

2017

Crooked Data: (Mis)Information in Contemporary Art

N. Elizabeth Schlatter

University of Richmond, eschlatt@richmond.edu

Follow this and additional works at: <https://scholarship.richmond.edu/exhibition-catalogs>

 Part of the [Contemporary Art Commons](#)

Recommended Citation

Schlatter, N. Elizabeth. "Crooked Data: (Mis)Information in Contemporary Art." Richmond, Virginia: Joel and Lila Harnett Museum of Art, University of Richmond Museums, 2017.

This Book is brought to you for free and open access by the University Museums at UR Scholarship Repository. It has been accepted for inclusion in Exhibition Catalogs by an authorized administrator of UR Scholarship Repository. For more information, please contact scholarshiprepository@richmond.edu.

CROOKED DATA

(Mis)Information in Contemporary Art

Home

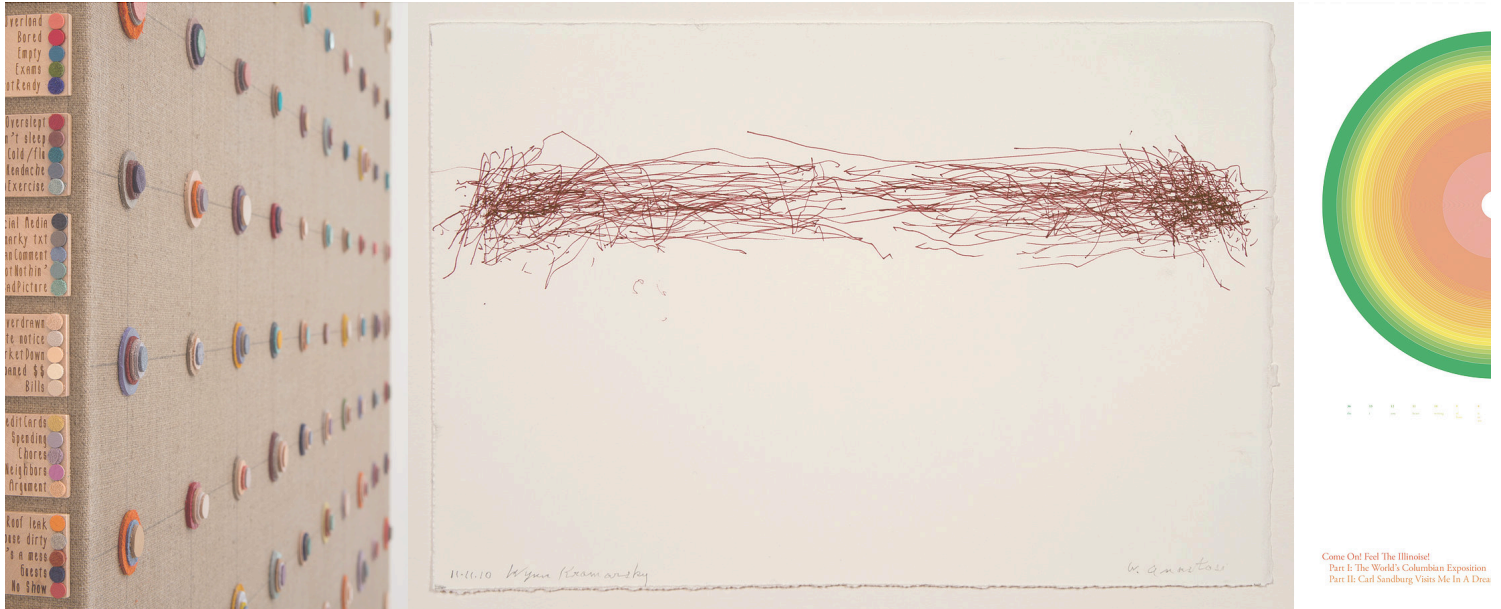
Artists

Curator's Preface

Digital America

Artist's Conversation

About



Come Out Feel The Illusion!
Part I: The World's Columbian Exposition
Part II: Carl Sandburg Visits Me In A Data

The University of Richmond Museums opens *Crooked Data: (Mis)Information in Contemporary Art* on February 9 through May 5, 2017, in the Joel and Lila Harnett Museum of Art. The exhibition features art by twenty-one contemporary artists and studios who work with data in nontraditional ways. Some artists incorporate data from known sources, using it as an aesthetic device divorced from its originally intended interpretive function. Others gather and manifest data that might normally be considered not worthy of collecting. And some of the works explore alternatives to standard data visualization forms and practices.

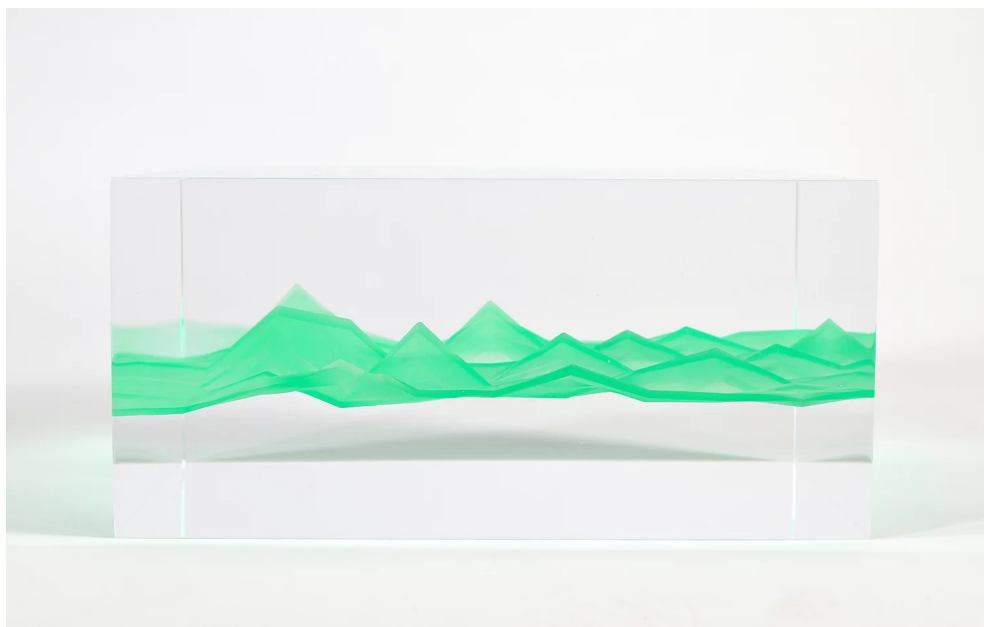
"We see data and data visualization everywhere – graphs in the news about voting statistics, interactive maps on our phones, animated weather radars and charts, standardized testing scores, etc.," says the exhibition curator N. Elizabeth Schlatter, Deputy Director and Curator of Exhibitions, University Museums. "The artists in this exhibition use data and data visualization as their subject and their process, creatively questioning our assumptions about how we decide what information is important and how we communicate and interpret information visually."

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Artist's Conversation](#)[About](#)

Curator's Preface



< 1/4 >

In its everyday use, data is a slippery term. It is often equated with facts although not all data is truthful; compare the standardized quality of rainfall measurements to the personal and possibly manipulative information posted in dating or Facebook profiles. Data may be used as evidence, yet it can be interpreted in widely variable ways; consider the 2016 presidential election polling predictions.

Data has no truth. Even today, when we speak of data, we make no assumptions at all about veracity.

- Daniel Rosenberg, [Data before the Fact](#), 2012

Data visualizations likewise are often presented as objective graphic representations of information yet the choices designers and editors make can be highly subjective and intended to affect the viewers' interpretations. For example, imagine a pie chart that illustrates the birthdays of your family members, in different colors for each month. What might it suggest if your uncle Floyd, the sole representation of a January birth, is noted in a slim gray pie slice, whereas the birthdays of aunts Rita and Janet, cousins Kevin, Grace, and Anthony, as well as your dog Diesel, all reside in the larger and radiantly magenta pie slice of July?

Visualizations are always interpretations — data does not have an inherent visual form that merely gives rise to a graphic expression.

- Johanna Drucker, [Graphesis: Visual Forms of Knowledge Production](#), 2014

If data visualization is considered an adaptable tool of making knowledge visible, it's no wonder artists are attracted to working with data and graphic interpretations for purposes of expression as well as for possible subversion, institutional critique, and activism. And interpreted broadly, "data" has been appearing in art for centuries. Examples include an ancient Egyptian tomb painting of an inventory of a noblemen's possessions to join the deceased in the afterlife; Spanish artist El Greco's 1608 painting *View and Plan of Toledo*, which includes architecture, landmasses, and a map of the city along with symbolic and religious references; and twentieth-century German photographer August Sander's 600+ portraits of a cross-section of society during the Weimar Republic.

Couple the artistic impulse to use data and data visualization with Conceptual artist Sol LeWitt's dictum for artists to not worry about viewers understanding the artwork, and you arrive at *Crooked Data* – an exhibition of art that incorporates data as both content and form, while challenging the predominant uses of data for clarification, education, and communication.

The aim of the artist would not be to instruct the viewer but to give him information. Whether the viewer understands the information is incidental to the artist; he cannot foresee the understanding of all his viewers.

– Sol LeWitt, [from statement accompanying his artwork "Serial Project, I \(ABCD\)"](#), 1966

Instead, the artists in this exhibition work with data and data visualization in nontraditional ways. Some incorporate data from known sources, using it as an aesthetic device divorced from its originally intended interpretive function. Others gather and manifest data that might normally be considered not worthy of collecting. Lastly, some of the works explore alternatives or reveal flaws in standard data visualization practices. But all of the artworks question what we mean when we use the term "data" and encourage us to think critically about its graphic forms.

N. Elizabeth Schlatter

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#) [Artists](#) [Curator's Preface](#) [Digital America](#) [Programs & Events](#) [About](#)

Blast Theory

[< Return to Artists](#)



Karen
2015, mobile device app
courtesy of the artists © Blast Theory

1/1

Interview of Matt Adams (Blast Theory) by [Digital America](#), December 2016

Fascinated by Big Data and how governments and social media corporations were handling user data, Blast Theory created the application *Karen* to question the role of artificial intelligence in our lives, and to highlight how quickly and carelessly we divulge information online. Over ten days, users interact with *Karen* once or twice a day by answering a series of questions. Interactions with *Karen* become increasingly uncomfortable and complex as users complete the sessions.

Karen's design as an amalgamation of the digital and the human provides a dynamic and often confusing experience for the user. Why did you choose an attractive female actor, as opposed to textual representation, to be the face of *Karen*? How do you think this design influences the relationship between us as users and consumers of this product and the product itself?

BT: *Karen* sits within a long tradition of work that satirizes AI or plays with AI as a concept. It goes back maybe as far as Hal in Stanley Kubrick's film *2001: A Space Odyssey*, which is perhaps the first or most famous instantiation of that. We played around with the idea of *Karen* as a kind of a construct, but the more that we developed the project the more we felt that it was really important that

this work doesn't sit easily within the tradition of AI—the unknown or uncanny causes of AI. This project should put you in the position where you're slightly off balance all the time as to exactly who this woman is and what your relationship with her is within the fictional frame and an extra level of "What's this thing that I'm engaging with?" Although at some level, *Karen* is a kind of front for a data collection process. She is also very human and her life is very ordinary in many ways. And so we deliberately avoid any of the science fictional tropes of AI, and the work in itself doesn't really acknowledge any of that data collection stuff within the frame of the work. The idea is that your immediate personal response to *Karen* should always rest inside your awareness of what *Karen* represents and what the project as a whole is doing, and so that ambivalence should be present.

As for the gender issue: there are a few parts to that. It is a cliché that AI is female and it's certainly been commented more on this year [2016], I would say. There is a lot more writing about it, and I think the makers of Cortana, Siri, etc. are more aware of that than they used to be and [thus] create male voices. I quite like the idea that we take the cliché of artificial intelligence, which is an idealized version of womanhood, and make her someone who is struggling with her life and is no way a silky voiced companion along the lines of the model that they use in the film *Her*. The other part of it is that I also just don't think that there are enough really good roles for woman, so it was nice to make a really rich and complex representation of a woman who is in her early 40s as well. Her age and her life stage is really deliberate as someone who is trying to deal with the breakdown of the main relationship in her life. Clearly your gender and your sexual preference make a difference when you're in a conversation with someone like that—quite intimate and at times very frank, and at times almost flirtatious. I think those responses will be very diverse, but I think it's a great tribute to Clare Cage's performance. Even though you know that this is a completely pre-canned performance, that she's available for tens of thousands of others, you still feel that there is a connection between you and her. We were trying to play with the sense of intimacy and forced intimacy that a video platform offers.

By day four, *Karen's* professionalism as a life coach unravels, and the relationship between coach to client shifts. She overshares, becomes hypersensitive, and emotionally attached. Is *Karen's* psychological deterioration a commentary on the malfunction and disconnect that occurs when the digital attempts to mimic human behavior, or is it something more broad?

BT: Definitely more broad. What we are trying to do is have something that works on a number of different levels. On one level, this is a story of online relationships and the danger of getting close to someone online when you don't really know much about who they really are and what their backstory really is. It's partly a commentary on the presentation of ourselves online. It is partly about online dating and this idea that we are increasingly sifting through strangers for our relationships online, and it fits within a tradition of stories of relationships gone wrong. It's one of the dominant memes of the past few years: people who present themselves online one way and then turn out to be very different. And it's partly a satire on life coaching. Of course one of the reasons that she thinks she's a great

life coach is because she's been having therapy to sort out all of the shit in her life, and she completely mucks that up, but she feels the therapy has been a great thing. She takes it upon herself to think, "Oh, wow. I can actually do this. I quite enjoy this. I can talk to people about problems and come up with solutions." And, of course, she's actually the worst person to do that. It's a symptom of her malaise, not a symptom of her competence, that's she's going through those life coaching type things. And it's partly a satire on the suggestion that you can fix people or that things can be addressed at that sort of level, and it's kind of a bot gone wrong story. And it's a story of a woman who is really suffering, and that gradually becomes apparent as the story develops.

We are also thinking about why software monitors us, and why are we so relaxed about that? What drives that? Why do we quite love it when Facebook pops up and provides a video of our life from the last year? Rather than the feeling that that is suspicious and unwelcome. Billions of people really welcome that. There is this solipsistic impulse that within these systems, which is as long as it's me reflecting back to me in a way that feels knowledgeable, we sign up to it. We don't mind that at all. You end up setting a positive feedback loop with software by saying, "By all means, scrape up information about me so that you know my taste and feed it back to me." This work is really standing slightly apart from works that have been made in the past years that kind of critique data monitoring and data collection and has more to do with why we like that so much and what makes us so drawn to that.

Your process for creating *Karen* included mining hundreds of personality tests. Could you talk about the specific types of questions that you chose for *Karen* and why?

BT: We read hundreds of them. And one of the core insights and developments of the piece was that you have all of these psychological tests that are based on you answering a question, and the questions themselves are very interesting, just as an interview question or of you talking with a friend over a drink. Some were really fascinating. It was that insight that, "Oh, this could be dialogue." *Karen* could slip every one of these questions into a conversation with you and ultimately end up with enough answers that she could make a psychological profile of you. That insight was a really big breakthrough in the work. There were loads of really good sexual ones about sexual inhibition, sexual insight, openness about sexual life, and they were all just really interesting because they were things that you don't talk to people about. They are hidden knowledge in a way. We found those all really interesting. The others were on behavior and weaknesses—mapping your fallibility and susceptibilities to different weaknesses. We were particularly drawn to those, but ultimately we had to strip out enormous amounts of those questions. One of the actual core scales that we used in *Karen* is around openness, and in the second lesson that she gives you she asks you five questions that come from scales of openness, and then we use your position on that openness scale to determine the rest of the story later on.

As a group of artists, how do you handle the tension of a work that critiques the over sharing of information online, but simultaneously requires the user to overshare?

BT: It should be intrusive. This is the power of the app as a form. It's entirely private at one level and very intimate—your phone is the most intimate technology (maybe). And so when you get asked an intrusive question by *Karen* you are forced to answer it to move forward. You either put it down and never touch it again, or you answer it. In some of the user testing we looked at a strategy of lying. "I'm not going to tell you that, I'm going to tell you something else." For users who tried to do that, it became very redundant very quickly, because when *Karen* responds to your lie, it's not very interesting because it's not the truth. So what we found was that even with people who started off with a strategy of lying to *Karen*, they quickly reverted to telling the truth because they actually kind of want to know. Any work that is satirical is of course playing with those boundaries. You play with the unacceptable in order to shine a light on the unacceptable. We obviously agonized long and hard over the privacy policy to the work, and we made what we feel is absolutely the best form of privacy policy that we could. The data is anonymized incredibly quickly, and once it's been stored for research purposes, it has no other use in any other medium and even then it's anonymized very rapidly. The idea is that precisely when that intrusive question comes, you are aware of this thing collecting your data and what might then be happening with it. It maybe heightens your awareness of a piece of software collection and why it might be doing that and where that data ultimately ends up.

Computers have been acting as pseudo-psychologists since MIT's ELIZA in 1964. Did the long history of affective computing influence your work on *Karen*?

BT: We were very aware of that—it is notable work. Some of the people in this psychological area, either in business or in research, see this as another demonstration on how software can be used for therapeutic purposes. We're clearly at a threshold in terms of these kinds of systems that I think will become explosive. I can't say that we looked deeply into the history of affective computing, but we did look into ELIZA and the tradition of bots and Turing tests. It's part of our intent that the work activates those connections and then poses questions about the appropriateness of those approaches.

Do you view the code to the app *Karen* as a means to an end, or do you see the code as part of the artwork itself?

BT: Clearly without the participant taking part in the work, it's nonexistent. In that sense the work is completed by the user. I see all those things as parts of the work. We very deliberately make work where the boundary of the artwork and the real world and society at large is diffuse or unclear, because we want to put you in a position where you're implicated by the artwork. It's why we have *Karen* send you little alerts, and we think you'll be pestered by some of them. I have many people say to me that their partner will say, "Who is *Karen*? Who is this person? She sent a message at one in the morning last night saying 'call me.'" It's deliberately trying to kind of flirt with that boundary as to where you almost have a little intimate relationship with this fictional character for those ten days. She has some kind of role in your life where you don't know when she's going to pop up or when you're going to engage with her. It's always fleeting but it's still in

your life. It's not a distinct activity, and it's not under your control when it happens. You have to wait for the next chapter to become available. All of those things are about trying to infiltrate the artwork into your life. But then to speak more widely, clearly the code and the research that comes out of it and the discussions around the work are all absolutely part of it and very valuable for us.

What is the research that comes out of the work?

BT: We are about to begin the phase of research with colleagues at the University of Nottingham who helped us develop the app, and part of that will be assessing the logs by looking at patterns of behavior, looking at the prevalent choices versus unusual choices, looking at the data reports, how many people have bought data reports, and what those data reports say. It will be very exploratory—it's not very clear. We've worked with the University since the late 90s and written about thirty or forty papers with them. So it's typical that our work will do some papers.

Founded in 1991, Blast Theory is a Portslade-based art group whose work explores multimedia and performance. Lead by Matt Adams, Ju Row Farr and Nick Tandavanitj, the group's collaborative work aims to determine how technology can be used as a cultural and personalized space. Touring nationally and internationally, the group has received numerous accolades, including several interactive arts BAFTA awards, honors from the Prix Ars Electronica, and Arts Council England Innovation Awards.

www.blasttheory.co.uk

www.blasttheory.co.uk/projects/karen

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Programs & Events](#)[About](#)

Brooke Inman

[< Return to Artists](#)

Neighborhood Cat Watch
2016-2017, photographs, drawings,
and notes
120 x 120 inches

courtesy of the artist © Brooke Inman
photographs 1-2 by Meg Eastman
Photography, LLC, and 4-7 by Izzy
Pezzulo

|| < 2/7 >

Interview by [Digital America](#), December 2016

Inman's installation documents the feral felines of the artist's neighborhood, creating an overwhelming web of information that is both personal and meticulous. The project consists of photographs, drawings, and surveys collected from the Battery Park community in the Northside of Richmond, VA.

BI: In the beginning, when I first moved to Battery Park, I felt like there were so many cats in the neighborhood. Every time I would walk out of my house, there was a cat. For a while it felt like different cats, but now I'm starting to recognize there's this cat and that cat that I see all the time. It started out as a really simple genuine inquiry where I wanted to get a sense of what cats were around, but then it turned into this bigger project.

I want the installation to feel a lot like this space does [referring to her studio] but more overwhelming. The aesthetic I am going for is a crime scene detective who was trying to piece together what cat controls which territory, what yards these cats frequent.

The full interview can be found at www.digitalamerica.org/brooke-inman-q/.

Brooke Inman (American, born 1983) is currently adjunct faculty at the University of Richmond in the Department of Art and Art History, and at the Virginia Commonwealth University in the Painting and Printmaking Department. She also serves on the board at The Iridian Gallery and teaches printmaking in the Richmond community at Studio Two Three, The Virginia Museum of Fine Art Studio School, and The Visual Arts Center of Richmond. Inman received a B.F.A. in Printmaking from the Cleveland Institute of Art in 2006, and an M.F.A. in Painting and Printmaking from Virginia Commonwealth University in 2008. You can view more of her work at [Cargo Collective](#).

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Programs & Events](#)[About](#)

Casey Reas

[< Return to Artists](#)

KTTV (August 2015)

2015, custom software (color, sound),
digital video, computer, screen
dimensions variable
sound by Philip Rugo (American, born
1992)

courtesy of bitforms gallery, New York
© Casey Reas

|| < 1/1 >

Interview by [Digital America](#), December 2016

Casey Reas collected broadcast signals from the Los Angeles Fox station KTTV during August of 2015. The signals were selected based on popularity and then edited together into an hour loop, accompanied by sound created by Philip Rugo. The resulting work *KTTV (August 2015)* is an immersive experience described by Reas as a "continuous generative collage" of the signals.

You've noted many times that you employ a different process for each of your pieces. What inspired you to choose a local (Los Angeles) Fox station as your data source for *KTTV*?

CR: I will admit that I have a difficult time answering clear questions like this because my motivations aren't clear. Much of my work brings together multiple inquiries and interests.

To attempt an [answer], I think broadcasting is fascinating. The idea that signals are continuously moving through space and that they are moving through our bodies ... that we design antennas to capture the signals and we design electronics to tune the frequencies ... it's a long-term interest. In the most recent

past, when television switched from analog to digital signals in 2009 here in the U.S. it was a major shift in how we experience images. I'm interested in perception, in how the shift from digital to analog images fundamentally changed the qualitative impact of the televised image. I'm in Los Angeles, so the towers on Mount Wilson are the broadcast point, these are the signals that I can receive in my studio. The Fox station was selected by someone arbitrarily, but the precise broadcasts recorded were selected based on the ratings. I am interested in the signals (the shows) that have the most eyeballs that affect the most minds – this is the media that has the strongest impact on how we collectively think.

I'm both horrified and fascinated with television – it's like the train wreck that one can't look away from. The footage used for *KTTV* is condensed into one hour from dozens of hours of television. The video is a tightly edited collection of what I think are the most iconic moments. It includes scenes of extreme violence and action, as well as the most manipulative of the glossy advertisements: murder, football, iPhones, Viagra ...

You worked with artist Philip Rugo on the audio to *KTTV*, which visitors listen to on headphones as they watch the screen. Was the audio created in conjunction with the work, or in response to it? How does it complete the experience?

CR: I worked on this series for a few years before adding audio, so I had extended experience with similar works that were silent. With these works, the audio focuses my attention. It was a breakthrough that in hindsight, I wish would have happened earlier. The audio encourages a new level of concentration.

Both the audio and the image are generated from the same source material, the one-hour compilation of *KTTV* signals. The images are constructed from the visual data in the source and the audio is created by filtering the audio data in the source.

Emergence seems to be a theme in your work—the idea that simple entities and interactions can lead to complex entities and unexpected patterns. Do you think of the data that you collect as the complex pattern or the simple entity?

CR: With *KTTV* and related work, the data are extremely complex from the point of view of perception and culture. Conversely, the data are extremely simple in regard to the format. A video is a series of still images, each still image is an array of colors, each color is defined by three numbers, one for the red, green, and blue component. *KTTV* looks at the content of the video as focused through its primitive data. The resulting surface cuts between the data view and the ghost of the original broadcast.

My work from the last few years, including *KTTV*, is more in the tradition of chance operations in music and visual art and has less of a relation to emergence, an essential aspect of my earlier work 2001–2010.

Though the video is created through distortion, the color compositions of *KTTV* are aesthetically cohesive. Can you speak more about the intentionality of your piece's

final and systematic aesthetic?

CR: The structure in the source video keeps *KTTV* visually coherent. The work abstracts the source more or less over time, but I defined the visual system of distortion to remain on the edge between pure abstraction and strong references to the source material.

The collection, organization, and distribution of data had become central to how we — people and institutions — make decisions in the 21st century. Was the process of manipulating the *KTTV* data a way of stripping the content and context from the signals?

CR: Yes, that's true. I think about the extremes. On one side there's the original television signal (the original data) and on the other, the raw data that comprises the signal. I want to experience the data view and the image surface at the same time, I want them to collide continuously; I want them to compete for my attention.

Johanna Drucker writes in response to *KTTV*: "Sitting with the headphones and watching the bits of visual information change in the elegant grids, I got lost. All sense of time, of body — of anything but the feed and its rhythms and changes — disappeared. The signal stream was so beautiful, so completely absorbing, that I could have drifted and floated on its irregular repetitions for hours. I had never felt so close to a computational process, so affected by it, as if I were hearing the music of machines, program-talk, and algorithm-speak — articulated by the very impulses that drive a computational process toward its own self-realization." (1) Perhaps to a viewer, like Drucker, your work beckons us to a place of transcendence. What does transcendence mean to you as an artist?

CR: "Transcendence" is a word that I don't often consider in relation to my work, but the description written by Johanna rings true for me. I have a similar experience with the work. Much of the music I listen to and the visual work that I'm drawn to is intended to bring about an altered state. I'm most engaged with noise and texture, in field conditions as a composition strategy. I want my work provide a wide space for reflection and interpretation.

Along with Ben Fry, you wrote Processing, which is an open source programming language and environment. Do you continue to use Processing in your own work?

CR: Yes, nearly all of my work is created with Processing. My most recent solo exhibition featured three new works created with Processing. Processing has changed over the fifteen years since we originated it. It started as a sketchbook, a place to work through ideas and code, but it emerged into a profession tool as well as a sketchbook. I've used it for all of my major work for the last decade. Before that, I would sketch code with Processing and then port the work to C++ to run faster and larger for exhibitions.

1. Drucker, Johanna. "Nostalgia for the lost subject of technology in the work of Casey Reas," *LA Review of Books*, January, 29 2016. <https://lareviewofbooks.org/article/nostalgia-for-the-lost-subject-of-technology-in-the-work-of-casey-reas/>

Born in 1972, American artist Casey Reas' software, prints, and installations have been featured in solo and group exhibitions at museums and galleries all over the world, including recent exhibitions at the San Francisco Museum of Modern Art, the Art Institute of Chicago, and recent commissions awarded by the Whitney Museum of American Art and the New World Symphony in Miami. Reas co-developed the popular Processing programming language and environment with Ben Fry, which continues to support visual artists as a tool and vibrant online community. He holds a masters degree from the Massachusetts Institute of Technology in Media Arts and Sciences as well as a bachelor's degree from the College of Design, Architecture, Art, and Planning at the University of Cincinnati. Currently, Reas is a professor at the University of California, Los Angeles.

www.reas.com

www.vimeo.com/reas

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

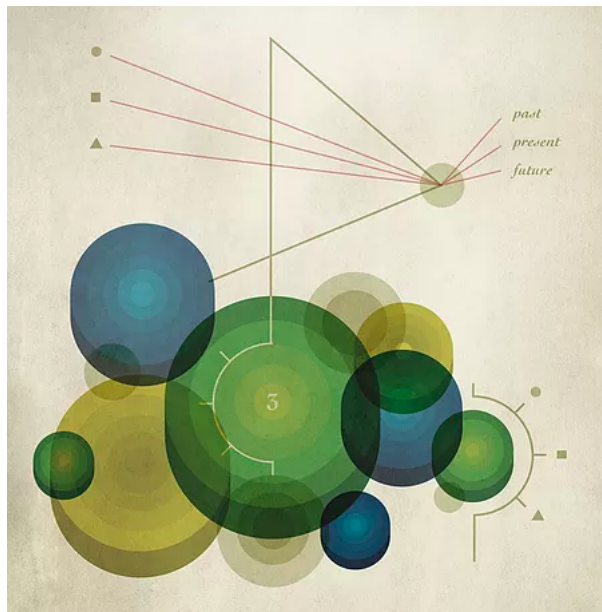
[Digital America](#)

[Programs & Events](#)

[About](#)

Chad Hagen

[< Return to Artists](#)



Nonsensical Infographics series
2009, inkjet print on paper
8 x 8 inches each

courtesy of the artist © Chad Hagen

|| < 2/6 >

Interview by Elizabeth Schlatter, November 2016

Your series of prints *Nonsensical Infographics*, comprises a set of images of data visualization tropes that convey no information whatsoever. The columns, layers, circles, patterns, and legends offer no clue as to what possible data could be determining the images.

How were you inspired to make these images? Were any of these made with traditional handheld design tools or am I correct in assuming you created these images digitally?

CH: In a small way this was my reaction to coming across information graphics in articles that felt unengaging or unnecessary to explain through visuals. But I've always had an attraction to old mechanical and diagrammatical graphic illustrations. I'm attracted to the unintentional beauty that some of these pure utilitarian graphics create. The "Nonsensical Infographic" pieces were an attempt at trying to recreate something that felt like a remnant of some utilitarian past and just focusing on the beauty of composition. Yes, the pieces were created digitally. This is how I've found I can express my ideas not only the quickest but the most accurately.

The "Nonsensical Infographics" have fonts, color families, and classic data visualization forms, which along with the smudgy looking backgrounds, recall illustrations from textbooks from the 1950s and 1960s. Did you intend for retro appearance of these images to suggest a sense of authenticity?

CH: On the surface I'm always challenged to make my art look authentic, especially when I'm creating it digitally. Making these [images] look like something from ages ago was a part of that challenge but also fed into a sort of open narrative of why these even exist.

Regarding this series you've remarked, "Infographics' level of success is always based on how much and how well they communicate their data, the classic form follows function. In this series, I reversed these roles, form is king and dictates what the infographic communicates." (1) Is there any data or information suggested by these forms? Were they inspired by data sets or visualizations that you admire?

CH: If there is any data or information that you are able to extract from these, it is only through my intention to makes these purely compositional. When I created these I thought of them as a finite series. I tried to take all the elements that I felt could communicate infographic (shapes, lines, type, & colors) and create a series that was absolved of meaning outside of their titles.

The scholar Johanna Drucker wrote that "visualizations are always interpretations – data does not have an inherent visual form" (2). Is *Nonsensical Infographics* a critique of the assumptions of truth and objectivity behind data visualization?

CH: Again, this was probably the impetus for me creating these. I'm very much a visual learner so to come across informational graphics that can be better explained other ways, (i.e. text) I tend to find off-putting.

Do you think that the ambivalence behind the graphic forms in this series, which also appears in some of your commercial work, is especially appealing to certain clients? Is there something a bit transgressive about your approach to design or do you find this type of questioning the relationship between data and visual form common within contemporary illustration?

CH: That's an interesting question. I personally love abstract and esoteric art. I think many of my clients are drawn to that aspect of my work. I find, many times, clients coming to me for articles that are very big concepts like quantum theory as an example. I think these big concepts lend themselves to this kind of interpretation best.

1. Chad Hagen, statement, from 20 x 200 website, accessed November 7, 2016, <https://20x200.com/products/chad-hagen-nonsensical-infographic-no-1>,

2. Johanna Drucker, *Graphesis: Visual Forms of Knowledge Production* (Cambridge, MA: Harvard University Press, 2014) 6.

Chad Hagen (American, born 1970) received his B.F.A. from Minnesota State University, Moorhead, and has been a graphic designer and art director for the past 17 years, living and working in Minneapolis. He has illustrated work published for *Fortune*, *TIME*, *Scientific American*, *Wired*, and the *New York Times* and has been responsible for developing such brands as Harley Davidson, Target, GAP, and Mattel.

www.chadhagen.com

www.20x200.com/collections/chad-hagen

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

[Digital America](#)

[Programs & Events](#)

[About](#)

Clement Valla

[< Return to Artists](#)



Postcard from Google Earth
(48°24'31.45"N, 122°38'45.52"W)
2010 archival pigment ink on paper
23 x 40 inches unframed, 24 x 41 x
1.5 inches framed
Edition of 5

Postcard from Google Earth
(43°5'22.07"N, 79° 4'5.97"W)
2010 archival pigment ink on paper
23 x 40 inches unframed, 24 x 41 x
1.5 inches framed
Edition of 5

courtesy of bitforms gallery, New York
© Clement Valla

|| < 1/2 >

Interview by [Digital America](#), November 2016

Postcards from Google Earth is an ongoing series of images collected and curated by artist Clement Valla. Valla combs Google Earth and finds anomalies in the landscape created by Google's Universal Texture system, which maps textures onto a 3D model of the entire globe. His 2012 essay in Rhizome, similarly titled "The Universal Texture," explores the scope of the software and his artistic process. [1]

How did you locate the glitches in Google Earth and did you find any similarities or patterns amongst them?

CV: I found them by chance. At first I just collected them out of a general interest and for fun, but I quickly figured out why these particular artifacts were occurring; namely aerial and satellite photographs of man-made structures were being bent and folded across a topographic 3-d model. So I was able to find more and more of these moments for particular conditions where man-made infrastructure and buildings might be located in hilly or mountainous terrains.

Google began clearing up many of these anomalies as you were collecting them. When did you realize that you were creating an archive, and did that change your process?

CV: I realized quite quickly that some of the locations I would bookmark in Google Earth no longer were quite as interesting when I went back later: Google was swapping out the photographs and possibly the terrain data too. So at that point I was producing an archive. That led me to try and systematize everything a little more, and to take multiple screenshots of the same area at different times to see how the software updates. I actually have all this raw material that I need to go through – I guess I've generated way more images and data beyond just the published screenshots with the thought that this will all be interesting to go back over some day – though it's kind of a mess at the moment.

Much of the tradition of internet art is based on found art and the readymade. Do you see *Postcards from Google Earth* as readymades?

CV: To a degree yes, these artifacts relate back to the readymade, but the readymade refers to objects, while Google Earth is more of a process, or a system/apparatus. So I'm using a 'readymade' process but selecting items based on aesthetic/intellectual criteria of my own. This selective act is then really different from Duchamp's claim that he selected "based on a reaction of visual indifference, with at the same time a total absence of good or bad taste...."

Google's Universal Texture is like a contemporary Borges' map – it creates simulacra of our world in a way that becomes sterile, yet normalized. Do you think that your archiving acts as a counterbalance to this increasingly "perfected" virtual terrain? Are you working in what you've called "the gap between the territory and the map"? (1)

CV: I am definitely trying to focus my work on the process of mediation and the tools we use to mediate or represent things. Those tools and processes are located in the gap between the map and the territory.

I'm not sure my archiving counterbalances Google or the increased buy-in to seamless simulations. It feels like a much smaller act. On the one hand it's really just allowed me to look more closely at Google Earth and develop an understanding for the platform. If I'm being more generous about the work then I would hope it points others in a similar direction – a way of looking more closely at Google Earth (and other similar software) without falling into easy binaries such as 'real' or 'fake' or notions of 'errors.'

Does the transition of *Postcards from Google Earth* from the web, to the gallery, and finally to Paul Soulellis's Printed Webseries, which creates physical archives of internet art, affect the interpretation of the artwork? (<http://www.printedweb.org/>)

CV: Yes, absolutely. I often try to make a different version of the work when I show it in a new location for a couple of reasons – it keeps the project fresh for me, to keep my interest going. It also allows me to explore a different aspect of the work and to relate it to different disciplines like photo, or sculpture, or web art, or conceptual art. I've shown these images in various ways including as postcards, as photographic prints, as sculptural installations. Finally when the images make their way back into print media that circulates, that too creates a

link to different kinds of networks, different ways of remembering places (like postcards).

There is a playfulness to your images, as one thinks about traversing these implausible roads. Is a sense of whimsy or the uncanny an important element in these works?

CV: It's important to me that there's an immediate visceral reaction to the images. Then all the thinking and contemplating can flow from this initial encounter. I think the uncanny is one such immediately visceral reaction or effect and I think it's what really makes the first encounter with these images so compelling.

1. Valla, Clement. "The Universal Texture," *Rhizome*, July 31, 2012. <http://rhizome.org/editorial/2012/jul/31/universal-texture/>

Clement Valla (American, born 1979) is a Brooklyn-based artist whose photography, sculptures, and software-based artwork has been exhibited worldwide, including recent solo exhibits at the XPO Gallery in Paris and the Transfer Gallery in Brooklyn. His work is frequently featured in renowned sources such as *The Guardian*, *TIME Magazine*, *Wired*, and on BBC television. Valla explains his artistic focus as "computer-based picture-producing apparatuses, and how they transform representation and ways of seeing." He received a Bachelor of Arts in Architecture from Columbia University and a Masters of Fine Arts from the Rhode Island School of Design in Digital and Media. Currently, Valla is an assistant professor at the Rhode Island School of Design.

www.clementvalla.com

www.postcards-from-google-earth.com

www.rhizome.org/editorial/2012/jul/31/universal-texture

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

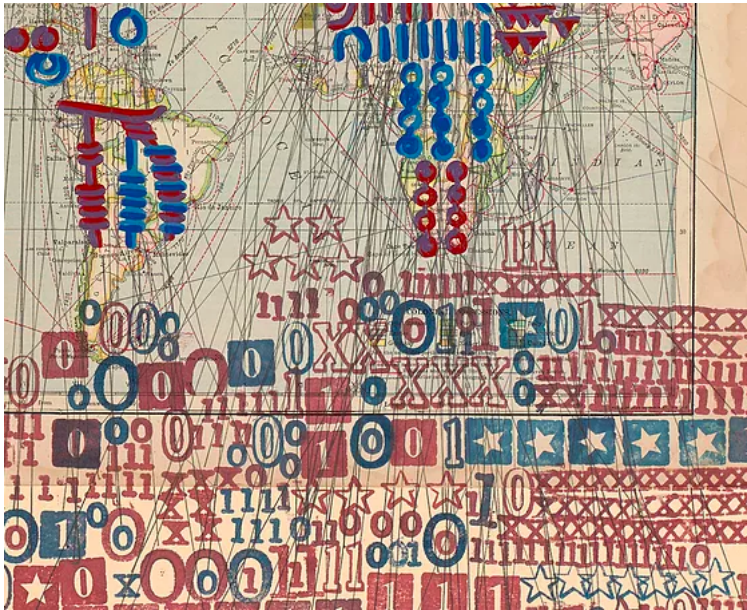
[Digital America](#)

[Programs & Events](#)

[About](#)

Dan Mills

[< Return to Artists](#)



A.I.R.S. with Symbols

2016, watercolor and ink on printed map on paper
22 1/2 x 30 inches

Wars and Conflicts by Continent, with Ancient Symbols

2015, ink and graphite on printed map on paper
22 1/2 x 30 inches

Piling Up (Wars and Conflicts, Belligerents and Supporters)

2016, ink on book page
15 x 11 x 3/4 inches

courtesy of the artist
© Dan Mills

|| < 4/4 >

Interview by Lindsay Hamm, November 2016

In the series *Wars and Conflicts*, Dan Mills uses vintage maps as a space to investigate global data on current wars and conflicts. He creates data visualizations using a variety of different forms, from simple dots, tally marks, and symbols taken from ancient cultures. For the latter, Mills finds that these foregone societies have visually and conceptually fascinating ways to represent numbers.

Your systematic visualization of data through symbols is methodical but convoluted. How does a viewer's understanding or confusion about the information play a role in the piece?

DM: I am interested in exploring the data deeply, and consciously thinking of ways to visualize them that communicate both the information and also the weight of their meaning, rather than being for example diagrams that illustrate supporting texts. The results are both systematic and convoluted and idiosyncratic.

For example, *Piling Up* visualizes the number of belligerents (the name commonly used for groups actively participating in a war or conflict) and supporters (groups

providing all but direct military support) in current wars and conflicts by continent. The page is small: it is from a geography book. It has the authority of a historic atlas or geography book: its form, printing, supporting language, etc. The forms, a simple dot in black or red, are deliberately too large to fit on the continents, so they spill out, down, and pile up at the bottom of the image. It's not about representing the actual number of each in a way that intends for the viewer to understand a numeric total. The intention is to have the viewer see the sheer number of groups involved in wars, and the number of current wars, so many that they spill out of the continents.

How do you reconcile outdated maps with data drawn from contemporary sovereign states and cultures? To quote an essay by Eleanor Heartney, "Mills starts with colonial maps (and Mills makes the point that most maps, in some way, contain evidence of colonization and conquest)."(1)

DM: The information in maps is organic; things change. They also depict selective information (the beauty and clarity of maps is due to leaving out 999,999,999% of information), and a particular perspective. Chinese maps, for example always depict China as the center of the world. Historic maps that may initially be understood as objective were virtually always created for/commissioned by a power: political, military, monarchic, or religious. And they present (and omit) information shaped to support the perspective of the commissioner.

I select maps recognizing their colonial aspects. And not only am I not concerned with whether the information is up-to-date, I am fascinated with the dated information: Italian Somaliland! Dutch Trading Empire! Indian Territory! Dominion of the Sassanids! In the history of human civilization, countries and their names have always been at play. I'm good with the use of not current maps adding potentially conflicting or agitating information. The geography remains consistent, and the data I've located there is based on it. I'm fond of the perceived authority of old atlases and books. Leather bound, color map inserts, or maps tipped into the book, the printing, even the aged appearance, to me has some weight.

In the works *Wars and Conflicts by Continent, with Ancient Symbols* (2015) and *Piling Up (Wars and Conflicts, Belligerents and Supporters)* (2016) the symbols represent belligerents and supporters. What do the terms "belligerents" and "supporters" mean, and what was the source of your data?

DM: As per the earlier comment, these are the common terms used:

A belligerent is an individual, group, country, or other entity that acts in a hostile manner, such as engaging in [combat](#).

A supporter is an individual, group, country, or other entity that provides noncombat support to a group or groups at war.

I cull information from many sources. For data on current wars and conflicts, somewhat to my surprise, an excellent source is Wikipedia. It has substantial information, cross-referenced and linked.

For data on fragile populations, the victims of war such as Asylum Seekers, Internally Displaced People, Refugees, and Stateless, it is very difficult to find reliable sources, and find consistent information. And people in one category, Asylum Seeker for example, may change to another, such as Refugee. But, sadly, if you think about it, this shouldn't be a surprise: these are the most vulnerable, most transient, least counted populations. It took a long time and many sources to develop numbers I was relatively comfortable with using as reasonably accurate as best we know. Sources include the UNHCR (UN High Commissioner for Refugees), Internal Displacement Monitoring Centre (Norway), UN Department of Social and Economic Affairs, Eurostat (European Commission), Institute on Statelessness and Inclusion Netherlands). What I learned after months of trying to come up with definitive numbers, is that there are significant disparities – millions to tens of millions – even between organizations that would seem to know better than anyone. Ultimately, I came to the realization that the numbers couldn't be 100%. What I learned and ultimately what I wanted to depict in the work is that they are tragically high, and that they represent tens of millions of people who are living in horrific conditions today, rather than being definitive. This is what is represented in the art.

In *Piling Up*, the map and visualization extend into the text on the lower part of the sheet of paper. Is there a relationship between the content in French and your subject? And do you often try to find a relationship between the original map content and your depicted subject matter?

DM: Sometimes, but not in this instance. Sometimes what I like is a beautiful world map. The source, the context is a bonus, but not necessarily a real driver of decisions.

In *A.I.R.S. with Symbols* (2015) a legend of numbers and stamp-like symbols fill the bottom of the map, denoting asylum seekers, internationally displaced people, refugees, and stateless (A.I.R.S.). How did you choose these specific symbols and what do they represent?

DM: I often work with letterpress stamps, have many sets and partial sets, and these provide a vocabulary of forms. The forms have some relevance. For example, the Refugees symbol is a bit like a rising sun; there is some optimism there. The Asylum Seekers have a sword-like symbol, which seems appropriate. They are often at risk of persecution. The Internally Displaced People symbol is an inverted or uprooted flower, which also seems appropriate. Stateless, while the smallest population, are tragic. No papers, no rights, and often no hope for change of status in the country they live. One can be born into statelessness, and in many countries, if a woman is a citizen but marries a man who is not, their children are stateless. Stateless is represented by an upside-down question mark.

Dan Mills (American, born 1956) exhibits extensively, including solo shows at Chicago Cultural Center, Sherry Frumkin, Los Angeles, Tianjin Academy of Fine Arts Museum, China, and Zolla/Lieberman Gallery, Chicago. His work has been exhibited at institutions including Utah Museum of Contemporary Art, Salt Lake City; Yerba Buena Center for the Arts, San Francisco; Katonah Museum of Art, NY; Pratt Manhattan Gallery, New York; China Art Archives and Warehouse, Beijing; and Pavel Zoubok Gallery, New York. He lives and works in Lewiston, Maine, where he directs the Bates College Museum of Art. Mills received a B.F.A. from Rochester Institute of Technology, and M.F.A. from Northern Illinois University.

www.dan-mills.net

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Programs & Events](#)[About](#)

David Bowen

[< Return to Artists](#)

*46°41'58.365" lat. -91°59'49.0128"
long. @ 30m (inverted)
2015, CNC routed acrylic
4" x 6" x 6" (each)*

courtesy of the artist © David Bowen

|| < 2/3 >

Interview by Elizabeth Schlatter, October 2016

Your work *46°41'58.365" lat. -91°59'49.0128" long. @ 30m* features five clear acrylic cubes, upon which the water surface data from Lake Superior, at the exact location noted in the title, was carved using a CNC router. The carved surfaces face down, so that the viewer sees the textures through the cubes, offering slight distortions and reflections of the waves.

Could you briefly describe your process in creating this piece? Why did you decide on this location and what times and days were used for the data?

DB: A small drone was deployed to the GPS location in the title of the piece at noon on five different days. The drone hovered above the water surface at 30 meters. The 5 different days were selected because of their varied conditions which created different wave patterns.

Why did you use clear acrylic for your forms, and how did you determine their sizes? With this version of the artwork, why did you invert the carvings to be on the lower part of the forms when displayed?

DB: I chose acrylic because I wanted to capture the dynamic movements of the waves and ripples from a specific time and location and suspend this ever-changing water pattern into a static transparent form. For this version I inverted the carving because I wanted to consider the space above the water surface occupied by the drone as it hovered.

You've used water surface, wind speed, and cloud formations to determine aesthetic variables and content in much of your work. What compels you to use natural phenomena and motion so prominently in your practice?

DB: The devices and situations I construct often play both the roles of observer and creator, providing limited and mechanical perspectives of dynamic situations and living systems. These relationships create a dissonance that leads to an incalculable and changeable situation resulting in unpredictable outcomes. The resulting phenomenological outputs are collaborations between the natural form or function, the mechanism and myself.

You often incorporate movement as well as image or object generation in your art via lights, robots, even flies and plants. But what appealed to you in making this piece, which is completely self-contained and static despite its rendering of accurate motion?

DB: I wanted to capture the dynamic movements of the waves and ripples from a specific time and location and suspend this ever-changing water pattern into a static transparent form. In some ways these works can be seen as three dimensional photography.

Do you consider data merely the bridge to other subject matters, or is data the key component?

DB: I consider data a material such as acrylic or aluminum. Likewise, I consider data acquisition a process such as coding or fabricating.

In thinking about how your work fits within art historical approaches to the landscape, such as the Hudson River School and the Land Art movement, would it be fair to say that your work is largely driven by natural phenomena alone versus other potential influences, for example, historical, nationalistic, or spiritual factors?

DB: I am certainly influenced by the Land Art movement. I am also very fascinated by the idea of chance and serendipity and thus influenced by the Black Mountain College and specifically folks like John Cage. I like to set up situations and give them space to have unpredictable outcomes. I especially enjoy it when machines destroy themselves in beautiful ways. I was also quite influenced by Jean Tinguely's *Homage to New York*. I wish I could have seen it in person. I imagine it was wonderful!

Some of the works in "Crooked Data" incorporate data that is "true" in the sense that it is verifiable, yet the data is not conveyed in ways in which we might think obvious or scientifically insightful. Is this the boundary that lets your work comfortably fall into

the arena of art as opposed to data visualization? I suppose this calls up the question, what is the difference between art and science?

DB: I am fascinated by science. I think the main difference between artists and scientists is artists try to ask questions and scientists try to answer questions.

David Bowen (American, born 1975), has shown his work nationally and internationally, including in solo exhibitions at the Mattress Factory Museum of Contemporary Art, Pittsburgh, PA; L'Assaut de la Menuiserie, Saint-Etienne, France; and the Minneapolis Institute of Art, MN. His work has been featured in numerous group exhibitions around the world, including in Japan, Germany, Canada, the Netherlands, Poland, Brussels, Australia, Spain, Mexico, and China. He has an M.F.A. from the University of Minnesota, MN, and a B.F.A. from the Herron School of Art, Indiana University.

www.dwbowen.com

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#) [Artists](#) [Curator's Preface](#) [Digital America](#) [Programs & Events](#) [About](#)

R. Luke DuBois

[< Return to Artists](#)



A More Perfect Union: Virginia
2011, pigment-ink on photo rag
36 x 24 inches

A More Perfect Union: New Jersey
2011, pigment-ink on photo rag
24 x 36 inches

Edition of 6
Courtesy of bitforms gallery, New York
© R. Luke DuBois

|| < 2/2 >

Interview by Lindsay Hamm, November 2016

R. Luke DuBois' series *A More Perfect Union* is a large-scale artwork based on the United States Census and 19 million downloaded profiles. These came from the 21 dating sites he joined as a straight man, gay man, straight woman and gay woman in every zip code in America. Started in 2010, the work creates an alternative census, based not on socio-economic fact but on socio-cultural identity. From profile bios organized by zip code, DuBois algorithmically determined the most common word unique to that area. He then inserted the term in place of the city name on a map. Richmond is now "Tobacco," Arlington is "Pentagon" and Jersey City is "Annoying."

Each replaced name acts as a generalized descriptor creating a map of self-imposed stereotypes. As a portrait of the United States, what does this reveal about us?

RLD: Each city is given the word used more in online dating profiles in that city than anywhere else in the United States. Some are stereotypical, for sure. But some illustrate local affinities - Syracuse, NY is "Dinosaur" because of the BBQ restaurant. A lot of cities are named after their main corporate employer. At the Zip Code level, the city maps expose interesting neuroses of a city - cosmopolitanism in DC, sexual kink in LA, trendiness in NYC. A lot of cities have

words that seem, well, arbitrary, or at least unpredictable. So I try to dissuade people from reading too much into the specific word for their hometown, and instead encourage everyone to look at the entire map as a vocabulary, because it's a fantastically diverse and interesting one, and tells us a lot about how creative we are with our language.

Online dating collapses the vulnerability of searching for love with the exposed nature of social media. How do your maps expose this tension?

RLD: Online dating is this bizarre act of self-identity (originally textual, and now, in the age of Tinder, more imagistic) where you have to describe yourself for the express purpose of getting someone to like you. They have to think you're interesting enough to date but not overtly egotistical, crazy, pushy, narcissistic, aggressive, or anything else that might turn them off because you went overboard on your online dating profile. You also have to describe the person you're looking for in the same terms. So the words we choose in these situations are really interesting, and the variety of ways in which we describe ourselves as well as each other. One thing that happens, presumably, in a lot of these profiles is one piece of text (the self-identity) is significantly less open and honest than the other (the description of who you want to meet). We put our best foot forward in describing ourselves on these sites, just as we do when we engage in other social media, but when it comes time to talk in aspirational terms about a partner, we get weirdly specific. The most brutally honest sites, it comes as no surprise, were the kink / alt sites (collar.me and alt.com) where there's little social incentive to hide how you are and what you're about. The big-tent dating service match.com was less personality- and sex-driven... the preponderance of names of sports teams, restaurants, bands, etc. in the project comes mostly from those sites, where people do external name checking to display their interests and try to seem cool.

In your [TED talk](#) about *A More Perfect Union*, you warn against reducing people to numbers or statistics as done in the US census, how do these maps provide a critique of this arbitrary survey?

RLD: The actual US Census, which this project was done in response to, has problems, not so much in its premise but in the way in which data is collected, how categories are chosen, the reductive variables, etc. More importantly, it's not great that public-facing information based on the Census is swallowed by the US public as gospel, decade after decade, and used to justify uninformed policy. The census is the gold standard dataset for the United States government, and it's considered largely inviolable; as a result, any third-party attempt to critique / expand / reframe the Census process feels like throwing a Frisbee at a battleship. So I wanted to come up with a project that used a dataset that was equally flawed and equally arbitrary to push the absurdity of how we are categorized. I also wanted to play with maps to poke at the way in which cartographic visualization dominates political discourse, so a lot of the project are these weird red state / blue state maps where I try to find all the people who self-describe as 'lonely' and juxtapose them against people who are 'funny'; if those

were our actionable political divisions, they'd be no worse than what we have now.

Can you imagine recreating this process next year, twenty years or 100 years in the future? Do you think the cities replaced names would be similar?

RLD: I think it would be interesting to replicate the piece in 2020 based on how dating has changed (Tinder is more about images than text, and I assume that trend will continue) to comment on how machine learning and image analysis are radically shifting the terms of engagement for how we socialize with computers. I think if I were to redo the same project it would shift a bit in response to pop culture, but the folks who rely on narrative- and questionnaire-driven dating services (e.g. eHarmony) will be aging along with the technology, so it might not shift much at all.

What was the most surprising term for a city or town you found? Were there any that seemed to fit perfectly, the reputation acting as self-fulfillment?

RLD: I love that Madison, Wisconsin is 'Pierced.' I love that the cluster around Atlanta consists of 'Coca', 'God', 'Company', 'Jazz', and 'Protestant'. It troubles me that people in Baltimore are 'Afraid' but folks in DC think they are 'Interesting'; that New York City is 'Now' while Camden, NJ is 'Vodka'; that Baton Rouge is 'Curvy' but folks in New Orleans talk about the 'Flood'. I love that the West Coast cities are hyper honest about fucking and everywhere else is a tiny bit repressed on that issue. I love that the diversity of self-identity encompasses all the contradictions inherent in the United States.

Did you enter this project with any preconceived notions about self-identity in America? How did these views change?

RLD: I thought this one was going to be a lot less interesting than it turned out. I was pretty sure everywhere was going to have generic words ("I like long walks on the beach") and then Los Angeles would be kind of freaky and people in New York would name-check restaurants. But it turns out that when they're trying to get laid, everybody is a freak, and everyone name checks restaurants, and a million other things besides. So it was definitely an eye-opener.

R. Luke DuBois (b. 1975, United States) is a composer, artist, and performer who explores the temporal, verbal, and visual structures of cultural ephemera. DuBois holds a doctorate in music composition from Columbia University, and has lectured and taught worldwide on interactive sound and video performance. DuBois has lived for the last twenty-two years in New York City. He is the director of the Brooklyn Experimental Media Center at the NYU Tandon School of Engineering, and is on the Board of Directors of the ISSUE Project Room.

www.lukedubois.com/

www.ted.com/talks/r_luke_dubois_insightful_human_portraits_made_from_data

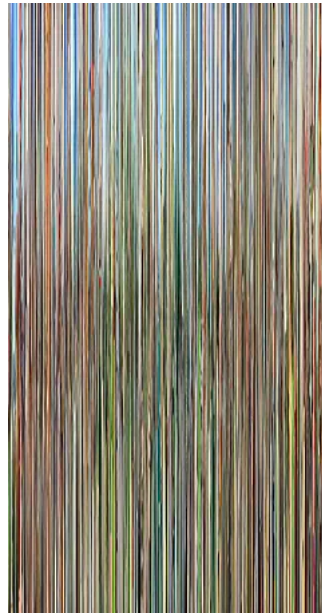
Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Programs & Events](#)[About](#)

Hasan Elahi

[< Return to Artists](#)

Conelrad v09

2016, pigment print on canvas
72 x 38 inches

Conelrad v15

2016, pigment print on canvas
72 x 38 inches

Courtesy of C. Grimaldis Gallery
© Hasan Elahi

|| < 2/2 >

Interview by [Digital America](#), November 2016

Hasan Elahi's *Conelrad* is a series of 6-foot tall prints on canvas, each containing 365 strips of vertically elongated photographs. Each photograph was taken at noon from the artist's location. Elahi has engaged in self-surveillance since being wrongly detained and investigated by the FBI in 2002 for erroneously being put on a terrorist watch list. *Conelrad* (Control of Electromagnetic Radiation) was the name of an American emergency broadcasting system during the Cold War. The purpose of *Conelrad* was to keep communication flowing during a nuclear attack by rapidly switching transmitters – a defense tactic that also inspired the decentralization of the early internet.

Can you discuss how early alert systems inspired the creative process with *Conelrad*? Is the title politically motivated?

HE: *Conelrad* is in the same trajectory with two earlier bodies of work (*Thousand Little Brothers*, started in 2014; and *Calibration*, started in 2008). In both of these earlier works, images are arranged in a manner of seven vertical stripes, similar to the television color test patterns that broadcasters use to calibrate their signal. Most people are familiar with these patterns as what was until recently known at

the Emergency Broadcast System; a cold war way that the government alerted the people to prepare for impending doom.

You call these works "encrypted Color Field paintings," which suggests that they are more politically charged than the traditional Color Field paintings of the post-war era in America. Do you see encryption as part of your process?

HE: Absolutely. The encryption part is very relevant to the work. I'm interested in strategies of camouflage and I've been working with this concept of digital noise for many years. In my work *Tracking Transience*, it is about hiding in plain sight and the relationship between signal and noise where I'm telling the viewer (and mainly the FBI) everything and nothing simultaneously. The key difference with this new body of work in *Conelrad* is that these are decipherable, unlike many of my other works. Also, I've been living in the DC area for 6 years now and the ghosts of the Washington Color School are quite present. I find it incredibly ironic that these artists intentionally created the least political, aesthetically pleasing works while they were in the belly of the beast during the McCarthy era.

You were polygraphed by the FBI as part of their investigations. Within that context, the compressed verticals of *Conelrad* resemble the aesthetic of the polygraph — bits of data as reactions to your environment and to memory that are meaningless on their own but have a profound impact when read together. Is there an intentional relationship to polygraphs with this work?

HE: I think our relationship to polygraphs is always mediated through entertainment (often a movie or television) and few of us have gone through the process itself. It's not glamorous at all and there are few visual qualities, if any. The real work now in polygraphs is taking place as software running invisibly in the background (not unlike a lot of surveillance systems) and not necessarily as a heroic investigator hunched over some crawls of paper with buzzers and scratchings. It makes for compelling scenes in movies, but the real process itself is quite boring.

Noon seems like an objective parameter for determining the context of your images, but noon is a mutable factor, dependent upon location and timekeeping devices. How and why did you choose noon for the photographs for *Conelrad*?

HE: The images in *Conelrad* are all the images that I've photographed as close as possible to noon (not necessarily exactly at noon) on each day, 365 (or 366 depending on the year) images, now seen as thin stripes on each work. I have over 90,000 images now and I'm constantly documenting my surroundings. When I look at the collection of all my images, there are some specific parameters that emerge, one of them being a horizon line across the middle of the image. When looking at an entire year of images at once, this becomes more evident.

These images are quite large, and when installed on a wall they tower over most visitors. How is this visual imposition intended to affect the viewer?

HE: They are quite large and they take advantage of the viewer's familiarity with many of the historic color field paintings that this work was created in reaction to. While they are quite human scale, when seeing these in real life, viewers often experience a sensation similar to vertigo when they come close to the work and the edges of the work leave their peripheral vision. Although it's not clearly evident to the viewer, it was important to me that the triggering of this sensation was one of the relevant aspects in deciding how large these works needed to be.

Rebecca Solnit writes about the paradoxical "invisibility" of disclosed surveillance, namely patriotism consisting of voluntarily renouncing intelligence of all kinds, even unclassified intelligence. (1) What is the intention behind the "absence" of identifiable information / references in the piece?

HE: I like to think of a lot of my work as aggressive compliance. I've always been fascinated with Magellan and the concept of circumnavigation: going far enough in one direction to end up in the other...or almost an Orwellian invisibility through excessive visibility.

1. Solnit, Rebecca. "The Invisibility Wars." *Mass Effect*, 2015.

Hasan Elahi (American, born in Bangladesh, 1972) is an interdisciplinary artist working with issues in surveillance, privacy, migration, citizenship, technology, and the challenges of borders. His work has been presented in numerous exhibitions at venues such as SITE Santa Fe, Centre Georges Pompidou, Sundance Film Festival, and at the Venice Biennale. Elahi has spoken at Tate Modern, American Association of Artificial Intelligence, International Association of Privacy Professionals, TED, and the World Economic Forum. He is currently Associate Professor of Art at University of Maryland.

www.elahi.umd.edu/

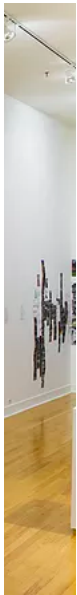
Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Programs & Events](#)[About](#)

Holly Hanessian

[< Return to Artists](#)

Touch in Real Time
2014, paint, wire, ceramic hand-
prints, and vinyl letters
96 x 168 inches

courtesy of the artist © Holly
Hanessian
Meg Eastman Photography, LLC

|| < 2/3 >

Interview by Lindsay Hamm, November 2016

In Hanessian's multi-year project, *Touch in Real Time*, each ceramic piece, strung along wires contrasted by a black wall, is representative of moments in time between pairs of people, connecting individuals and demonstrating the value of touch. Each was formed during a handshake shared by the artist and a participant where wet clay was pressed between their connected hands. The fired porcelain handshakes are displayed outlining gamma, theta, beta, and alpha waves from an EEG phase. During the project, brain image patterns were mapped while individuals shook hands showing how the

production of oxytocin, the bonding hormone, released during the 15-20 second interaction affected the participant's brain.

Each ceramic piece is a physical record of one intimate interaction, both as a literal document of the two handprints and as a symbolic representative of the moment. How did you decide to focus on the handshake as the focal element of this artwork?

HH: The idea of touch was central to the artwork and the act of handshaking is a typical formal behavior that easily transitioned into an intimate interaction.

An EEG allows neuroscientists to map electrical patterns through the five brain waves (gamma, beta, alpha, theta and delta). Are these peaks and valleys from the recorded EEG patterns? What is the significance of having the handshake forms comprise the visualization of waves?

HH: Yes, these are peaks and valleys representing recorded EEG patterns from when I worked with a team of neuroscientists trying to see where touch resides in the brain. Each of these EEG states, gamma, beta, alpha, theta and delta represents different types of behaviors that are taking place during the handshaking, i.e. arousal, memory, etc.

In the context of this exhibition, the ceramic casts of the handprints become the data, coupled with the brain wave information. Does this work make a connection between the idea of a moment recorded in analogue (the cast handshakes) and our digital world of instant communication?

HH: The handprints are the actual moment caught during the handshaking event. They are the artifact, the residual data from the moment two people have a human interaction. It is the defining moment of an analogue event and then strung on electrical wire. Dovetailing the artifact, the analogue as a counterpoint to our digital communication was extremely important.

What was the importance of this project being part social engagement and part scientific research? How do these two separate operations interact with each other?

HH: The interaction was significant by asking people to take the time to stop and be 100% present with another person. It was the act of intimacy, of holding hands AFTER the handshake for another 5 minutes and being aware that through the release of the hormone oxytocin, that they can make a physical connection with the person they are touching.

In other works you have used white porcelain to signify a sanitary, hygienic material. How does this distinction play a role in this project?

HH: The porcelain used in this project was an incredibly fine and very soft clay that responded with a very distinct impression when the two hands came together and squeezed. I will be a bit ceramic nerdy here and also comment that this clay body has an intrinsic visual depth when fired that most ceramic clay bodies don't possess.

While exploring the importance of touch did you make any unexpected discoveries?

HH: I found that even though we are digitally connected, many people are hungry to reach out and touch in our culture.

Holly Hanessian (American, born 1958) is a studio artist who creates artworks that inhabit the overlapping worlds of craft, design and contemporary art. Her most recent project involves ideas based on neuroscience and the senses, in particular the sensation of touch. In addition to her ceramic art practice, she has written articles observing cultural changes in the ceramic world and most recently investigated contemporary ideas using digital applications in the field of contemporary ceramics. She is a member of the Socially Engaged Craft Collective and ArtAxis.org, and is the area head of ceramics and a Professor of Art at Florida State University.

www.hollyhanessian.com

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

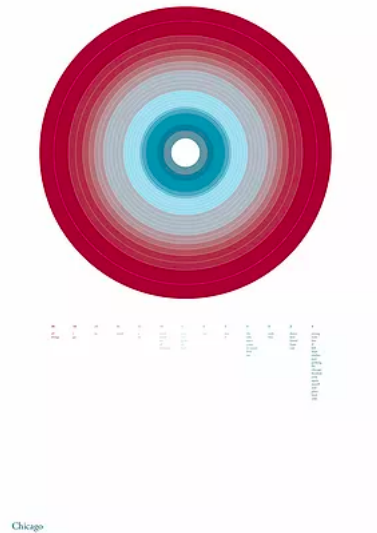
[Digital America](#)

[Programs & Events](#)

[About](#)

Jax de León

[< Return to Artists](#)



Illinois: Visualizing Music
2009, inkjet print on paper
28 x 22 inches each, 13 total

courtesy of the artist, © Jax de León

|| < 2/3 >

Interview by Lindsay Hamm, October 2016

You made these word usage circles as a part of *Illinois: Visualizing Music*, a project inspired by Sufjan Stevens' album *Illinois*, where you took each song, deconstructed, rearranged and built it up again. Each piece is the equivalent of one song from the album and is made up of many concentric circles with each circle representing a specific word in the lyrics.

How did you pick Sufjan Stevens as an artist and why this album in particular?

JL: *Illinois* is my favorite album and has meant a lot to me for many years. It was released in July 2005 right before I left for college and became the soundtrack to my experience those four years. When I first began to conceive of this project it was much bigger - data visualizations about music in general or entire genres or discographies - but that ultimately felt too broad and impersonal and frankly too much to cover in one year. When it struck me to just focus on one album, the choice was obvious. *Illinois* is the one album I could listen to over and over and always find deeply compelling.

How did each song influence your choice of concentric circles as well as the color composition?

JL: *Illinois* is an expansive, dense, complex 22 track album with a wide range of songs, ranging from 6 seconds to over 7 minutes long. 13 of those tracks have vocals, and I wanted to display how unique each one was, where long songs with lots of words and repetition produced physically larger circles. The concentric circles invoke vinyl records, and the color palettes were a personal choice - what shades I felt were appropriate for the tone of each song.

Each song's color palate is a sort of ombré effect, does this progression have any specific meaning or correlation?

JL: The gradation of specific colors was one of the more subjective elements to these pieces. I wanted the colors and circles to almost vibrate, to feel like a moving thing, where data takes on a new and unexpected life.

Do you see your work as an almost truer representation of the album, only colored by your experience and reaction to it?

JL: Nothing can even come close to actually hearing the album. I looked at this project as an opportunity to see music in a different way, that might compliment the music itself and bring new insights to light. During the original exhibition of the entire project, I played the album on loop for the whole week it was displayed, which I felt was the only way to truly honor the work of art I had deconstructed.

Did anything surprise you when dissecting these songs into data visualization? If so, was it impacted by your ability to see them in a graphic form?

JL: I was constantly surprised by the data these songs produced. On a basic level, I was surprised by how much data there was to extract. Despite a history of playing various instruments, I am by no means a musician, so there was a limit to what I could do. But even with that limited knowledge I was shocked at how many elements of the music I could quantify. The rest of the project visualizes lyrical themes, vocalizations, note frequencies, instruments, lyric length and structure, and a map of actual locations in Illinois that are mentioned over the course of the album. I could have easily continued the project for years. It was always a challenge to figure out the best way to display each type of information, since the album varies in so many ways. What works for one song or bit of data might not work for all of them, and I learned a lot about data visualization by working through those difficulties.

On your website, you have said you are always interested in music opportunities and connections, so what drives your interest? Are you working on anything right now?

JL: Music has always been my biggest passion, and I've tried to connect music and design as often as possible in my career. From data visualizations to designing album art and show posters, it's challenging and fascinating to create

something visual to represent and compliment something auditory. I'm currently working full time so side projects tend to be fairly small at the moment.

Jax de León (American, born 1968) is an artist and graphic designer living in Brooklyn and working for About.com in Manhattan. She received her B.F.A. from SUNY Purchase School of Art + Design in May 2009.

www.jaxdeleon.com

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

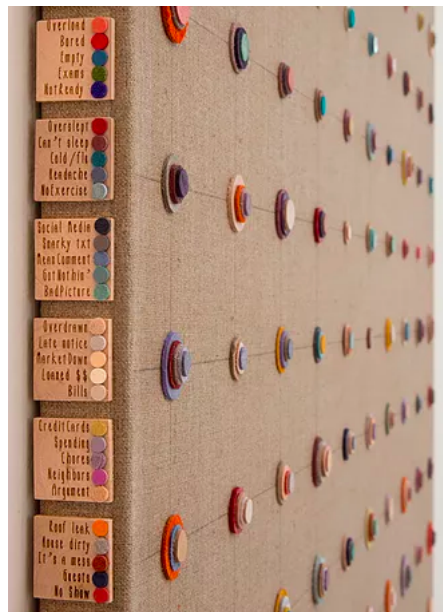
[Digital America](#)

[Programs & Events](#)

[About](#)

Laurie Frick

[< Return to Artists](#)



Daily Stress Inventory #8
2016, cut leather on stretched linen
30 x 40 inches

courtesy of the artist and Edward
Cella Gallery © Laurie Frick

|| < 3/3 >

Interview by Lindsay Hamm, October 1016

In Laurie Frick's piece, *Daily Stress Inventory #8*, dots appear at the intersections of a pencil drawn grid on stretched linen. Each dot, made from layered hand cut leather circles, is equal to one day. Every circle corresponds to a different logged stressor from her daily life and the size variation of the circles reflects the amount of stress inflicted. On the left and right edges of the piece are the legend and future chronic health gauge, respectively.

Why did you decide to collect your daily stresses and how did you determine what counted as stressors?

LF: I've been tracking human measurements as a way to 'see' yourself ... and a little over a year ago, I believed all the data about us could anticipate actions. When I began researching and reading academic papers about prediction, I found a study that evaluated small stressors and captured cortisol levels, and over a multiyear period evaluated resulting effects on long-term chronic health. All very real. Then I tracked down multiple studies of stress going back to the 80's and correlated small stress relative to today, things that drive us nuts, and I imagined

the physical 'dial' or score you could immediately see the result on long-term health.

How did you decided to work with commonly found or handmade materials such as linen, leather and wood? Data collection feels more sterile and in line with digital and/or machine-made materials. Does your work relate to juxtaposing medium and concept?

LF: I have always thought familiar materials that we know and experience frequently possess a more human feel. Seems right for human data. I also try to think about the physical materials and its relationship to us and what it's measuring, they have a connection for me. Maybe others see it, maybe they don't ... doesn't matter.

In the legends on the left side of the artwork, each day is signified by a wooden square with the five colored circles corresponding to their defined stressor. How did you choose the color palette for each day as well as the distinct color for each circle?

LF: No. The little squares on the left side of the work are a legend of all possible stressors, the leather color is indicated with the tiny punched circle. You'll see the corresponding leather color in the grid on the front, each stack of cut leather circles represents a day, the size correlates with the amount of stress.

On the right side of the work you have a future chronic health gauge; can you explain what this is? How does the color progression factor into its meaning?

LF: It's like an old-fashioned temperature chart, warm shades are more stress, cool shades are less. While it's static, you can imagine a future experience where you move the arrows up or down depending on how you're handling the small daily inventory of stress.

By logging subjective data points you have created a daily journal of your mind. Is this meant for personal reflection, as a sort extension of the field of neuroscience, or something else entirely?

LF: I'm creating actual maquettes for user interfaces. This could totally be real at some not-so-distant point in the future.

In a past interview you said, "in all of these patterns, I do think there is an essential idea of who we are." (1) What meaning have you found through your own data? And although you are gathering and presenting us with these patterns, how do you perceive your work viewed as art and not simply visual representation?

LF: I see data as identity. They are in fact data portraits. Also I believe that abstract data collected about us can be consumed by our sub-conscious and have an effect on us. It's art in that I am creating work based on the experience of how we will consume data in the future. I mix experience and data. If you look closely, these are not super accurate ... and tend to be future facing. And yes, I've gained a much better understanding of me from my data.

1. Laurie Frick in Jacoba Urist. "From Paint to Pixels." *The Atlantic*. May 14, 2015. Accessed October 3, 2016.
<http://www.theatlantic.com/entertainment/archive/2015/05/the-rise-of-the-data-artist/392399/>.Artist

Laurie Frick is a data artist living in Austin, Texas and New York, New York, exploring the bumpy future of data captured about us. She holds an M.F.A. from the New YorkStudio School, an M.B.A. from the University of Southern California and studies at New York University's ITP program. Frick recently was awarded residencies by Samsung Research and the Neuroscience Research Center University of Texas. She is represented by Edward Cella Gallery in Los Angeles, and Pavel Zoubok in New York.

www.lauriefrick.com

www.tedxtalks.ted.com/video/Seeing-The-Hidden-Language-In-2

www.edwardcella.com/artist/Laurie_Frick/works/2779

www.vimeo.com/180077714

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

[Digital America](#)

[Programs & Events](#)

[About](#)

Lee Walton

[< Return to Artists](#)



*The Golden State Warriors,
24 Game Winning Streak,
Plus System Notes and Game 25,
October 27 - December 11, 2015*
2015, ink and wash on paper
7.25 x 6.25 inches (paper size)

courtesy of Kraushaar Galleries
© Lee Walton

|| < 1/6 >

Interview by Lindsay Hamm, October 2016

Lee Walton's work, *24-Game Winning Streak* (2015), is a set of 26 drawings, of which 24 are based on each of the 24 games won by the Golden State Warriors (NBA) in their 2015 season. The 25th drawing represents the streak ending 25th game, and the last drawing features detailed system notes that provide insight into the artist's methodical process. Each game drawing consists of four distinct quarters and time-based records of every play, shot, and move in the games.

This series, which you classify as "system drawings," records and renders basketball as art. What inspired your decision to create these pieces and how does it act as commentary on your own love for the team and sport?

LW: One night in 2000, I had a dilemma. I wanted to be in my studio making drawings, but I also wanted to watch the World Series. At this time, I was fascinated by John Cage and his use of chance-operations to create musical compositions. Cage used the I-Ching, an ancient Chinese oracle based on the 64 outcomes from the *Book of Changes*. I then began to wonder if could use the outcomes of a baseball game in the same way that John Cage used the I-Ching? So that day, I created a set of actions that would happen in response to a slew of

events from baseball games themselves. I tuned into the live radio broadcast and responded to the events of the game. I ended up making a whole series of new work in the studio and I never missed a pitch! Over time, I have created systems for all kinds of sports games, from soccer, football, and basketball to pool, darts, golf and more.

Each piece's secondary vibrant hues are game specific referring the opposing team's colors (ex. *Game 16 Warriors vs L.A. Lakers* features yellow and purple). Why did you choose to represent loss in the 25th game as colorless instead of continuing your system with the Milwaukee Buck's green and white?

LW: Using the opposing teams colors was both a practical and conceptual choice. One of the reasons to create systems that determine the drawings is to remove my ability to make choices based on taste. As Sol LeWitt once said, "taste is based on past experiences, I am interested in new experiences." In this regard, I simply used the opposing team's color combinations determined by each game. I am curious about the idea that these color combinations were chosen by top-tier marketing consultants and professional brand strategists! It seemed like a good collaboration to me... As for the loss in game 25, I was inspired to make it "colorless" by a book I was reading at the time called *Colorless Tsukuru Tazaki and His Years of Pilgrimage*, by the Japanese Author Haruki Murakami. Tsukuru, the main character had four very close friends. Each of them had colors as part of their surnames, but his name was colorless. This had a great effect on Tsukuru and he always felt empty because of it. Game 25 felt empty to me.

When did you transcribe the game, in real time or after the season was completed? How did the fast paced nature play into your creative process? Was there a sense of urgency in trying to keep up or did your system make it easy to calmly follow along?

LW: Over the years, I have found many ways to transcribe and record the activities of sports games. Some games I listen to live and make drawings in time, while others I record the events myself or find play-by-play records on-line. I have become fascinated with the on-line transcriptions of basketball games, as they break down the events by seconds, minutes, and quarters. These transcriptions are dense with information and become like recipes. The *24-Game Winning Series* involved hundreds – an absurd recipe made up of hundreds of pages. Every event of each 48-minute game was plotted out according to what happened in the game and when it took place. For this series I created 4 quadrants of 12 small rectangles. Each quadrant (quarter) represented a 12-minutes of the game. To make the drawings, I worked in layers. Focusing on one game at a time. I would plot out each event, such as "rebounds" and go through the transcriptions, noting when each rebound happened and making the mark in the corresponding rectangle. I would then go through the next event, plotting away... In the event of a bad pass, a small hole was to be made in the paper. You can see the holes clearly if you were to hold the drawing up to the light. Plotting each event was tedious and took weeks. However, making each mark is a (1) perfunctory affair. I am simply following the rules of the system. Without the burden of making choices my mind is relaxed, yet hyper-focused. It's a strange combination.

How were the symbols representing different plays and goals chosen? Was the specified mark's design influenced by its corresponding action in the game?

LW: Primarily, these marks aim to emulate the feel and flow of a basketball game. As a mental rule, each mark and line needed to negotiate around one another – dashing and twisting in search for open space. Overlapping lines are much like the players bumping and crashing into each other on the court! Various actions in the games were assigned different mediums, such as pencil, black ink, ink wash, silver paint, light pencil, and dark pencil. The choices were influenced directly by the actions. For example, light blue ink wash was made when Steph Curry scored. I wanted the impact of his presence to shade each game in a subtle way. Missed three pointers were recorded in a very light pencil (as if they never happened) and a made shot was recorded in a darker pencil. Also, when a player missed a free throw, nothing happened at all.

How did making this series affect your experience as a fan? Were there any unexpected patterns or findings?

LW: The most notable affect this series had on me was more about drawing than basketball. The exhaustive number of games in the series allowed me to really see and feel the way the lines found space and interacted. At times, the spaces felt overly constrictive, tense and difficult to maneuver. Other times, the space seemed to open up, breath, and the lines danced effortlessly through the space. I imagine the players have similar experiences on the court. When a rhythm is found everything comes to life and you just try to ride it out as long as possible... before the opposing team calls a "Time Out!"

1. When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. The idea becomes a machine that makes the art. —"Paragraphs on Conceptual Art" by Sol LeWitt, *Artforum*, June 1967.

Lee Walton (American, born 1974) is a California-born artist with an expanded practice that includes drawing, performance and social practice. He received his Masters in Fine Art from California College of Arts in 2000 and is currently an Associate Professor of Art at the University of North Carolina at Greensboro.

www.leewalton.com/

www.kraushaargalleries.com

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#) [Artists](#) [Curator's Preface](#) [Digital America](#) [Programs & Events](#) [About](#)

Martin Brief

[< Return to Artists](#)



Elementary Particles and the Forces of Nature

from the series *A Brief History of Time*
2015, ink on paper
image: 22 x 9.5 inches
sheet: 32.25 x 19.25 inches

The Origin and Fate of the Universe

from the series *A Brief History of Time*
2015, ink on paper
image: 22 x 15 inches
sheet: 32.25 x 24.875 inches

Wormholes and Time Travel

from the series *A Brief History of Time*
2015, ink on paper
image: 22 x 5.5 inches
sheet: 32.25 x 15.875 inches

courtesy of DANESE/COREY, New York
© Martin Brief

|| < 2/6 >

Interview by Elizabeth Schlatter, October 2016

Your series *A Brief History of Time* visually cross-references the text of Stephen Hawking's book of the same name, originally published in 1988, with text from the Torah, the New Testament, and the Qur'an. Each of the 12 sheets of paper in this series corresponds to one of the 12 chapters in the book and features thousands of very small rectangles (about 1/16 of an inch tall), upon which you've written the chapters' words and then affixed (using tweezers) to the sheet. The color of these small tiles corresponds to the appearance of the words in the religious texts; gold denotes a word that occurs in all three scriptures, silver is for words that appear in two, bronze is for a word in one, and copper indicates a word that only appears in Hawking's publication.

How did you decide to focus on Hawking's book as something of a matrix in this series, upon which you identify links to three religious texts? Similarly, how did you decide to work with the Torah, New Testament, and Qur'an?

MB: For many years prior to starting this project I had been exploring how we create meaning and beliefs. My projects involved using existing texts (dictionary, *New York Times*, Amazon, etc.) and it was a natural progression for me to use these three religious texts to expand my explorations into the realm of religion. I

became very interested in the fact that these three religions have such a close historic relationship, a shared God, and tremendous conflict. Because each of these religions believe their text is the word of God, I began the project by examining the words used in each text to look for differences. What I found was a tremendous similarity between them.

As the project evolved some of the public debates involving science and religion led me to introduce a fourth text as a way to explore connections between these two disciplines. I chose *A Brief History of Time* because it is one of the best selling science books of all time and was written for lay people, supposedly an easy to understand version of some very complex theories surrounding how the universe began and what is going to happen to it.

The coloring system – gold, silver, bronze, and copper—relates to concepts of value. What is the significance of these colors in the your series?

MB: In my project the colors also refer to value. This project began with just the three religious texts and I used gold, silver, and bronze as a way to identify which words were used in all three texts as opposed to words only used in two or one. Because each of these texts is believed to be the word of God (the same God) it made sense to see which words were favored and therefore more important. When I introduced Hawking's book I needed a fourth color to indicate words only used in his text. Ultimately I was curious to see how much of Hawking's words were also in the three religious texts and which kinds of words, gold, silver, or bronze.

How did you determine the composition of these works, the materials that you used, and the installment of the pieces, which sit off the wall, unframed?

MB: I have been using ink on paper for many years. I like the simplicity of these materials and that traditionally they are used commonly by artists, writers, and scribes. I experimented with several methods of creating the colored blocks and this final method was the most efficient and, believe it or not, the easiest. The colored "tile" effect also makes a reference to mosaics and religious art.

The installation method is one that I typically use for my drawings. Because of the intricate, delicate nature of my drawings I don't like to have it mediated by a glass in a frame. I want viewers to be able to get close to the work. Floating the pieces off the wall also gives them an ethereal quality.

What surprised you in creating these works, either in the process itself of making these images or in the seeing the series as a whole when it was complete?

MB: I had done some tests to find the best way to apply color to the words and I determined that the tiles worked best functionally and conceptually. The biggest surprise came when I laid out an entire chapter (without glue) to see what it would look like. I was surprised how good it looked and how much the relief of the tiles affected the piece.

In a previous interview you said, "Cataloguing is about control, and for me, the illusion of control. Similar to the idea that myths help to explain the unexplainable, these types of catalogues bring a sense of order to what can never be ordered." [1] Sharing and gaining knowledge and control of an uncertain world/universe could be considered a motivation behind all of the texts represented in the *A Brief History of Time* series. How do the concepts of uncertainty and control play into your conceptual and materials processes?

MB: Uncertainty, the unknown, and control are major conceptual themes in my work and as a result figure into the process. For each of my recent projects I created tightly controlled systems that I followed in order to make the work. The system is usually guided by the specific information that I am working with in each project. In *A Brief History of Time* the system was fairly simple: determining the word usage in the three religious texts, creating the color code, and applying it to the text of Hawking's book. Once the system is established the final drawing is something I can't control. The formal qualities of each piece, placement and amount of color and the size of the piece are determined by the system.

1. Martin Brief, interview with Laura Fried, in Gallery Guide for "Great Rivers Biennial 2010," (St. Louis, MO: Contemporary Art Museum, 2010), accessed October 2, 2016, <http://camstl.org/uploads/2011/01/10/martinbriefgg.pdf>

Martin Brief (American, born 1966), has had several solo and two-person exhibitions, including at the Danese/Corey Gallery in New York and the Contemporary Art Museum in St. Louis, MO, and has been included in many group exhibitions, such as at the Arkansas Art Center (Little Rock), the Delaware Center for Contemporary Arts (Wilmington), and Gallery Joe (Philadelphia). His work is in the permanent collections of the Joan Flasch Artist Book Collection at the Art Institute of Chicago, the Center for Creative Photography at the University of Arizona, and the Newberry Library in Chicago. He is the recipient of numerous residencies and awards, including a MacDowell Colony Fellowship and the 2010 Great Rivers Biennial Award.

www.martinbrief.com

www.danesecorey.com/artists/martin-brief

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#) [Artists](#) [Curator's Preface](#) [Digital America](#) [Programs & Events](#) [About](#)

Nathalie Miebach

[< Return to Artists](#)



Chutes and Ladders
2015, wood, paper, data
14 x 18 x 20 inches

Musical Buoy in Search Towards a New Shore (Navigating Into a New Night)
2009, wood, data, and reed
32 x 32 x 32

score for Musical Buoy in Search Towards a New Shore (Navigating Into a New Night)
2009, colored pencil on watercolor paper
13 x 17 inches
realized and performed in 2009 by Elaine Rombola (American, born 1978)
2 minutes, 16 seconds

courtesy of Miller Yezerki Gallery
© Nathalie Miebach

|| < 2/2 >

score for Musical Buoy in Search Towards a New Shore (Navigating Into a New Night) - Nat...



00:00 / 02:17

Interview by Elizabeth Schlatter, November 2016

Nathalie Miebach creates sculptures, installations, and musical scores that manifest scientific data in artistic forms. Her three-dimensional works utilize basket-weaving techniques to establish a grid framework from which she varies patterns and shapes, and incorporates dowels, reeds, and other elements. Together they convey "snapshots" of weather events during specific periods of time. Miebach gathers the data by using simple measuring instruments placed in the landscape as well as from various weather sources posted online.

In your TED Talk (2011), you said "Every colored bead, every colored string, represents a weather element. And together, these elements not only construct the form, but they also reveal behavioral relationships that may not come across through a two-dimensional graph." (1) How does working in three-dimensions allow for more opportunity to convey weather data?

NM: Weather is a very visceral, multi-dimensional experience that happens all around us everyday, but is for the most part invisible. We can measure temperature, feel wind, sense barometric pressure drops, but we cannot actually "see" weather. Translating weather data into 3-D allows me to give this invisible complexity of behaviors a visual, tactile form. The pieces aren't so much about explaining weather in a didactic manner, but rather to invite the viewer into the layers and layers of interactions that make up weather.

Regarding the data that inspires your work, you've explained, "It's not just temperatures, wind, and barometric pressure, it's all these tentacles, all these human stories that are connected that really make this information so rich." (2) Could you talk about what you mean by human stories and how are those incorporated or responded to in your pieces?

NM: I think data just by itself can be pretty dry. What makes data meaningful is if it connects to or impacts something that the viewer can relate to. When I decide what storms I want to make a piece about, I look for two things: a compelling meteorological story embedded within the data itself, and a human story that was impacted by the storm. We associate storms usually with death and destruction, but it can also bring out some powerful stories about empathy, compassion and beauty.

I think of the data as building the scaffolding upon which the human drama takes place. Usually the data itself builds the structures or it is placed on bands that function like timelines that encircle the piece. Components that are non-data based and relate to the human story are usually more recognizable, such as tiny ships, or rafts. Sometimes the data itself will also build structures that function as metaphors for the human story. For example, the data that builds *Chutes and Ladders* builds the rollercoaster turbine and the Ferris Wheel. But imposed on that is the metaphor of the game Chutes and Ladders, with ladders indicating the precarious ride we are on in terms of how we are responding to Climate Change.

In that same source referenced above, you said, "I still want you to be able to read the weather off of these sculptures." (3) Why is accuracy such an intrinsic value in making these pieces?

NM: I want the pieces to walk a very delicate, uncomfortable line in that they exist as an aesthetic object in a space, but can also be read as data visualization because of their accuracy. By staying true to both the numbers and the aesthetic demands of the structure the data builds, I'm trying to push the viewer into asking him/herself where does this object really belong? What sort of assumptions do we bring with us about the visual languages or materials we associate with art versus science?

Is that boundary between fidelity to data and artistic creation mutable? Does it depend on the professional responsibilities of the designer versus the artist?

NM: To me, one of the most interesting aspects about working with data as a craftsman is the inherent contradiction it sets up for me everyday in the studio.

It brings up this question of whether or not data can ever be treated as an artistic medium? I believe in the old lesson you learn from any craftsperson, which is that to truly understand a material you have to burn it, twist it, break it, melt it, play with it, but most of all fail with it a thousand times for you to even begin to understand where its true parameters and possibilities lie. If you take that same approach with data, you find yourself very quickly in uncomfortable territory. To break, to twist, to play with data means to soil some kind of purity we imbue data with. Data becomes "Bad Data," which renders it unusable. I'm fascinated by that because we associate data with truth and facts and any kind of alteration is seen as a violation of that notion. How can we ever truly understand data if we are never allowed to fail with it? I wonder, is there a way we can treat it like a material but still allow it to retain its position as a kernel of truth? Does playing or translating data into art necessarily mean that we compromise its integrity as a container of fact? I think that is where the poetry of data lies for me – in that very divide between data as a container of fact and data as a material.

Although there is a literal connection between the form and the content of your *Weather Scores*, the sculptures also possess a bit of whimsy through the colors and shapes you choose, the slightly off-centered appearance of the structures, and the hand-made craftsmanship. Are there emotions or responses that you hope to elicit from viewers through your aesthetic choices?

NM: The color palette and the reference to toys is deliberate. I want to confront the viewer with the visual and aesthetic language associated with play before they realize that underlying all this visual chaos is a numerical logic. It's a way of luring you into the piece, without immediately telling you it's data you are looking at. Most viewers become curious and become a kind of detective. First, you get overwhelmed by the colors and shapes. Most people who visit my studio mistake it for a toy shop. After a while, you begin to notice that there are tiny numbers associated with some of these colors and dowels. You see symbols that vaguely remind you of something you may have seen on the weather channel. So, slowly, this other reality starts to emerge, one seeped in numbers and systems.

For "Crooked Data," your piece *Navigating into a New Night* is displayed with a recording by pianist Elaine Rombola of a musical score you created from the same data. Why do you compose musical scores? Do you make them simultaneously with the sculptures or is there a sequence that you follow?

NM: After focusing on weather data for several years, I began to become increasingly interested in the discrepancy between how weather instruments record weather and how we as human beings actually interact with and interpret weather. Most of the time, weather falls into the background and we only notice it when we forgot our umbrella or the windshield wipers need replacement. But, human beings are actually great weather stations because we register a lot more information about our environment than we are aware of most of the time – both physically and emotionally. A thermometer won't ever get the flu, a wind meter won't ever lose a loved one and a barometric pressure device won't ever fall in love. We do, and these human experiences can influence the way we read,

understand and remember weather. Once in a while, weather seeps to the foreground such as when we get married, when we lose a loved one, when we heard about the attacks on 9/11 – we remember the weather on those days. And then there are weather events that affect us personally, when we see the rage and fury of a blizzard come through and shut down a city for a few days.

In order to tap into those more nuanced readings of weather, I began to translate weather data into musical scores, in which the notation system became a filter that would allow me to bring in more subtle readings of the information without actually changing the data. The scores are built entirely of weather observations – both from weather instruments and weather observations recorded in a notebook. I use these scores in collaborative performances with musicians, who are asked to interpret the data within very specific parameters. The goal isn't to make expressive music about weather, but to reveal a kind of nuance in the data through sound, which is harder for me to reach through sculpture. I, in turn, use those same musical scores as blue prints and build sculptures that function as data visualizations of the weather event as well as 3-D musical scores.

Navigating Into a New Night is the very first score I ever wrote, and Elaine is the first musician I collaborated with in this series. The score is about the passing of my father-in-law. It translates weather data from the first day we found out about his death to his funeral. What struck me during this period of mourning was how much weather instruments are like metronomes. They measure weather like a clock. But when we go through a period of mourning, the feeling of time becomes very malleable – it speeds up, while at the same time slowing down as you try to find your equilibrium again. The score explores that duality of having a score written entirely made up of weather data and then having Elaine interpret it, knowing that this is the story of a loved one passing.

The score and sculptures sometimes get build together. Sometimes a score becomes the source material for a whole series of sculptures.

In the score for *Navigating into a New Night*, different colors represent different factors, such as blue marks for cloud cover, orange for humidity, green for barometric pressure, etc. But with a performance, it's unlikely that a listener could interpret the sounds as representing specific weather data points, at least not as clearly as from looking at the score or the sculpture. Were you interested or challenged by loosening that link to the weather content through performance?

NM: When I'm collaborating with musicians or composers, I'm not interested in the kind of accuracy a computer might give me. I'm more interested in how they navigate the rules and limitations that describe these scores and how they bring in their own artistic voice. The scores are very basic, almost too basic. If you were to play exactly what is on the page, it would be the most boring thing to listen to because you can see right there what would happen – wind would go up, barometric pressure would drop and temperature would dance between the two. Because I am dealing with storms, I am often working with extremes – very high wind, very low pressure. To transpose all the data onto a matrix that is imposed on a musical structure, means that you have scores that span 6-8 octaves. How

do musicians work with those extremes? How do they infuse their own emotional take on the data, while still retaining some of the basic musical structure built by the data?

1. Miebach, Nathalie, from "Art Made of Storms," TEDGlobal, July 2011, accessed November 21, 2016 at http://www.ted.com/talks/nathalie_miebach
2. Miebach, Nathalie, from "The Weather Artist: Chasing Storms with Sculpture," posted by *The Great Big Story*, March 15, 2016, accessed November 21, 2016 at <https://www.youtube.com/watch?v=1ES4Ds7ApQw>
3. Ibid.

Nathalie Miebach (American, born 1972) is a Boston-based artist who has exhibited nationally and internationally including at the following museums: Spencer Art Museum, University of Kansas; the Museum of Science, Boston; Akron Art Museum, OH; Elmhurst Museum of Art, IL; Crystal Bridges Museum of American Art, Bentonville, AR; and the Milwaukee Art Museum, WI. She has been the recipient of numerous grants and residencies, including IAPP in Washington DC; ART Lab Residency – Mountain Lake Biological Station, Pembroke, VA; Pollock-Krasner Award, New York; Bemis Center for Contemporary Arts, Omaha, NB; and Amherst College Artist-in-Residence, MA. She has a B.F.A. in political science from Oberlin College, OH and a Masters in Art Education and a Master of Fine Art from Massachusetts College of Art.

www.nathaliemiebach.com

www.millervezerskigallery.com

www.ted.com/talks/nathalie_miebach

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

[Digital America](#)

[Programs & Events](#)

[About](#)

Sosolimited

[< Return to Artists](#)



Fifty Shades Leggings

92% Nylon and 8% Elastane, 41 x 15 inches

Great Barrier Reef Tote Bag

100% polyester canvas, 16 x 15.5 inches, handle 23 inches

Iridescent T-Shirt

100% cotton, 27 x 20 inches

Lava Scarf

100% rayon, 36 x 36 inches

Mona Lisa T-Shirt

100% cotton, 27 x 20 inches

Summer Bomber Jacket

Body is 100% nylon, lining is 100% nylon, ribbing 100% cotton 35 x 57 inches

App created in 2015, clothing printed in 2016

© Sosolimited

|| < 1/4 >

Interview by Elizabeth Schlatter, November 2016

Designed by the American design studio Sosolimited, *PixelWeaver* is a web-based application that generates pixelated clothing patterns from internet search terms. These patterns can be printed onto jackets, t-shirts, leggings, scarves, and bags using the Print All Over Me platform.

For example, typing in the term "Mona Lisa" will result in a deconstructed portrait of amber hues in various saturations, made of thousands of little rectangles. Each pattern

is a distillation of the shapes and colors of the search, customized to the user's preferences.

What inspired you to create the *PixelWeaver* app?

S: Our studio often works with streams of data as an artistic material. We try to distill insight and beauty from datasets that are too vast to parse as an individual. We've worked with lots of text-based datasets – *PixelWeaver* was our first experiment with translating text into visual data.

We wondered what it would mean to wear the "average" image of an idea on a t-shirt. The design of the app organically grew out of this question. We found that the ephemeral nature of search results causes the pattern for a given term to change over time. Post-election, the visual results for "Trump" are very different from when we first created the app. You can actually see the imagery start to converge on a presidential-style headshot.

Why choose to have the designs printed onto clothing and accessories, instead of onto other things, like mugs, digital wallpapers, stationery, etc?

S: *PixelWeaver* was specifically designed for Print All Over Me, an internet-based custom clothier. 30% of *PixelWeaver* sales go to the Processing Foundation, an organization that promotes digital literacy and creativity. Sosolimited was one of two creative studios invited to participate in the campaign.

From an artistic viewpoint, it seems appropriate that the creations are worn rather than used. Fashion is closely tied to self expression. Even if the patterns are not recognizable, the knowledge that the term will be worn adds some weight to the user's search term choice. It also gives people a fun secret to walk around with.

The overall images tend to be unreadable until you learn the search terms that inspired the design, which then engender responses of either "Oh right, cool!" or "really?" Was the impetus for including thousands of tiny pixels in the design to divorce the overall image from recognition, to scramble the signal so to speak?

S: The decision to obscure the original imagery had several motivations. Most practically, remixing allows us to work with literally any image, whether copyrighted or otherwise unsuitable to show in its original form. Aesthetically, we liked the idea of capturing an average of many, many images. The resulting patterns are a deconstructed distillation of the images. They retain many of the original characteristics, but reflect a more abstract impression of the search term.

At one point, we debated including the source term as text on the garment. In the end, we decided to omit it. The scrambled imagery becomes a cypher for a user's search history. The decision to reveal that source is completely up to the user. It frees them to use obscure or unexpected search terms to create mesmerizing patterns. Words that have little importance, like "popsicles" or "tongue scraper" can be elevated to an artform.

Do you wear garments created using *PixelWeaver*, and if so, what sorts of comments do you receive?

S: We've yet to sport our garments in public, but that's only because it's so hard to choose. There are a pile of pieces in our shopping cart waiting to be ordered!

There are interesting analogies between *PixelWeaver* and other artists and art movements that grapple with gestalt effects, such as 19th-century Pointillism, 20th-century Cubism, and modern artist Chuck Close's portraits comprised of separated units of color. Are there any artists or artworks that influence or inspire you?

S: We are fascinated by the way these artists translate ideas into images, especially their use deconstructive processes to create recognizable images. We've also been influenced by remix culture, and we're often drawn to work that builds new wholes from lots of chopped up parts. Christian Marclay's *The Clock* is a beautiful example of this: a film made of hundreds of other films that challenges our relationship to time. We are also influenced by Jenny Holzer and other artists working with text.

Do you ever worry about people using *PixelWeaver* to illustrate terms that might be somewhat nefarious?

S: In testing the app, we let our imaginations run wild, experimenting with all kinds of offensive search terms we'd rather not print here. We discovered, however, that even the most offensive material loses its ability to offend.

Nefarious imagery serves primarily to intimidate others or show solidarity with those that express your opinions. If that imagery is mashed to oblivion, what real purpose does it serve? The abstraction of the images simultaneously allows the freedom to choose any search term and protects those that view the clothing without context.

It looks like *PixelWeaver* inspired another user-generated, image-making app that you created called *Miraj*, in which viewers with the new Apple TV can say a word into the remote and a continuously generating kaleidoscope image appears based on images gathered from searching for that word. What draws you to creating apps that link words and images, combined with user input?

S: This kind of generative approach lets anybody produce a stunning image from a simple idea. In the case of *Miraj*, we went even further to let people simply say something, shortening the distance between imagination and creation. It puts an enormous amount of creative power in people's hands. It also encourages a playful, stream of consciousness interaction that never ceases to surprise. Once you get cooking, it's hard to put it down.

Sosolimited is an American design studio that specializes in interactive environments and data-driven design. Founded in 2003 by three MIT graduates, they are based in Boston and San Diego, and their international client roster includes HBO, Google, Twitter, and Porsche among many others.

www.sosolimited.com

www.sosolimited.com/work/pixelweaver

www.sosolimited.com/blog/sosolimited-print-all-over-me-1

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

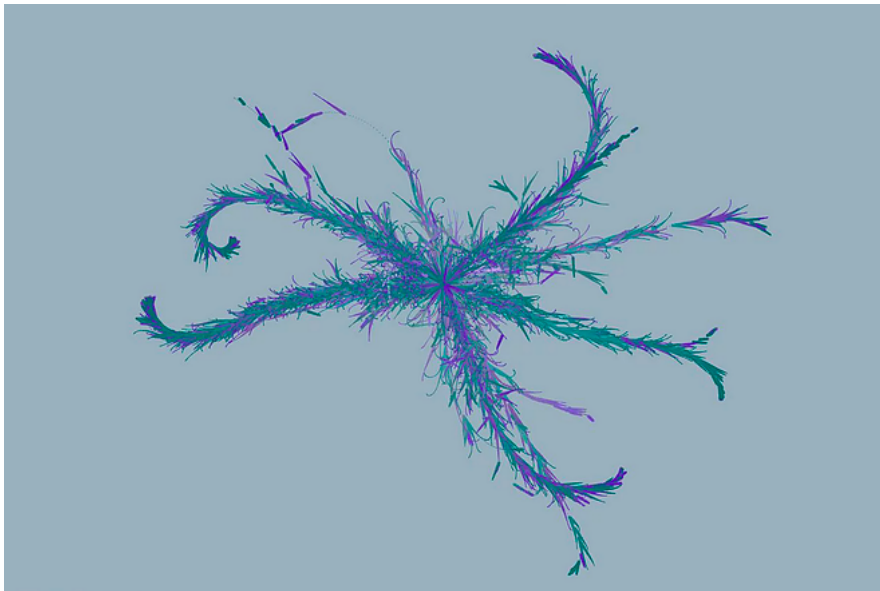
CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#) [Artists](#) [Curator's Preface](#) [Digital America](#) [Programs & Events](#) [About](#)

Stamen Design

[< Return to Artists](#)



still from *Facebook Flowers*
2012, data visualization

courtesy of Stamen Design © Stamen
Design

|| < 2/2 >

Interview of Eric Rodenbeck (Stamen Design) by Lindsay Hamm, March 2017

Facebook Flowers is a series of three videos commissioned by Facebook and created by the American design firm, Stamen Design. Each video correlates to the viral activity following three posts by Star Trek actor George Takei. The three images (Marvin the Martian, Ab Fab London, and Famous Failures) were the most popular on the actor's page having been shared hundreds of thousands of times. Each visualization is made up of a series of branches starting from a single person which generates a thread. Secondary shares continue as extensions of that strand, blooming as the picture is passed from friend to friend. As the branch grows, re-shares split off on their own arcs, sometimes spawning a new generation of re-shares, sometimes exploding in a short-lived burst of activity. The two different colors show gender, and each successive generation becomes more and more white as time goes by as a sort of ghosting effect.

The majority of Stamen Design's work collapses data visualization onto recognizable maps. *Facebook Flowers'* time based, non-geographic mapping of viral activity seems to be an outlier, what about this project appealed to you and your team? How did the initial approach differ from other projects?

SD: We do about 40 projects a year, and the ratio of map-based visualizations to more abstract spatializations changes quite a bit. Right now it's about 50/50, which is high. Maps are kind of a gateway drug to data visualization; if you put a small dot on New York and a large dot on Richmond, people know that means there's more of whatever you're talking about in Richmond. And it depends on what the market wants at any given time. Maps, for us, are a subset of data visualization, ones with a geographic component.

Part of how this worked was that we'd been working with the Facebook Stories team for about a year on multiple projects, so the level of trust between the teams was quite high. We were able to be a key part of the concept development around the project, which was super fun. The specific dataset was fascinating too, with a bit of levity: George Takei shares a picture of Marvin the Martian, the Internet goes crazy! And it goes crazy in this very specific way, which is really fun to look at.

In a previous talk you mention the reason for the commission as Facebook's initiative to inform about what's happening on the site in order to engage users. [1] How does *Facebook Flowers* elicit or reference engagement from the viewer? Was there a goal for this visualization apart from an aesthetically pleasing depiction of data?

SD: The goal was to stimulate a public conversation about Facebook's platform. We wanted to show that Facebook knew a lot about how people were using the site, which seems kind of obvious in retrospect but was fun to think about the specifics of it. It's been shared about a million times so it seems to have struck a chord. What I specifically like is the way there's an initial explosion of George's immediate followers, then a bit of a lull, and then a whole new set of George's followers pile on, and those then shoot out in their own directions with their own specific profiles. It's like watching the Internet breathe.

In that same blog post it says that the three accessible facts about each user are their identified gender, age of the user, and Facebook age (number of years since the profile was created). [2] Why was gender the final choice as the determining design factor instead of user age or account age?

SD: We looked into a number of different factors of people's profiles that might have been relevant; you can read about it in the [Evolution of the Flowers](#) blog post. Part of the work of making these things is to make lots of sketches and try different things out and throwing lots of them away. You can see that sharers tend towards the younger end of the spectrum, and there are some versions that take the relative age of the share (how many times it's been shared) into account. In the end it wasn't all that interesting to look at, so we kept the thing simple, at least from an analytical standpoint.

The two represented colors identify the gender of the user as either male or female. How were these colors chosen, and was the palette affected by the original shared image?

SD: You know, I don't remember. I think there may be some relationship between the colors of the original and the visualization. Geraldine Sarmiento did that. She's a terrific designer.

This is where I'd be remiss if I didn't mention the two people at Stamen who did the coding on the project, Rachel Binx and Zach Watson. Rachel has gone on to have a very successful career at places like the Jet Propulsion Lab in Pasadena. Zach worked at the Exploratorium after Stamen, and sadly was killed by a reckless driver at the age of 29 in San Francisco. We set up a [memorial fund in his honor](#) to support the work of young data visualization people at an early stage of their careers. I miss him a lot.

In the blog post, "Facebook: Evolution of the Flowers," Stamen Design says that "drawing pictures with the data can tell you all sorts of things, like the overall shape of the dataset, where there might be gaps or anomalies, and pointers towards which axes you might begin hanging things from to illustrate one element or another". [3] How much does the drawing process influence your overall design in this work specifically? What about in the firm's other works?

SD: That's the whole of the work! Trying to bolt a pre-conceived story onto a dataset without knowing its specific contours or anything else about it is like telling a joke and asking someone to imagine what the punchline is. We're telling stories about what's in the data, as well as what's not in it. The gaps, holes, and errors can be as interesting and as useful as the accuracies and the completenesses.

In the Webstock talk you mention that "maps are data visualizations that have a geographical component associated with them, they are often the easiest ones to get people engaged with [because] they are immediately accessible". [4] Does this work's lack of a geographic component make it less accessible? Why is accessibility within data visualization an important factor for you?

SD: I'll answer those two questions separately. Firstly: I don't think, in this case, that the lack of geospatial context would make the visuals any more accessible, mainly because that's not really the point of this one. I suppose if you plotted the shares on a map it might show you patterns of where people are, perhaps some relation to what time of day it is that people are checking into Facebook, and so on. But we weren't really after that, and "people in Thailand share George Takei's photos more in the afternoon than people in Canada" isn't going to wow anyone. What we were trying to do here was to move past the analytic quality that a lot of data viz has and make something that was clearly real, in the sense that it refers to something in the world that actually happens and has a shape, but that you've probably never seen quite like this before. People have said "it looks like a flower, ice petals, nerve endings," and it kind of looks like all those things, and none of them, but it looks like something.

The second one: what a great question. I've actually never seriously considered why the accessibility of data viz is important to me. It's always seemed intuitively obvious that learning something about the world and how it works using your

eyes is a useful and interesting goal worth pursuing. I suppose it has to do with the capacity of visual material to delight (or repulse) as well as inform (or confuse). I really like the idea that the way something looks can be as important a factor in how you understand it as the "content" of what's being said.

It's also incredibly easy to lie with maps and visuals, which can have real world consequences that can be quite negative. So I'm less interested in making the one visualization to rule them all than I am in helping to raise the general literacy level of data visualization in our culture. It increases the quality of the conversation that we can have about the world.

1. "Webstock '13: Eric Rodenbeck – Drawing outside the lines: Data visualization done wrong." Webstock (vimeo), April 5, 2013. <https://vimeo.com/63442341>
2. "Facebook: Evolution of the Flowers." Stamen Design (blog), October 17, 2012.
3. Ibid.
4. "Webstock" op. cit.

Stamen Design, based in San Francisco, was founded in 2001 by Eric Rodenbeck. Since then the studio has grown to a staff of twelve, and has established a reputation for its expertise in creating compelling interactive design and data visualization projects. The have work that is both beautiful and functional, and is always accessible, interactive

Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

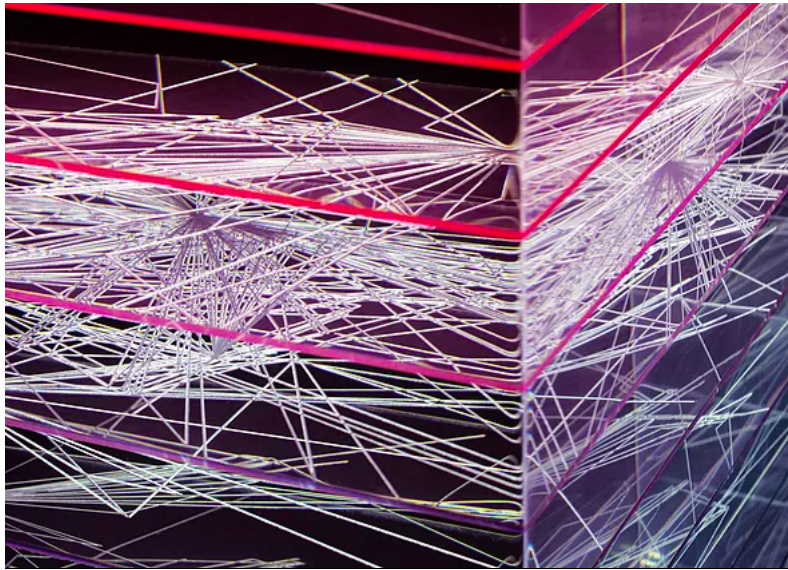
[Digital America](#)

[Programs & Events](#)

[About](#)

Stephen Cartwright

[< Return to Artists](#)



Floating Data (Human Powered Mileage, Temperature 2011-2014)

2016, acrylic and dyed resin

8 x 12 x 1 inches

Floating Data (Spending 2006-2015)

2016, acrylic and dyed resin

5 x 12 x 12 inches

Floating Map (Stroud, UK, 2000-2015)

2016, acrylic and dyed resin

14 x 12 x 12 inches

Floating Data (Driving Mileage, Human Powered Mileage 2010-2011)

2016, acrylic and dyed resin

10 x 16 x 1.5 inches

courtesy of the artist, photographs by Will Arnold © Stephen Cartwright

|| < 1/8 >

Interview by Elizabeth Schlatter, October 2016

You've been recording your hourly latitude, longitude, and elevation since 1999, and all but three of the works in this exhibition feature data related to landscape and movement. One of the most recent pieces in the exhibition, *Floating Map (Stroud, UK 2000-2015)*, is informed by latitude and longitude recordings from each time you and your wife visited your wife's hometown in England. *Floating Data (Human Powered Mileage, Temperature 2011-2014)* is a landscape sculpture based on data from your travels on bike and/or foot combined with temperature ratings. *Floating Data (Driving Mileage, Human Powered Mileage 2010-2011)* likewise has two data sets based on your travel.

You've mentioned in a previous essay that you use data in these types of works "to make an unbiased recording of my life. Recording every hour on the hour means my choices are reduced so that each hour becomes a data point of equal value."⁽¹⁾ Is it fair to suggest that these works are a form of self-portraiture, and if so, why are you drawn to life-logging as both a personal and artistic activity?

SC: I hadn't originally thought of my work as self-portraiture, but after many years I started to see how it can be viewed in this way. It obviously does not capture my physical likeness, but arguably creates a much more defined image of

myself. For me there is a comfort in working with the facts (known, definable quantities) in all areas of my life. Since so much of art is subjective it gives me a firm place to begin. Life-logging provides a detailed history against which I can compare current events and shifting perceptions and memories. It makes it possible to see a cause and effect for many of my actions.

Are you interested at all in viewers comprehending your data or are you more interested in the forms (visual, sculptural, aural) that arise? Is there a sense of how far is too far to push the aesthetics of your data or is that not a concern?

SC: I am interested in viewers understanding how the data drives the form of the work. I hope people will appreciate the form and the underlying information enough so that they might question how a data set might be different if they had recorded it themselves. But if I thought it was necessary for people to glean specific information from my work I would make very different things. The aesthetics of the data can be pushed as long as I am not fabricating data or making the pieces internally inconsistent. For example, with any given set of data or pair of data sets I may apply algorithmic equations or shift the scale to tease out an interesting visual from the existing information. Making decisions like this is what puts this work in the area of art and not data-visualization.

Along those same lines, there's an irony in working with purely rational and unbiased content (i.e. data) within a form (art) that inevitably interprets and in some cases obfuscates the data. You are still responsible for making a large number of choices in how the data is conveyed (size, color, representation, data parameters, etc.). Is this a friction that interests you?

SC: Working with unbiased data prompts more questions about my aesthetic and even conceptual choices. I used to think my formal decisions were arbitrary compared to elements dictated by the data. However, what I record and how I record it could also be considered subjective or arbitrary decisions. In many ways both are intuitive. On the visual side, I am interested in the flow of ideas between what the data represents and what its visualization evokes. It is amazing how far exploring what we perceive as concrete data can take you in your understanding of the more intangible aspects of existence.

Have you noticed a change in your initial motivation of using data or the practice of gathering and employing data due to advances in technology from when you started making this type of work in 1999?

SC: My *Latitude and Longitude Project* only became feasible in the mid-90's when consumer GPS units became available. At that time I built up a recording practice based around the GPS, handwritten logs, computer spreadsheets, and 3D modeling programs. I have kept this system basically intact since then. With the proliferation of smart phones and apps, much of what I do could be automated now. I have considered automating certain parts of the practice but have resisted this impulse for the most part. In spite of my resistance to change, this new technological era makes me consider the benefits of my existing system. Through my process I have come to appreciate the mindfulness aspect of my work. In an

age when so much can be automated it is important to actually be aware of certain things – being present where you are and what you are doing.

Why do you describe some of your works as "landscape sculptures"?

SC: For two reasons, one about form and another about content. In the simplest terms the form that the data takes when I translate it to 3D often evokes the topography of the land. But more importantly many of the pieces are explicitly or implicitly about my relationship with the landscape. I will linger and walk slowly in the mountains and move as fast as I can across the flatland. Those tendencies are readable in my data and my work. My data is shaped by the environment I live in and I am very interested to see where my actions are influenced by or diverge from natural rhythms and phenomena.

Floating Data (Spending 2006-2015) differs from the other pieces in this exhibition in that it compares rates of your personal spending over a 10-year period, plotted out by month. What drew you to addressing this topic for this piece?

SC: As with all of my recording projects, paying attention and recording provides a better understanding of myself. I have many personally recorded data sets that I maintain that have not yet found their way into a piece. Sometimes it takes several years of patient recording to see what kind of work it should be incorporated into. For example, I recorded the time of sunrise and sunset at my location for seven years before I started to note the patterns and form an idea about a piece that I would make from the data. It is a similar case for the spending data. I started recording everything that I spent as a way to save money and be more aware and intentional with my spending. I also started paying attention to my spending to make possible some long overland bicycle journeys that put me in profound contact with the landscape for months at a time.

1. Stephen Cartwright, "100,000 Beeps," in *The Nameless Hour: Places of Reverie, Paths of Reflection*, ed. Ashley Kistler and Dinah Ryan (Richmond, VA: Anderson Gallery, VCU School of the Arts, 2010), 48-49, accessed September 14, 2016, <http://stephencartwrightstudio.blogspot.com/2011/01/nameless-hour-catalog-essay.html>

Stephen Cartwright (American, born 1972), has had several solo and two-person exhibitions, including at the Evanston Art Center (IL) and the Butler Institute of American Art (OH), and has been included in many group exhibitions, such as at the Science Gallery, Trinity College in Dublin, Ireland; the International Symposium on Electronic Art (2014, in Dubai, UAE); and Anderson Gallery, Virginia Commonwealth University (VA). He is currently Chair, Painting and Sculpture, and Associate Professor at the University of Illinois at Urbana-Champaign, Illinois, and he has an M.F.A. in sculpture from the Tyler School of Art, Temple University, and a B.A. in studio art from the University of California.

www.stephencartwright.com

www.stephencartwrightstudio.blogspot.com

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Programs & Events](#)[About](#)

Tiffany Holmes

[< Return to Artists](#)

Process Documentation: TMT.170209
2017, reclaimed plastic toys
dimensions variable

courtesy of the artist © Tiffany
Holmes
Meg Eastman Photography LLC

|| < 4/7 >

To create this data visualization comprised of hundreds of toy parts, Holmes used data from a local citizen science project known as a "bioblitz." In a bioblitz, volunteers from the general public help identify all of the living forms in a local area. The data supplied for this piece came from the Richmond National Battlefield Park, gathered in fall 2016 with assistance from University of Richmond students working with professors in the departments of Biology, Geography, and Environmental Studies. The volunteers noted 386 distinct species that were categorized into 9 pie "wedges" representing plants, insects, birds, mammals, fungi, arachnids, amphibians, reptiles, and mollusks.

TH: I wanted to make a piece that displayed the complexity of the unwanted plastic toy universe. So I started asking people to give me their unwanted toys. Soon I had 20 large bins of plastic playthings in all shapes, sizes, and colors.

As an artist, I appreciate the irony that a veritable army of plastic representations of natural organisms might approximate the very ratios of plants, birds, mammals, and reptiles found outdoors. Some of the toy insects actually resemble some of the species identified in the bioblitz.

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)

[Artists](#)

[Curator's Preface](#)

[Digital America](#)

[Programs & Events](#)

[About](#)

University of Richmond Students

[< Return to Artists](#)

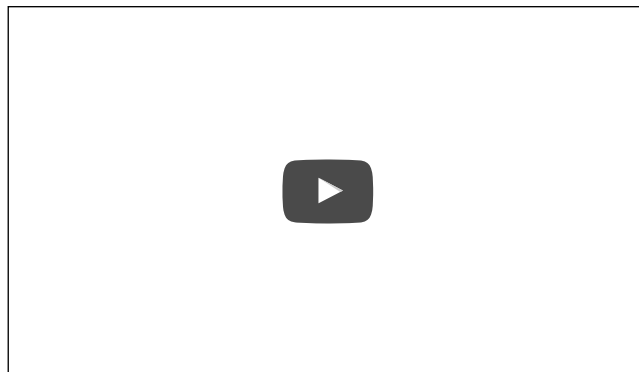


Participation Spectrum

2016-2017, screen print on cut paper,
pasted to wall
120 x 144 inches

courtesy of the artists
Meg Eastman Photography LLC

|| < 3/8 >



Interview by Lindsay Hamm, December 2016

This screen-printed mural consists of data derived from usage statistics from the University's Weinstein Center for Recreation and Wellness. The piece was made by the following students, enrolled in the fall 2016 Introduction to Printmaking class, taught by Brooke Inman, Adjunct Professor, Department of Art and Art History, University of Richmond: Emily Carrick '20, Corinna Cho '17, Laura Delaplace '18, Hannah Gertz '17, Carlie Johnson '17, Kiiko Kotera '19, Xiaojia (Jessica) Liu '20, Alexa Mendieta '18, Liza Morrison '17, Sophia Nguyen '18, Andrew Testas '20, and Griffin Walsh '20.

What were your initial expectations or reservations regarding working with data from the gym? [Answers provided by students in the class]

I expected to see a lot of numbers, in regards to machine usage. To my surprise, the data was a lot more organized than I thought it would be.

I was initially worried about how we would translate data from the gym into something completely different.

I wasn't sure what to expect working with the data from the gym. I didn't know what type of information the data would include, whether it would be financial, about usage, or anything else. So I wasn't really sure about anything. I knew from the beginning that the piece was going to have to include the stereotypical "gym" things like weights, shoes, and other similar things.

I was not quite sure how we would incorporate the data and I knew that I wanted the imagery to be more abstract and unconventional.

I thought using data from the gym would be really interesting and give us a lot to work with. The gym collects so much data and so we had a bunch of cool statistics to choose from when brainstorming ideas.

At first, I was very confused because I had no idea what data we were going to be given and how we could use the data from the gym to make an art piece. It was hard for me to visualize art inspired by data from a place that has nothing to do with art.

I really did not have any expectations because I really did not know how we were going to use numbers with the art.

An initial reservation I had was with the large amount of data that was given to us by the gym. It was a lot to manage and transform into an art piece.

I'm really excited because data from the gym and arts seem to have no connection so it's really cool to combine it and do something that has never been done before.

My reservations were about working on a project with the whole class and how that would be difficult, since there would be more people than I am use to working together on one project with.

At first I was not sure how we would be able to produce a work of art from data from the gym.

I initially thought it would be difficult to make the jump from raw data to a class piece.

How did the collected data's source inform your artistic choices?

We wanted to reflect the gym in whatever we decided to make, so ultimately the source had a lot to do with influencing our artistic choices. The content of each print was based on reasons we attend the gym and varies from caloric foods to fitness and health.

The gym gave us more than enough information with numbers and charts. Our job was to decide what data we wanted to include in our piece and how we wanted to represent that data in an ambiguous way to viewers.

Because the data was from the gym, the concept of the gym itself definitely lent itself to the aesthetic. There are items that are definitely going to be brought up when thinking of a gym and those were obvious choices.

It did not inform my artistic choices initially but after discussing with the class about how we could portray the graph of individuals coming in to use the gym on different weekdays and at different hours, I saw how including this information would tie back the piece we made to the gym and actually convey the idea of "Crooked Data."

The collected data included pie charts and bar charts. I was initially drawn to the pie charts because they had color and reminded me of food, like a real pie. I think we were all drawn to using the numbers to inform the number or quantity of imagery used in the final piece.

When receiving the data from the gym, it was very easy for me to focus on some of the information given. Focusing on the information that seemed most interesting and relevant to our campus culture seemed to help me, as well as my classmates, to be able to create an image in my head of what our piece should start to look like.

We decided to use symbols that came to us when we think of the gym as well as actual equipment at the gym.

We were very interested in the shapes the graphs made.

The data from the gym contains multiple charts and diagrams. We want to show people that the amount of people that come to the gym varies from time to time, day to day.

Our class mainly focused on the participation graph, which guided us to think about why and when people go to the gym.

Right off the bat I began to think of ideas relating to exercise. Our work didn't have to be blatantly about exercise, but receiving gym data made me think of it.

What was your overall aesthetic goal? Did you plan this in advance or was it decided by the finished imagery?

We planned in advance to have an overall aesthetic goal of representing the data in a way that wouldn't utilize the actual data itself (numbers and charts), but would interpret the data in certain imagery relating to the gym. Overall, we didn't want viewers to look at the piece and immediately think of a gym.

We wanted to create an overall image made up of smaller images, inspired by an artist (Andrew Kozlowski) we were shown during class. We decided the placement of the individual images after we had completed the imagery, as we were deciding between a traditional color scale or scattered colors.

The aesthetic emerged as a result of the decision to display the information in a wheel. A wheel is a very intuitive way to represent a rainbow color spectrum, so I think it was a bit of an obvious choice to display all of the symbols in seven different color schemes. Especially because we had data for all seven days of the week. So it just made sense to do it the way we did.

Personally, my aesthetic goal was to use images not typically associated with the gym – but instead, to use images that showed the sounds of the gym.

The inspiration for the overall piece came from Andy Kozlowski's work in which he takes many smaller images and arranges them to create one larger image. In advance we planned out the overall image before deciding on the final smaller images to use.

I personally did not plan an overall aesthetic goal in advance. I knew that we needed something to grab the audience's attention, so when we were collectively deciding on our project, I could start to visualize what we wanted: something colorful, simple, and appealing to the eye.

I wanted the data to be relatable to people who are viewing it instead of just something very abstract. It was decided by the finished imagery.

The goal was to show the data without making it look like data.

Showed data in an aesthetic way. I think it would be decided by the finished imagery. We had a rough anticipation of the final image but we could adjust later.

All of us were inspired by Andy Kozlowski's work, which led us to create a list of 18 different images in which we were going to display.

Complexity leading to simplicity. Our piece is an aesthetically pleasing colorful work but it is made of a lot of individual prints.

Did you find it difficult to work cohesively as a group or were decisions easier because of a democratic process?

It was a slow process in the beginning to decide on where to start and what we wanted for our project, but a lot of our ideas were overlapping. Once we began a

general consensus for the project idea and what data to use, it was more of a democratic process narrowing down the specifics for imagery and design.

I don't think we ran into many issues working as a group, and everyone was very understanding of each other's opinions and ideas.

I don't think working in a group was necessarily easier or more difficult, but it was definitely different. I know in my own work, my own style and aesthetic choices shine through a lot. But in a group, everyone's opinions need to be taken into consideration so we definitely utilized the democratic process a lot.

Although it was hard at first to come to a conclusion, I liked working as a group because we came to a final imagery that flowed very well together.

I found that decisions were much easier in a group because we were able to feed off each other's ideas and it made the brainstorming process more fun than had it been done alone.

I didn't think it was hard to work cohesively as a group. We all seemed to want the same thing for our project so it was pretty easy to make decisions and I really appreciated our democratic method of making decisions. I could say that we all mostly agreed on the same imagery and colors so the decision process went by really smoothly once we were able to figure out what we wanted for our final piece.

Decisions were easier because we could all throw ideas in and vote on them.

I thought it was easier to work cohesively because as a group, we can come up with more ideas together and make decisions quicker.

I think our class worked very well together and we made most of the decisions easily through voting.

Once we agreed on an idea, it was very easy to get rolling since the project was group-based.

How did you handle differences of ideas or opinions?

We were all respectful of each other's decisions and ideas—anyone who had a strong feeling towards incorporating an idea or completely against an idea was both listened to and taken under consideration.

By voting together as a class and going with the majority's opinions. Our ideas did have a lot of overlap so that allowed for easier agreements as to the project idea.

We had a voting system, which worked really well and was very fair. Every major decision was decided by a popular vote.

There was a lot of discussion over what type of aesthetic or style we wanted to pursue and because we had thirteen different people contributing, there was some differing of opinions. But ultimately we decided to vote on most of the issues and that worked well.

All ideas were heard and understood. Everyone's opinions were heard and every idea was taken into consideration. When differences arose, we took a vote to see what the majority of the class preferred.

We all listened to each other and everything we had to say. I think that since no one had major differences in their opinions on what our project should be like, there were no conflicts when having to "handle" any differences in ideas, because we all appreciated everyone's input.

We all made compromises and pitched in ideas or thoughts we have. Everyone is pretty understanding so it wasn't a problem.

Listen to different ideas patiently. Sometimes other's opinions are really creative and great. I can absorb the part and combine differences.

Popular vote was used to decide the preferred choice.

I don't believe there were that many differences of opinions, but they were settled through a voting process.

Truthfully, I'm not the most artistically inclined student, so I pretty much just accepted the ideas of those in the class whose work I admire.

How did you collectively decide on your eighteen chosen images?

Again, with the voting system. We all came to class with ideas of imagery. We combined all of these ideas and then voted on them.

We first developed general themes for imagery, which allowed every person to come up with their own specific images. Once all the images were combined, we were able to narrow down to 18 images based on popularity and voting.

This was an instance in which deliberate discussion worked really well. We came up with a master list of a bunch of images and debated over the merits of each one. Eventually, through sifting through the proposed images, we narrowed them down to eighteen symbols.

We all individually came up with different images that we thought portrayed the gym and then found commonalities – those that were repeated were most likely chosen as one of the images for the eighteen chosen images. Other images were voted upon and decided.

We all made lists of the images we would like to see in the final piece. All the lists were compiled to see where they overlapped or were similar. Then we were able

to narrow it down to eighteen images by using the most popular images and then taking a vote on the remaining few.

We all made lists of what we each thought the eighteen images should be and I think Brooke did a great job of writing them out on a big piece of paper and having us all discuss each of the images everyone suggested. After we all collectively read them through and discussed each of them, we all kind of seemed to have the same idea of what we wanted so voting on the eighteen images we would want to use was very easy and didn't take us long at all.

We all came up with 18 symbols/images and as a class we slowly eliminated to come up with everyone's top 18 choice.

Through democratic selection.

We vote. Everyone came up with with a list of images, then we go through each of them and decide together, considering the sorts of things related to the gym.

By voting. The top 18 out of all the ideas were chosen.

We each made a list of objects we would like to represent the various times and then voted as a class.

Each member of the class came up with a list of images and then we voted on which 18 to choose.

Why did you choose a rainbow color palette? Does it have any specific meaning?

A rainbow color palette allows for different interpretations of mood and emotion, unlike one color scheme which wouldn't encompass the significance of all the object.

The rainbow color palate represents the days of the week. Red is Monday, orange is Tuesday etc. We decided on this color palette because the imagery we chose reminded us of something fun and poppy.

The rainbow palette is very aesthetically pleasing and I think that the nature of the color wheel and the shape of the display lend itself to a natural usage of the spectrum.

The rainbow offered a variety of colors, which would work well with labelling the days. The colorful choices also made me think of graphs and how engaging one, such as a pie chart, typically had many different colors.

It seemed most natural to use a rainbow color palette because we were dealing with the seven days of the week. The rainbow palette seems cyclical, just as the data has a sort of cyclical pattern as well.

I don't think our choice of a rainbow color palette has any deep meaning, but it is appealing to the eye. I think we all wanted to do something colorful for our project so choosing these colors was easiest and then contrasting them with a lighter version just made our piece come even more alive.

We chose the rainbow palette because we wanted to be able to show the different days of the week.

Rainbow color is very colorful and beautiful. Rainbow color also symbolizes the energy of blessing and peace. I have no reasons but to love rainbow color.

Each day is represented by a specific color. The rainbow was decided by the whole class.

We chose the rainbow palette because it would look like the color wheel once the images are assembled in a circle.

Each color represents a different day of the week. It's a subtle way to convey data.

Is there an overall idea, theme, or conclusion in the mural that you hope viewers will understand?

I hope that they are able to grasp all of the things that the gym has to offer, depicted in the different images.

I hope they will gather the different reasons why people go to the gym, as well as which times and days are peak at the gym. I think all of these are very deliberate in the creation of our overall image so I hope users are able to interpret it once they get a little more knowledge on what they are seeing in front of them.

I hope the viewers can take the data from the gym and interpret it in ways that they hadn't really thought of beforehand.

In our imagery, I hope the viewers will also understand our perspectives and associations with the gym and I hope it engages them to think about what are the first images they associate the gym with.

I hope the overall piece gives a sense that it correlates with data from the gym, but I hope that is not too obvious. I hope that the viewers will be able to see the subtle connections that the imagery has to different aspects of the gym.

I hope that the viewers can see all the work we put into our mural. We all put so much work into it and we all had such a big part in creating it that I think what I hope comes out the most in our mural is our hard work and each of our artistic abilities.

The gym is for everyone and that everyone goes to the gym for different reasons.

I hope the viewers will reconsider their view on fitness and what goes on at the gym.

Energetic, positive attitude.

Understand that some form of data is represented by the mural.

The overall idea is that the images represent motives of why people go to the gym and they are assembled in a clock like manner.

I'm not sure how much viewers will be able to infer from our piece, but I'd like it to give them a better sense of the days at times the gym is used.

Has this project changed or confirmed your thoughts on how designers make data visualizations? If so, how? Has it changed your thoughts about the gym?

Depending on whether the designer is working independently or with others makes the thought process much more complex. The designer needs to be able to create something aesthetically pleasing that he/she and the audience will enjoy or find interesting. My thoughts were not changed about the gym, but the only thing that surprised me was how organized they are with their data and how much of it they collect.

I don't think I realized before meeting with a representative at the gym or seeing all the data how big of an operation they have going on over there. It made me really appreciate all the services offered to me on this campus because it showed that "the gym" isn't just the physical building. They also work with all IM and club sports for example which is a pretty big scope of student activity.

It was interesting considering the data and attempting to understand how it could be represented outside of the normal parameters of data. By visualizing the data in this way, I believe we were able to take some dry, quantitative data and add more characterization to it.

It has confirmed that it can take a while or more research about the data to make data visualization. It has made me realize that the gym is not only a place of exercise and recreational sports, but also a place of socialization, a form of reassurance, a body of sounds, etc. It can have many meanings to an individual besides fitness.

I never realized how involved it could really be and all the little details that need to be taken into consideration. There were so many different directions we could have gone with this piece, so the fact that we were able to narrow it down to one solid idea is pretty great. My thoughts about the gym have changed in that I now know way more about the gym than I ever did before. Knowing the patterns and peak times of attendance is a helpful thing to know when planning a gym visit.

I always knew an artist's work came with dedication and hard work, and this project just confirmed that. The decision and creative process that comes into

making data visualizations is a lot of work and having to go through this process myself just makes me appreciate these designers' works even more. Regarding the data from the gym, this has confirmed what I see all the time. I work at the gym as a Facility Assistant, so I am able to see first-hand all the activity that goes on. I think that's why I was one of the people who were inclined to use the Gym Participation data as part of our project, because in the two years I have worked at the Robins Center, it has always been interesting to see the patterns of the gym's usage throughout the days and times of the week.

I never thought of combining both art and data together to make an art piece. It has changed my thoughts because it made it a more positive outlook than just somewhere I would dread.

Looking at the data made me realize that expectations don't always meet reality.

I got a chance to become familiar with every part of the gym. In the class, Brooke showed us different data visualizations from different artists.

This project changed how I thought about data in general, since before this project, I did not think that data could be used as designs or designs could be used to represent data. It also gave me more knowledge about the what the gym does and how it functions.

I have never heard or seen a data visualization before partaking in this project, but I was really impressed by the amount of creativity and time needed to make such a project.

This project has shown me that designers spend a lot of time working on their data visualizations, and I've gained a new found respect for their work.

Copyright © 2017. All Rights Reserved. University of Richmond Museums, VA

CROOKED DATA

(Mis)Information in Contemporary Art

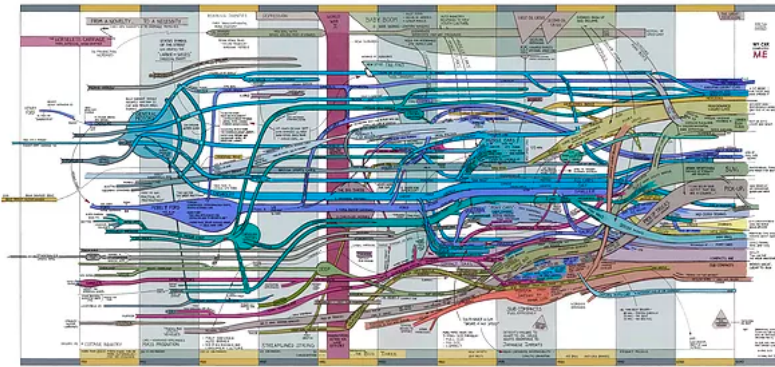
[Home](#) [Artists](#) [Curator's Preface](#) [Digital America](#) [Programs & Events](#) [About](#)

Ward Shelley

[< Return to Artists](#)

My Car Completes Me, v.1
2016, acrylic and toner on mylar
31 x 56 inches

Courtesy of the artist and Pierogi,
New York © Ward Shelley



|| < 1/1 >

Interview by Elizabeth Schlatter, January 2017

Ward Shelley's painting *My Car Completes Me* is an ambitious timeline of automobile design, production, and consumption primarily in the U.S. The painting captures the beginnings of mass production with the Model T Ford in the 1910s and 1920s, the retooling of designs during and after WWII, smaller car models emerging in the 1970s and 1980s due to fuel efficiency needs, to the ascendancy of SUVs and pickup trucks since the 1990s. Also included is the evolution of major car companies, marketing slogans, as well as types of drivers and their attitudes (e.g. the emergence of the soccer mom aligned with the rise of the minivans.)

In a statement from 2006 regarding your art, you said, "The attempt is to organize a mass of interrelated facts on a single "page" so that the scope of their relations and connections can be seen in an interesting and revealing way." (1) This is a practically perfect definition of data visualization. Is the subject of paintings such as *My Car Completes Me*, both the actual subject (data about cars) of the work, as much as the form (data visualization norms)?

WS: I find my work is often, and for very legitimate reasons, being placed in a category such as data visualization. All categories attempt to group things by

affinities, I think, and by that, make our understanding more useful and easy to apply in new circumstances. But categories tend to round-off differences too, so what you gain in muscular generalities you may lose in specificity. I normally favor the categorical distinction "information graphics" over dataviz for my work. This is because I am sourcing and depicting historical narratives more than quantitative databases, which is what I think data visualization implies. There is a lot of this database driven graphic work being done now. I am hugely impressed by it, but I see my own form as only partly connected to that kind of work. Similar but different.

And to address the last part of your question, I am not consciously intending to address the form (data visualization norms) – I do what I think works best on a case-by-case basis – but I do think that, even dependent as I am on conventions and ideas developed by others, my work stakes out its own, if somewhat eccentric territory.

A common theme in much of the art in "Crooked Data" is revealing the subjectivity involved in data gathering, visualization, and interpretation. When you make these types of paintings, are you making conscious choices regarding an overall scheme and what you will emphasize or reveal?

WS: I think the most apt comparison would be to the historian who, in order to make a sensible narrative, has to select information that builds the argument and reject information that is extraneous or misleading. We all hope, and I certainly try, to remain faithful to the truth – the gem of understanding that lives inside the confusion of information. But truth is always a subjective and human-conditioned thing – always and unavoidably political too, I need to add. Always keeping that in mind while doing my work is sort of exciting – it gives me pleasure. Like walking on the edge of a cliff – the danger is the spice.

From afar, this painting looks a bit like a Dr. Seuss-inspired illustration of some sort of digestive system. What appeals to you in using this type of illustration, which seems somewhat unrelated to the subjects of your visualizations?

WS: I can see why people see my work that way, and I think it is mostly an interesting accident. One thing though is that nearly all of my work is hand drawn (and most current data viz is computer drawn). I had a few reasons for working this way, but the official reason speaks to your last question. I feel that machine produced graphics, even printed words, tend to carry an undeserved hint of authority (and this is routinely exploited, of course). I wanted my work to have the look and feel of One Guy's Work. Not to rely on some assumed authoritative source, like Big Brother. I want to offer to subvert that presumptive authority. I want the viewer to engage with my narrative as a place to begin a discussion and work out things from there. Paradoxically, I think that the current problem with fake news, history and science deniers, and truthiness echo chambers are an outgrowth of people's desire to have Authorities instead of thinking things out. Authorities that share their own confirmation bias, of course.

Rock-n-roll, science fiction, and art historical achievements and trends are just a few of the many subjects you've addressed in your art. How do you decide on topics to explore in this manner and how do you conduct your research?

WS: Since I am usually working on a new piece, I stay in a frame of mind to seize on any idea that comes up. My uber-form is the gallery show and this means I will try to assemble a body of work whose parts have a common theme. Too, looking back over the last 10 years of shows, the themes suggest to me a path, a development. Once I start to "feel" the theme, I try to add interesting and related subjects. But I like to keep it porous too – not airtight. Anyway, I started with artist's lives, then art history, then culture and ideology, and the last show was culture and politics. I think culture and psychology is my next target.

How do I conduct my research? Read, read, read.

Why did the topic of the automobile appeal to you? And what were you suggesting with the title *My Car Completes Me*?

WS: The automobile was almost the symbol of personhood to my generation (disclaimer: I grew up in the suburbs). When you got your car, you had your freedom, your power, your autonomy. Or the illusion thereof. And, during my lifetime, I have watched automobile marketing dovetail into and exploit everyone's (by this I mean the American Individual, a.k.a. the consumer) quest for identity. This I enjoyed but learned to rue as I began to see how limiting, exploitative, and destructive it has been as a cultural trend. So I am a critic. But I love cars too.

I also think I see that, at least in the coming generation, this car/identity problem will be displaced. As far as I can tell, the car is being replaced by the smartphone as youth's symbol of power and autonomy. That could be good.

Do you own a car right now? If so, would you mind sharing the model? And are there cars in the past that you've owned or have special memories of?

WS: As I said, I love cars, but I have mundane needs. I own an old Ford Focus 4-door hatchback which can do everything and has no glamour to efface or fade. My brother and I share a Red Mini Cooper Clubman, which we inherited from my dad – we got it to celebrate his mid-life crisis at age 91. It is a fun thing to drive. I get most of my car-jones fixes from my brother, who is a life-long motor head. He is re-building a '63 split rear window Corvette right now. Talk about identity confirming. He has 4 cars, but he only drives one at a time.

And for me, the best-fit car companion was my split window VW microbus hippie van. That was My Ride – when it was in one piece.

1. Ward Shelley, "The Hold in Mind Disclaimer," 2006, accessed January 15, 2017, <http://www.pierogi2000.com/artists/ward-shelley/ward-shelley-bio-2/>

Ward Shelley's (American, born 1950) art has been featured in numerous exhibitions, including Pierogi (New York), SPACES (Cleveland), the Brooklyn Museum of Art (New York), Scope Basel (Switzerland), Teapot Gallery (Cologne, Germany), and Gallery 400 (Chicago). He is in the collections of several museums, including the Museum of Modern Art and the Whitney Museum of American Art (both in New York) and the Baltimore Museum of Art (Maryland). He is a past recipient of The Joan Mitchell Foundation Award for Painting and Sculpture, a Prix de Rome, and a Pollock Krasner Grant. He received a B.F.A. from Eckerd College and M.A. from New York University.

www.wardshelley.com

www.pierogi2000.com/artists/ward-shelley

Copyright © 2017 - All Rights Reserved University of Richmond Museums, VA

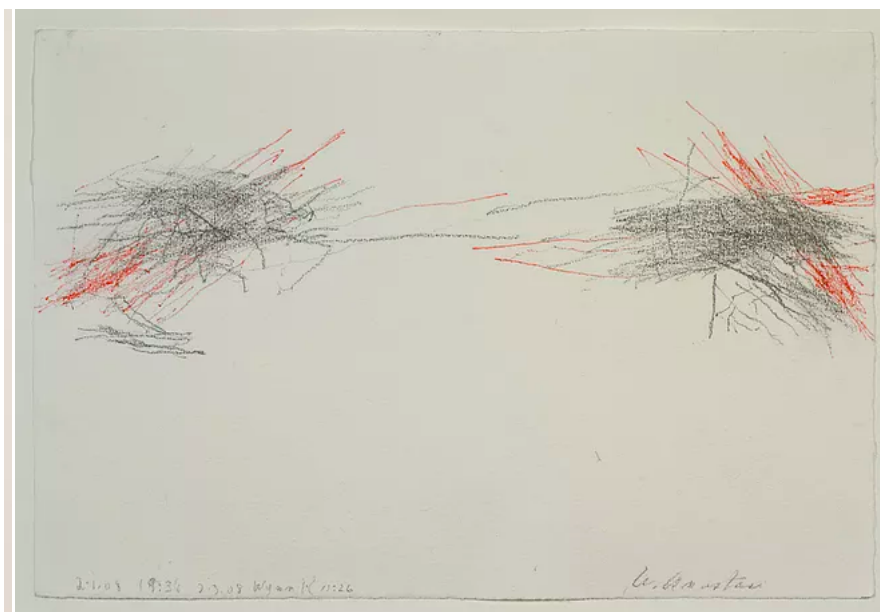
CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#) [Artists](#) [Curator's Preface](#) [Digital America](#) [Programs & Events](#) [About](#)

William Anastasi

[< Return to Artists](#)



Untitled (Subway Drawing)
2008, graphite and colored pencil on paper
7 5/8 x 11 1/4 inches

Untitled (Subway Drawing)
2010, graphite and ink on paper
7 5/8 x 11 1/4 inches

Joel and Lila Harnett Print Study Center, University of Richmond Museums, Gift of Sally and Wynn Kramarsky
H2013.04.01 and H2013.04.02
© William Anastasi

|| < 1/2 >

Interview by Elizabeth Schlatter, November 2016

We have two of your subway drawings in this exhibition, one from 2008 and another from 2010. In a previous interview with Thomas McEvilley, you described how you made these drawings in the following passage: "... starting in 1977 I would go downtown on the subway a lot to play chess with John Cage. I would fill my pocket with a couple dozen sharpened pencils. Then on the subway I would put on firing range headphones to make it silent. It also makes people less likely to interrupt me. I would sit erect with my back away from the seat, with a pencil in each hand and a sheet of paper on a surface. The train ride is lurching enough so you need an external point to keep your balance; I would use the pencils for that and allow the swaying of my body as the train careened around curves to make the drawing. I bet I've done a thousand of those. I would ride from 137th to 18th street and after the game back again." (1)

You often would log the dates, times, and destinations on these subway drawings. Our drawing from 2008 says "2.1.08 19:36 2.3.08 Wynn K 11:26" and the one from 2011 reads "11-11-10 Wynn Kramarsky". The art collector Wynn Kramarsky gave both of these drawings to our museum, so am I correct in assuming both of these were made

on route to seeing Wynn? Do you recall if the one from 2008 reflects a return trip or two trips?

WA: "2.1.08 19:36 2.3.08 Wynn K 11:26" is round trip. Suspect the second is one way otherwise it would have two entries.

In these drawings, along with other "blind" drawings that you've created, the movement determines the gesture, yet some factors must be pre-determined by other means, such as the size of paper, the pen or pencil and its color, the choice of including one ride or two, etc. How were these other factors decided?

WA: The paper size is determined to be comfortable on the lap. The markers are usually pencil or pen, the colors chosen according to my aesthetic inclinations at the moment. The same is true regarding whether I consider the drawing finished at the end of one or more trips.

These drawings differ from other blind drawings ("walking" or "pocket") in that by using two hands there are usually two foci of marks, different yet parallel. Did you have any purpose in mind in using both hands instead of one? Do you think having the two loci of marks affects how viewers experience these drawings versus the walking or pocket drawings?

WA: Can't use two hands for the Walking Drawings, one has to hold the paper on a support, and a Pocket Drawing is done one handed to fit in the pocket. For the subway it is possible to use both hands, but I don't use both exclusively. With two hands I can enjoy comparing the results of the left (more unschooled) to the right (since I'm right handed).

When you made these, did they feel as if they were physical markers of your day? Or possible talismans for meditation? Did you ever consider asking someone else to make drawings like this for you or was it important that these be records of solely your movement on the subway?

WA: The activity provides a meditation in a typically non-meditative environment. The noise canceling headphones or cotton help promote distancing, as well as shutting my eyes or looking at the shoes of the passengers sitting opposite of me. The drawings reflect a kind of notation of the day since I write whom I'm visiting, if that's what prompts the outing.

These drawings are simultaneously accurate (they record your arm movements) yet impenetrable (there are no specifics, like velocity), and like many of your artworks, they demarcate a presence, space or an activity that is interstitial. Was bringing attention to these types of everyday experiences and/or spaces (the inside of a pocket) part of your motivation in creating these works?

WA: Velocity is reflected in the long drag lines as the train stops. They were devised as strategies to get away from overly intentional mark making.

In the same interview quoted above, McEvilley remarks about your subway drawings, "The results are extraordinary. It's interesting too that you got better at it, though some of the early ones are beautiful in a less knowing, more innocent way."⁽²⁾ Is it possible that the subway drawings got "better" as you became more proficient at making them, and what does "better" mean in this context? Could you describe how your drawings made in 2008 and 2010 might differ from some earlier drawings?

WA: As time went on I was able to get out of myself more and into the movement of the train as in meditation. I also found finer pointed leads and began to explore color and demark one way with one color, the way back with another. That results in more varied drawing—not necessarily better.

1. Anastasi, William, interviewed by McEvilley, Thomas, *The Triumph of Anti-Art: Conceptual and Performance Art in the Formation of Post-Modernism*, (Kingston, NY: McPherson & Co., 2005), p. 134

2. Ibid.

William Anastasi (American, born 1933) is a self-taught artist and founder and pioneer in the fields of Conceptual and Minimalist art in the United States. He has been exhibited internationally, and his work is in the collections of numerous museums, including The Museum of Modern Art, The Guggenheim Museum, The Whitney Museum of American Art, and The Metropolitan Museum, all in New York; as well as the National Gallery of Art (Washington, DC), the Walker Art Center (Minneapolis, MN), the Art Institute of Chicago, and The Museum of Contemporary Art in Los Angeles.

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Artist's Conversation](#)[About](#)

Acknowledgements



< 1/4 >

Organized by University of Richmond Museums, "Crooked Data" was curated by N. Elizabeth Schlatter, Deputy Director and Curator of Exhibitions, [University of Richmond Museums](#). It is presented in cooperation with the University's Departments of [Art and Art History](#), [Geography and the Environment](#), [Boatwright Memorial Library](#), [the Digital Scholarship Lab](#), [Recreation and Wellness](#), and [Partners in the Arts](#). The exhibition and programs are made possible in part by [Data Blueprint](#), the University's Cultural Affairs Committee, and funds from the Louis S. Booth Arts Fund. The exhibition is accompanied by an online catalogue featuring works in the exhibition and interviews conducted by Elizabeth Schlatter and Lindsay Hamm, '17, art conservation (interdisciplinary studies) major, University of Richmond.

We are grateful for the assistance of the artists, collectors, dealers, and distributors who kindly offered their services to bring this project to fruition. We also would like to specifically thank the following people for their support throughout the development of the project:

Dove Bradshaw, artist, NY

Peggy Chiang, C. Grimaldis Gallery, Baltimore, MD

Carol Lee Corey, DANESE/COREY, NY

[Data Blueprint](#), Richmond

Katherine Degn, Kraushaar Galleries, NY

[Tiffany Holmes](#), School of the Art Institute of Chicago

Dan Lamont, [Blast Theory](#), Brighton, England

Eric Rodenbeck and Sarah Fateen, [Stamen Design](#), San Francisco
John Rothenberg and Alex Olivier, [Sosolimited](#), Boston and San Diego
Steven Sacks, Kerry Doran, and Aliza Morell, bitforms gallery, NY
Susan Swenson and Audrey Irving, Pierogi Gallery, NY

And at the University of Richmond:

Rob Andrejewski, Director of Sustainability
Kevin Butterfield, University Librarian
Jeremy Drummond, Associate Professor of Art and Chair, Department of Art and Art History
Katie Fauth, Program Coordinator, Partners in the Arts
Melissa Foster, Technology Learning Center Specialist
Samantha Guss, Social Sciences Librarian
Lindsay Hamm, '17, art conservation (interdisciplinary studies) major
Brooke Inman, Adjunct Professor, Department of Art and Art History
Todd Lookingbill, Associate Professor, Department of Geography and the Environment
Nick Lydick, Technical Support Consultant
Rob McAdams, Jr., Director, Partners in the Arts
Marge Musial, Telecom Service Representative
Robert Nelson, Director, Digital Scholarship Lab
Meghan Rosatelli, Part-time Instructor, Department of Art and Art History
Tom Roberts, Assistant Vice President, Recreation & Wellness
Phil Sherman, Senior Engineer/Telecom & Media
Jennifer Stancil, Director, Foundation and Corporate Relations

University Museum Staff:

Heather Campbell, Curator of Museum Programs
Katreena Clark, Museums Operations Manager
Stephen Duggins, Museum Preparator
Henley Guild, Museum Preparator
David Hershey, Assistant Collections Manager
Matthew Houle, Curator of Museum Collections
N. Elizabeth Schlatter, Deputy Director and Curator of Exhibitions
Richard Waller, Executive Director
Martha Wright, Coordinator of Museum Visitor and Tour Services

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)
[Artists](#)
[Curator's Preface](#)
[Digital America](#)
[Artist's Conversation](#)
[About](#)

Object List

[William Anastasi](#) (American, born 1933)

Untitled (Subway Drawing)

2008, graphite and colored pencil on paper

7 5/8 x 11 1/14 inches

Joel and Lila Harnett Print Study Center, University of Richmond Museums, Gift of Sally and Wynn Kramarsky, H2013.04.01

Untitled (Subway Drawing)

2010, graphite and ink on paper

7 5/8 x 11 1/14 inches

Joel and Lila Harnett Print Study Center, University of Richmond Museums, Gift of Sally and Wynn Kramarsky, H2013.04.02

[Blast Theory](#), (British artists group)

Karen

2015, mobile device app

courtesy of Blast Theory

[David Bowen](#) (American, born 1975)

46°41'58.365" lat. -91°59'49.0128" long. @ 30m (inverted)

2015, CNC routed acrylic

4" x 6" x 6" (each)

courtesy of the artist

[Martin Brief](#) (American, born 1966)

Elementary Particles and the Forces of Nature

from the series *A Brief History of Time*

2015, ink on paper

image: 22 x 9.5 inches

sheet: 32.25 x 19.25 inches

courtesy of the artist and DANESE / COREY, New York

The Origin and Fate of the Universe

from the series *A Brief History of Time*

2015, ink on paper

image: 22 x 15 inches

sheet: 32.25 x 24.875 inches

courtesy of the artist and DANESE / COREY, New York

Wormholes and Time Travel

from the series *A Brief History of Time*

2015, ink on paper

image: 22 x 5.5 inches

sheet: 32.25 x 15.875 inches

courtesy of the artist and DANESE / COREY, New York

[Stephen Cartwright](#) (American, born 1972)

Floating Data (Driving Mileage, Human Powered Mileage 2010-2011)

2016, acrylic, dyed resin

10 x 16 x 1.5 inches

courtesy of the artist

[Brooke Inman](#) (American, born 1983)

Neighborhood Cat Watch

2016-2017, photographs, drawings, and notes

120 x 120 inches

courtesy of the artist

[Nathalie Miebach](#) (American, born 1972)

Chutes and Ladders

2015, wood, paper, data

14 x 18 x 20 inches

courtesy of Miller Yezerski Gallery

Musical Buoy in Search Towards a New Shore (Navigating Into a New Night)

2009, wood, data, and reed

32 x 32 x 32

courtesy of Miller Yezerski Gallery

score for *Musical Buoy in Search Towards a New Shore (Navigating Into a New Night)*

2009, colored pencil on watercolor paper

13 x 17 inches

realized and performed in 2009 by Elaine Rombola (American, born 1978)

2 minutes, 16 seconds

courtesy of Miller Yezerski Gallery

[Dan Mills](#) (American, born 1956)

A.I.R.S. with Symbols

2016, watercolor and ink on printed map on paper

22 1/2 x 30 inches

courtesy of the artist

Piling Up (Wars and Conflicts, Belligerents and Supporters)

2016, ink on book page

15 x 11 x 3/4 inches

courtesy of the artist

Wars and Conflicts by Continent, with Ancient Symbols

2015, ink and graphite on printed map on paper

22 1/2 x 30 inches

courtesy of the artist

[Casey Reas](#) (American, born 1972)

KTV (August 2015)

2015, custom software (color, sound), digital video, computer screen

dimensions variable

sound by Philip Rugo (American, born 1992)

courtesy of bitforms gallery, New York

[Ward Shelley](#) (American, born 1950)

Floating Data (Human Powered Mileage, Temperature 2011-2014)
2016, acrylic, dyed resin
8 x 12 x 1 inches
courtesy of the artist

Floating Data (Spending 2006-2015)
2016, acrylic, dyed resin
5 x 12 x 12 inches
courtesy of the artist

Floating Map (Stroud, UK, 2000-2015)
2016, acrylic, dyed resin
14 x 12 x 12 inches
courtesy of the artist

[Jax de León \(American, born 1986\)](#)

Illinois: Visualizing Music
2009, inkjet print on paper,
28 x 22 inches each, 13 total
courtesy of the artist

[R. Luke DuBois \(American, born 1970\)](#)

A More Perfect Union: New Jersey, 2011
Pigment-ink on photo rag
36 x 24 inches
Edition of 6
courtesy of bitforms gallery, New York

A More Perfect Union: Virginia, 2011
Pigment-ink on photo rag
24 x 36 inches
Edition of 6
courtesy of bitforms gallery, New York

[Hasan Elahi \(American, born in Bangladesh, 1972\)](#)

Conelrad v09
2016, pigment print on canvas
72 x 38 inches
courtesy of C. Grimaldis Gallery

Conelrad v15
2016, pigment print on canvas
72 x 38 inches
courtesy of C. Grimaldis Gallery

[Laurie Frick \(American, born 1955\)](#)

Daily Stress Inventory #8
2016, cut leather on stretched linen
30 x 40 inches
courtesy of the artist and Edward Cella Gallery

[Chad Hagen \(American, born 1970\)](#)

Nonsensical Infographics series
2009, inkjet print on paper
8 x 8 inches each
courtesy of the artist

[Holly Hanessian \(American, born 1958\)](#)

Touch in Real Time
2014, paint, wire, ceramic hand-prints, vinyl letters
96 x 168 inches
courtesy of the artist

[Tiffany Holmes \(American, born 1968\)](#)

TMT.170209
2017, reclaimed plastic toys

My Car Completes Me, v.1
2016, acrylic and toner on mylar
31 x 56 inches
courtesy of the artist and Pierogi, New York

[Sosolimited \(American design studio\)](#)

Fifty Shades Leggings, 92% Nylon and 8% Elastane, 41 x 15 inches

Great Barrier Reef Tote Bag, 100% polyester canvas, 16 x 15.5 inches,
handle 23 inches

Iridescent T-Shirt, 100% cotton, 27 x 20 inches

Lava Scarf, 100% rayon, 36 x 36 inches

Mona Lisa T-Shirt, 100% cotton, 27 x 20 inches

Summer Bomber Jacket, Body is 100% nylon, lining is 100% nylon,
ribbing 100% cotton 35 x 57 inches

App created in 2015, clothing printed in 2016

[Stamen Design \(American data visualization practice\)](#)

Facebook Flowers
2012, data visualization
courtesy of Stamen Design

[University of Richmond Students](#)

Participation Spectrum
2016-2017, screen print on cut paper, pasted to wall
120 x 144 inches

Created by students from the fall 2016 Introduction to Printmaking class (VMAP 115), Instructor: Brooke Inman, Adjunct Professor, Department of Art and Art History, University of Richmond: Emily Carrick, '20, Corinna Cho, '17, Laura Delaplace, '18, Hannah Gertz, '17, Carlie Johnson, '17, Kiiko Kotera, '19, Xiaojia (Jessica) Liu, '20, Alexa Mendieta, '18, Liza Morrison, '17, Sophia Nguyen, '18, Andrew Testas, '20, and Griffin Walsh, '20

[Clement Valla \(American, born 1979\)](#)

Postcard from Google Earth (43°5'22.07"N, 79° 4'5.97"W)
2010 archival pigment ink on paper
23 x 40 inches unframed, 24 x 41 x 1.5 inches framed
Edition of 5
courtesy of bitforms gallery, New York

Postcard from Google Earth (48°24'31.45"N, 122°38'45.52"W)
2010 archival pigment ink on paper
23 x 40 inches unframed, 24 x 41 x 1.5 inches framed
Edition of 5
courtesy of bitforms gallery, New York

[Lee Walton \(American, born 1974\)](#)

The Golden State Warriors, 24 Game Winning Streak, Plus System Notes and Game 25, October 27 - December 11, 2015
2015, ink and wash on paper
7.25 x 6.25 inches (paper size)
courtesy of Kraushaar Galleries

[Digital America's selection \(all courtesy of the artists\)](#)

Derek Curry (American, born 1976), *Public Dissentiment*, 2015 web application

Joe Reinsel (American, born 1971), *It looks like Mars*, 2015 digital image

dimensions variable
courtesy of the artist

Daniel Alexander Smith (American, born 1990), *Sea Change*, 2015
digital video

Daniel Alexander Smith (American, born 1990), *Tide*, 2015 digital video

CROOKED DATA

(Mis)Information in Contemporary Art

[Home](#)[Artists](#)[Curator's Preface](#)[Digital America](#)[Artist's Conversation](#)[About](#)

About



< 1/3 >

The [University of Richmond Museums](#) opens *Crooked Data: (Mis)Information in Contemporary Art* on February 9 through May 5, 2017, in the Joel and Lila Harnett Museum of Art. The exhibition features art by twenty-one contemporary artists and studios who work with data in nontraditional ways. Some artists incorporate data from known sources, using it as an aesthetic device divorced from its originally intended interpretive function. Others gather and manifest data that might normally be considered not worthy of collecting. And some of the works explore alternatives to standard data visualization forms and practices.

"We see data and data visualization everywhere – graphs in the news about voting statistics, interactive maps on our phones, animated weather radars and charts, standardized testing scores, etc.," says the exhibition curator [N. Elizabeth Schlatter](#), Deputy Director and Curator of Exhibitions, [University Museums](#). "The artists in this exhibition use data and data visualization as their subject and their process, creatively questioning our assumptions about how we decide what information is important and how we communicate and interpret information visually."

Some of the works featured in *Crooked Data* include a selection from [R. Luke DeBois'](#) series *A More Perfect Union*, in which the artist presents maps of states, replacing the names of cities and towns with the most frequently used words from residents' online dating profiles that are unique to that region. For example, in the map of Virginia, the city of Richmond and local towns are represented by the words "tobacco," "reasonable," and northern Virginia, not surprisingly, is denoted by the words "Pentagon," "diplomat," and "beltway."

Other works in the exhibition include [Blast Theory](#)'s app *Karen* which features a pseudo life coach who provides personalized personality profiles based on user input. [Nathalie Miebach](#) translates science data into sculpture, installation, and musical scores. In the series *Wars and Conflicts*, [Dan Mills](#) uses vintage maps as a space to investigate global data on international tensions, conflicts, and refugee statistics. [Clement Valla](#) reproduces Google Earth images that reveal anomalies within the system, images that are correctly formed with the data used by the software but are incorrect in accurately depicting their subjects.

[Artists](#) included in the exhibition:

- [William Anastasi](#) (American, born 1933)
- [Blast Theory](#) (British Artists group)
- [David Bowen](#) (American, born 1975)
- [Martin Brief](#) (American, born 1966)
- [Stephen Cartwright](#) (American, born 1972)
- [Jax de León](#) (American, born 1986)
- [R. Luke DuBois](#) (American, born 1970)
- [Hasan Elahi](#) (American, born in Bangladesh, 1972)
- [Laurie Frick](#) (American, born 1955)
- [Chad Hagen](#) (American, born 1970)
- [Holly Hanessian](#) (American, born 1958)
- [Tiffany Holmes](#) (American, born 1968)
- [Brooke Inman](#) (American, born 1983)
- [Nathalie Miebach](#) (American, born 1972)
- [Dan Mills](#) (American, born 1956)
- [Casey Reas](#) (American, born 1972)
- [Ward Shelley](#) (American, born 1950)
- [Sosolimited](#) (American design studio)
- [Stamen Design](#) (American data visualization practice)
- [Clement Valla](#) (American, born 1979)
- [Lee Walton](#) (American, born 1974)

The exhibition will also include an artwork created by [University of Richmond students](#) enrolled in the fall 2016 Introduction to Printmaking class, taught by [Brooke Inman](#), Adjunct Professor, Department of Art and Art History, University of Richmond. Their screen-printed mural consists of data derived from usage statistics from the University's Weinstein Center for Recreation and Wellness.

[Digital America](#), an online journal on digital culture and art, will be featuring three art works in conjunction with the Crooked Data exhibition on its website (www.digitalamerica.org/crooked-data/). Each piece in the online gallery explores the deceptive nature of digital data through various digital media. Digital America is supported by the Department of Art and Art History at the University of Richmond.

Organized by University of Richmond Museums, "Crooked Data" was curated by N. Elizabeth Schlatter, Deputy Director and Curator of Exhibitions, [University of Richmond Museums](#). It is presented in cooperation with the University's Departments of [Art and Art History](#), [Geography and the Environment](#), [Boatwright Memorial Library](#), [the Digital Scholarship Lab](#), [Recreation and Wellness](#), and [Partners in the Arts](#). The exhibition and programs are made possible in part by [Data Blueprint](#), the University's Cultural Affairs Committee, and funds from the Louis S. Booth Arts Fund. The exhibition is accompanied by an online catalogue featuring works in the exhibition and interviews conducted by Elizabeth Schlatter and Lindsay Hamm, '17, art conservation (interdisciplinary studies) major, University of Richmond.

