doing it and being prolific at it, and challenging yourself, and challenging others you work with. People just have to find their own path, their own way, of expressing themselves.

I see art's role as an irritant, forcing society to look at itself critically -- while also engaging the mind and the heart.



Formalists like Chris Ware, Scott McCloud, and Art Spiegelman have helped me see comics' nearly limitless potential to break narrative boundaries.





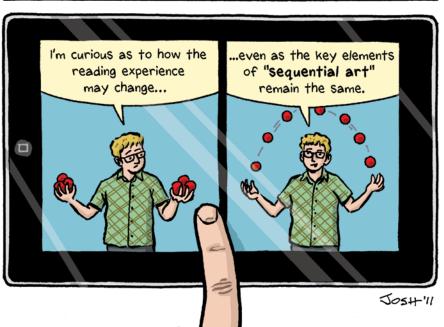


Because of McCloud, I've become interested in how comics can expand their narrative possibilities onto the "infinite canvas" of the web.

Similarly, comics journalist

Dan Archer has used interactive maps and clickable comics in really cool ways.







Scan the QR code to your right to access our online material. Or you can visit **arts.gov** for a video on artist Tony Orrico and his unique way of creating art; an interview with the Low Anthem's Ben Knox Miller and Jeff Prystowsky on their innovative approach to music; Meredith Monk talking about innovation and performance; and more.



Artist Tony Orrico creating a piece at the National Academy of Sciences.

PHOTO BY MICHAEL HART

