EYEO CONVERGE TO INSPIRE 2011-2015

EYEO
CONVERGE
TO
INSPIRE
2011–
2015

Ben Fry

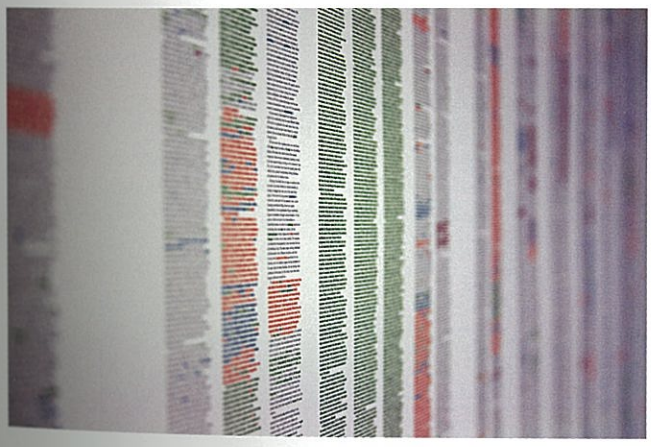
I use code because it allows me to work on a larger scale than what I can reasonably do in a sketchbook, and because it enables faster iteration during the design process, and navigation/interaction in the final product

Fathom Information Design
benfry.com
@ben_fry

at eyeo 2011 2012 2013 2015

"I'm fascinated with taking apart complex datasets and using design to explain how they work."

I grew up with separate interests in design and code. This led m to study graphic design as an undergrad (and to minor in compu science) and then on to the Aesthetics and Computation Grou at MIT, where I joined others who share similar interests. My Ph work there focused on mixing disciplines into computational information design. Nowadays, I run a design firm that puts it a into practice.



Images courtesy of Ben Fry

On the Origin of Species: The Preservation of Favoured Traces 2008

We often think of scientific ideas, such as Darwin's theory of evolution, as fixed notions that are accepted as finished. In fact, Darwin's *On the Origin of Species* evolved over the course of several editions he wrote, edited, and updated during his lifetime. The first English edition was approximately 150,000 words and the sixth is a much larger 190,000 words. In the changes are refinements and shifts in ideas—whether increasing the weight of a statement, adding details, or even a change in the idea itself. This piece depicts those changes in print and interactive forms.

Jer Thorp

I learned how to program when I was 14, then made a determined effort to forget for almost exactly a decade; coding was not yet cool. In 1999 I learned how to write ActionScript, and became a True Believer. It was an uncool language, but it was also tremendously flexible and deceivingly powerful. I miss it. These days I work mostly in Processing, because I can see my ideas in action so very, very quickly. It's 12 years old, and starting to be uncool as well, but like AS it's much more than what it may seem. I will miss it when it's gone. I think it's important to know how to do a lot of things quite badly. I'm an amateur at Python and JavaScript. I'm an embarrassment to Node.js and R. If anyone with any sort of pride saw what I do with C++, they'd probably challenge me to a duel. | Understand two things: that everything you're doing has been done before, and that everything you're doing is brand new. Learn how to collaborate, and do it as much as you can. Find people you are simpatico with and (politely) force yourself upon them. Learn GitHub (add, commit, pull, push—in that order) and embrace the glitchy Skype call. Also, get a dog.

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blprnt.com
@blprnt

Photographer: *Thatcher Cook*

"Make friends with a pione Never underestimate the power of polite persisten

The Mac SE. HyperCard. Dial-up modems and sysoping. Co books and *National Geographic* and tropical fish and D& Douglas Adams and Margaret Wies and Tracy Hickman. Th clearer path: study cell biology and genetics at university, out and join a rock band, work at an aquarium, join a dot c fired on 9/11, freelance for a decade, make art. Move to Ne and take the subway every morning uptown, to the Gray L Start teaching at ITP, start a company, start a conference day wake up to something new.

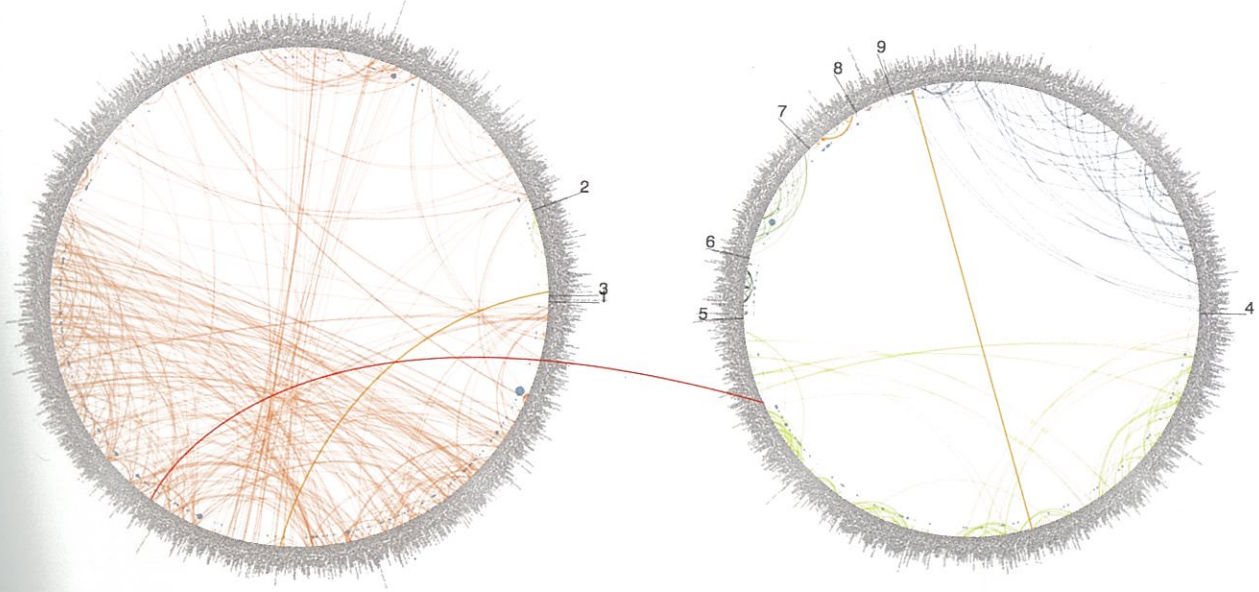
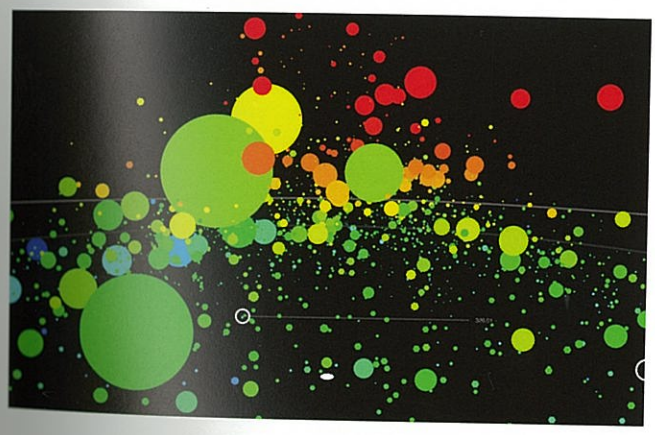


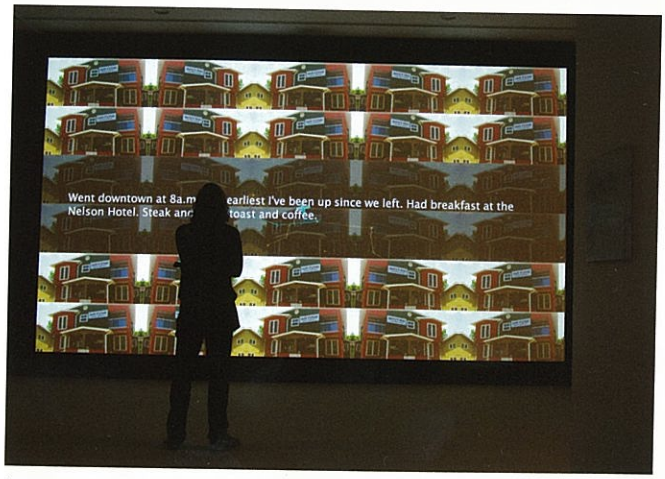
Image courtesy of Jer Thorp



Exo

2012

Exo is a visualization tool that was used for exploring the nearly 2,300 exoplanet candidates that had been identified as of 2012 by NASA's Kepler mission. When I showed my original version of this project to people, which was built in Processing, some clown would inevitably say, "That's so Minority Report!" So it's ironic that I'd travel to California, and rebuild it with John Underkoffler and the team at Oblong. It's a tough project to get a sense of in print, as it's very fluid and dynamic. Watch the video!



Images courtesy of Oblong Industries

Nicholas Felton

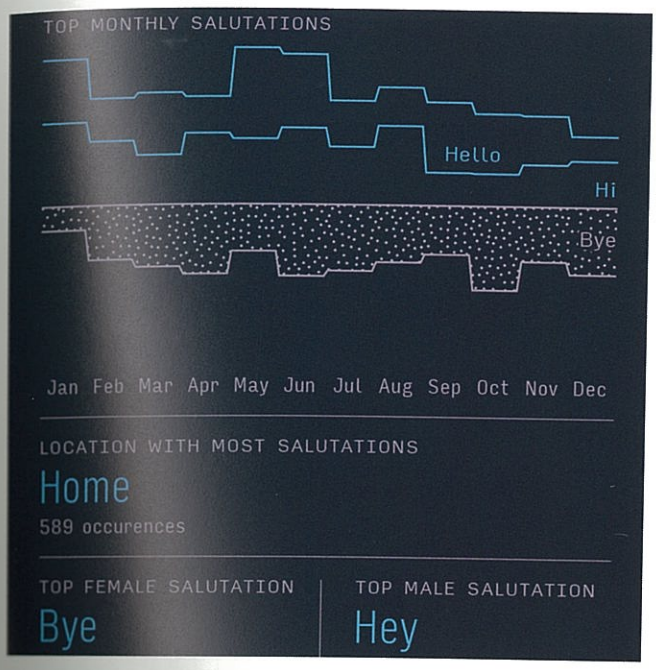
My work is driven by an interest in storytelling and is facilitated by core concerns of graphic design (typography and composition) an a tenuous ability to use Processing to organize data into compellin constructions. My most successful projects have all been the resu of passion and curiosity, and I hope that following these ideals will continue to lead me to produce interesting work.

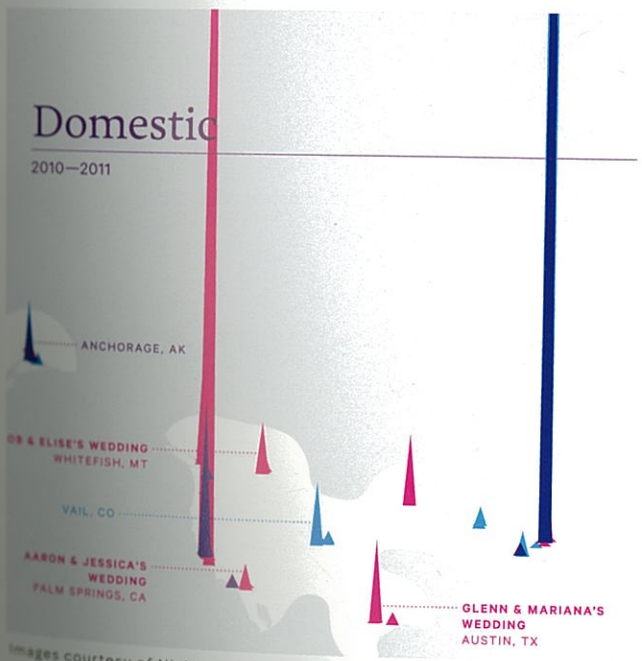
Nicholas Felton
feltron.com
@feltron

Photographer: *Noah Kalina*

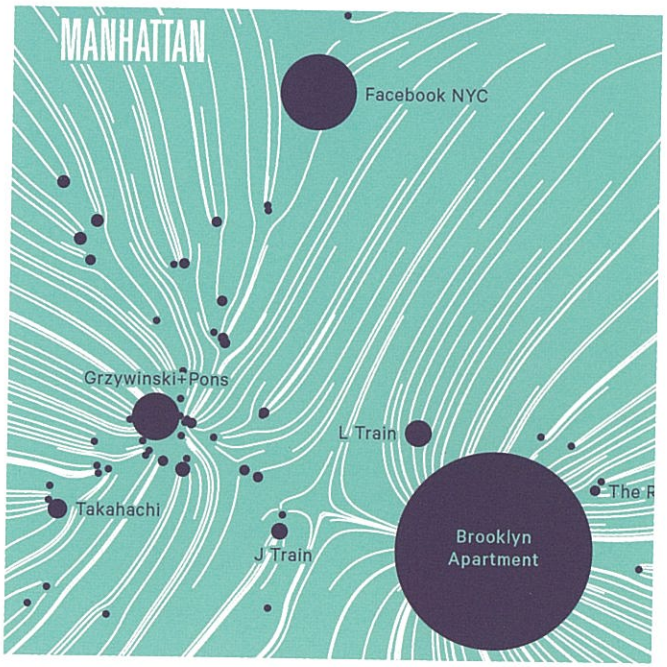
"I find inspiration in natu math, geometry, scienc and music. In obsession language, humor, smal moments, and elegan

Nicholas spends much of his time thinking about data, our daily routines. He is a designer, entrepreneur, and a work is focused on translating quotidian data into mea objects and experiences. He is the author of numerous annual reports that condense the events of a year into of maps, graphs, and statistics. He was one of the lead of Facebook's Timeline and is the cocreator of both R iPhone and Daytum. He has been profiled by the *Wall S* and the *New York Times* and his work is a part of the p collection at MoMA.





Images courtesy of Nicholas Felton



Feltron Annual Report

2010–2013

Each year since 2005, the *Feltron Annual Report* has attempted to condense a year of Nicholas Felton's life into a digestible format. At eyeo, he has shared his techniques to quantify and visualize the experiences of a year into something consumable by a broad audience. In 2011, Nicholas shared how this approach was expanded to chronicle the life of his father.

Nathalie Miebach

I've been very influenced by minimalist music, particularly the works of Steve Reich, Terry Riley, and John Luther Adams. Music feels very sculptural to me and it's been a companion in my studio practice since the beginning. While I don't play an instrument myself, music taught me not to be afraid to play with the arrangement of data and its relationship to actual physical space. As a craftsperson, one of the first things you learn is that you have to break, mess up, warp, ruin, and deconstruct a material before you can ever hope to understand it. It takes years to to know a material and it only comes with a thous failures along the way. Don't be afraid to treat da like a material—let it fail, let it expand, let it breat and rip it out of the didactic approach it's so oft squeezed into. There is so much poetry in data. surdity, metaphors, and poetry are powerful len through which to look at data—eeking out, perha a more nuanced way of looking at information t graph can ever enter into.

at eyeo 2012

Nathalie Miebach
nathaliemiebach.com

"Some of the most courageous decisions I've made came from no knowing what the heck I was doing."

A windy path that began with studying Chinese and poli science at Oberlin College. My introduction to art was a p revolution in Indonesia, where I found myself shortly aft years. Suharto's dictatorship was slowly unraveling and cal dissent was rife. The visual art scene at the time was politically engaged, so I ended up hanging out and meet of artists. Fast forward to Boston, where I ended up stu For my first degree, I created an art curriculum that exp "time" is understood differently across disciplines. The some classes in astronomy at Harvard and a basket we nearby. And that is how the data-vis started, using the b to explore data with.

Images courtesy of Nathalie Miebach

The Sandy Rides

2013–

Some of the most iconic images of destruction by Hurricane Sandy were those of amusement park rides on the New Jersey and New York shorelines. The sculptures are rides built with numerical data from weather stations or ocean buoys. Other sculptural elements, such as floating rafts and underwater rides, introduce another parallel narrative that explores the futuristic vision of these rides. While on a first encounter they appear to be playful amusement park rides, the two narratives weave an absurd and darker interpretation of Sandy's weather data. The work explores the complicated relationship humans have with the changing seaside.

Ben Rubin

I love PD, Max/MSP, and Ableton Live—all environments as well-suited for careful fine-tuning as for reckless play—presuming that I will be both using and extending them through code. I love Python for working with symbols, Processing for working with pixels, and Git for working with other people. I've never been a superstar coder, but I started writing code when I was 16, and programming brings me enormous joy and satisfaction whenever I have the chance immerse myself in it. I've been greatly inspire Robert Irwin, Richard Teitelbaum, Trevor Pagl Claude Shannon, and John Cage; their work e the border zone between signal and noise, ar are each trying to reveal the beauty and the of human communication.

at eyeo 2013

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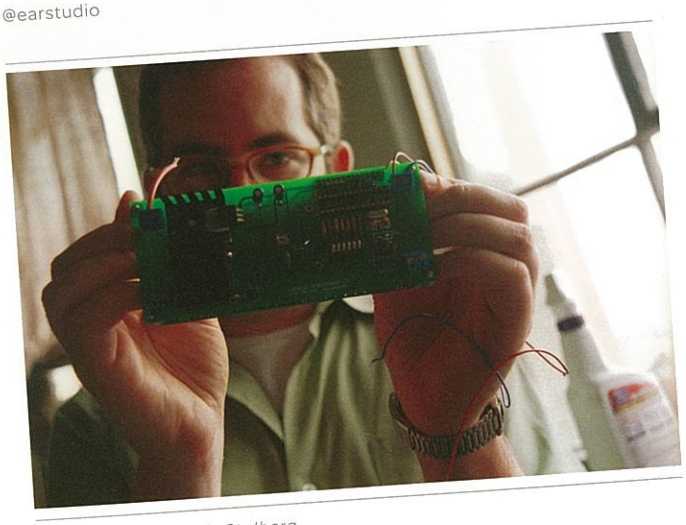

Photographer: *Wendy Stulberg*

"Find mentors. Watch h they work, listen to ther work with them, learn from them."

I'm a media artist based in New York City. I make pu sculptures, films, and media designs for theater. I'm fascinated by the ways people communicate with e Communication technologies, symbols, body langu and language are all central elements in my work. I' have grown up with creative role models: my fathe teacher, and my mother, a visual artist.

Shakespeare Machine

2012

Shakespeare Machine is a kind of supercollider, where the "particles" are scenes, lines, and phrases from Shakespeare's plays. The work was commissioned by the New York City Department of Cultural Affairs for the revitalized lobby of the Public Theater in New York. Suspended from the ceiling and serving as the lobby's chandelier, the work features 37 LED display screens on which fragments of Shakespeare's plays appear and dance, creating an unfolding kaleidoscope of language in motion. The machine selects and organizes these fragments based on grammatical, contextual, rhythmic, and/or semantic attributes of Shakespeare's language.

Images courtesy of EAR Studio

Giorgia Lupi

What inspires me the most is my urge, will, and need (i.e., obsession) to ideate and design something different every time—more beautiful, and "better" than what I made before. Okay, but practically. Every day I spend a great amount of time looking for visual inspiration, and carefully (maniacally) organizing those images: abstract art, music notations, architectural drawings, scientific and astronomic charts, surreal collages, and many more—absolutely not only data visualizations. Looking for clues in unusual co is an attempt to discover and dissect the aest qualities of all the things that we naturally like abstract them and introduce them as core el in building visual compositions. I ask myself t questions, What is it that I like of what I see? elements and aspects do I appreciate and wh I draw what I see, I retrace what I like of what capture ideas and help those ideas take shap

Accurat
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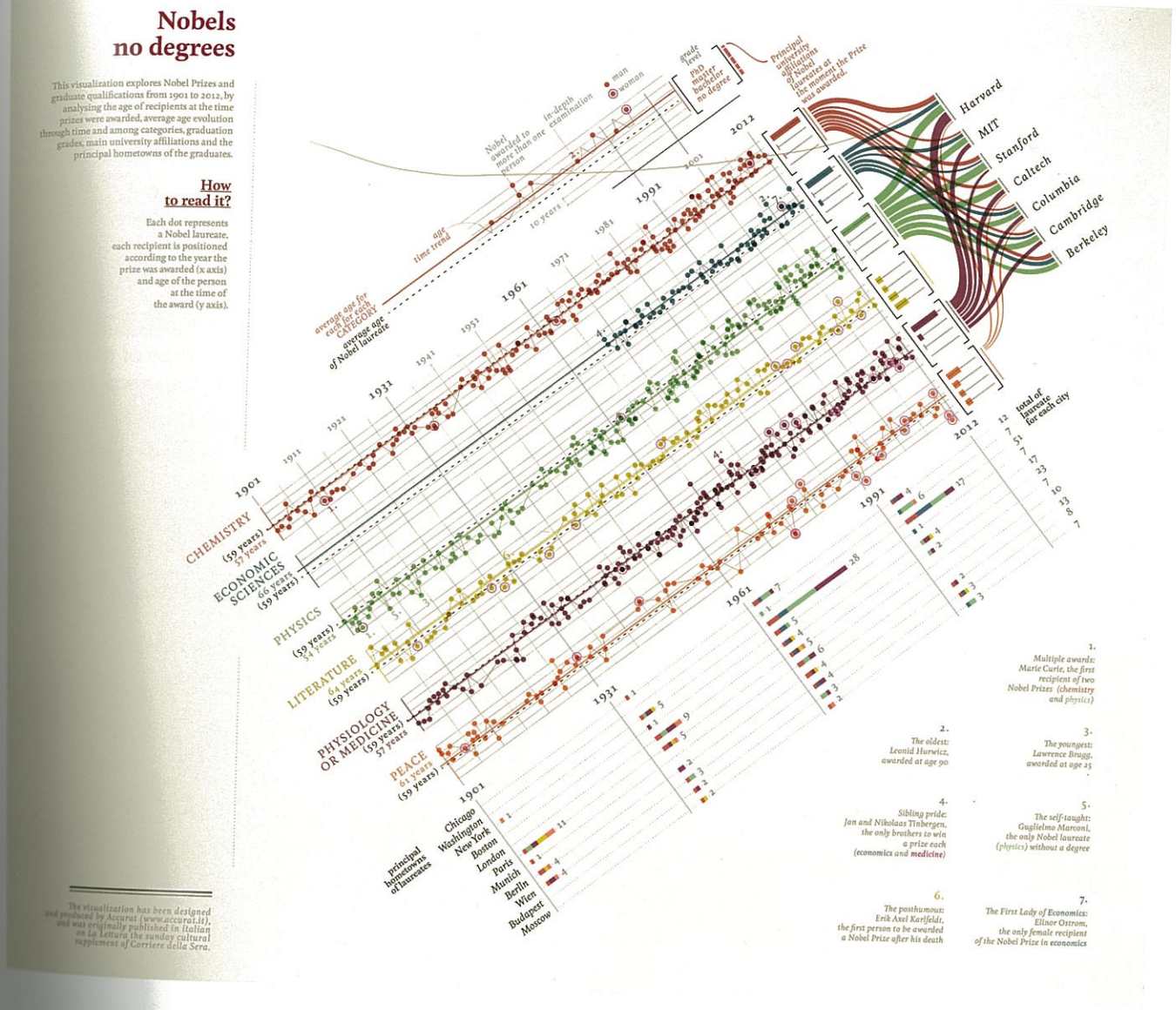
Photographer: *Gabriele Rossi*

"There is no rush to understand what your ultimate goal or mission or your style as a desig Does an ultimate goal ever exist?"

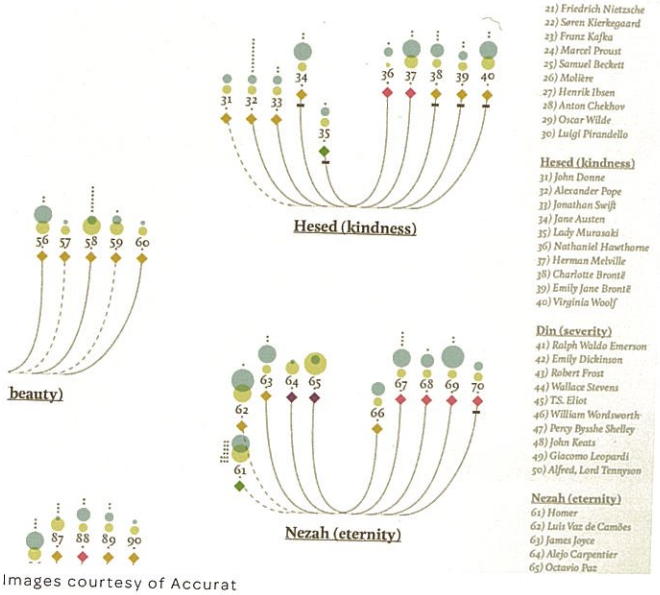
I got my M.Arch. at FAF in Ferrara, Italy, and became a architect, but soon after finding out that I unfortuna like wearing black and drawing perfectly straight lines I was left with only three options for my future: move lier to become a professional contemporary dancer, the keyboard in a progressive metal band, or start w self-taught visual designer. For unspecified reasons last one and cofounded Accurat in 2011, where I'm t director. I earned a PhD in Design at Politecnico di M drawing random things above anything else, and keep and others, that this is very useful for my work.



Visual Data, La Lettura

2012–2014

"La Lettura" is the Sunday cultural supplement of *Corriere della Sera*, the main Italian newspaper. As Accurat we regularly design and publish data visualizations within the column "Visual Data." In these specific data visualizations, we aim to deliver rich visual narratives able to maintain the complexity of the data but still make this complexity more accessible and understandable through the visualization. Also, we like trying to push forward how we can "compose" data visualizations that achieve (in our idea) aesthetic beauty and elegance through new visual metaphors, intentionally avoiding typical and already tested styles of representation.



Images courtesy of Accurat

Brian House

Today it is essential to resist the increasingly totalizing corporate and state projects of classification and control made possible by computers, networks, and data. But our capacity to do so only benefits from a love of code. I'm inspired by the points at which programming slips into the awkward, the incomplete, the hilarious, and the beautiful. My toolbox is always changing; currently it includes Python, a Casio keyboard, a stethoscope, anthracite, a handheld recorder, stacks of R tsunami of books. I deeply respect individu virtuosic and specialized. But for better or fo usually compelled to start projects from the What's always there is a pull to think abou space and to solve and cause problems by building things.

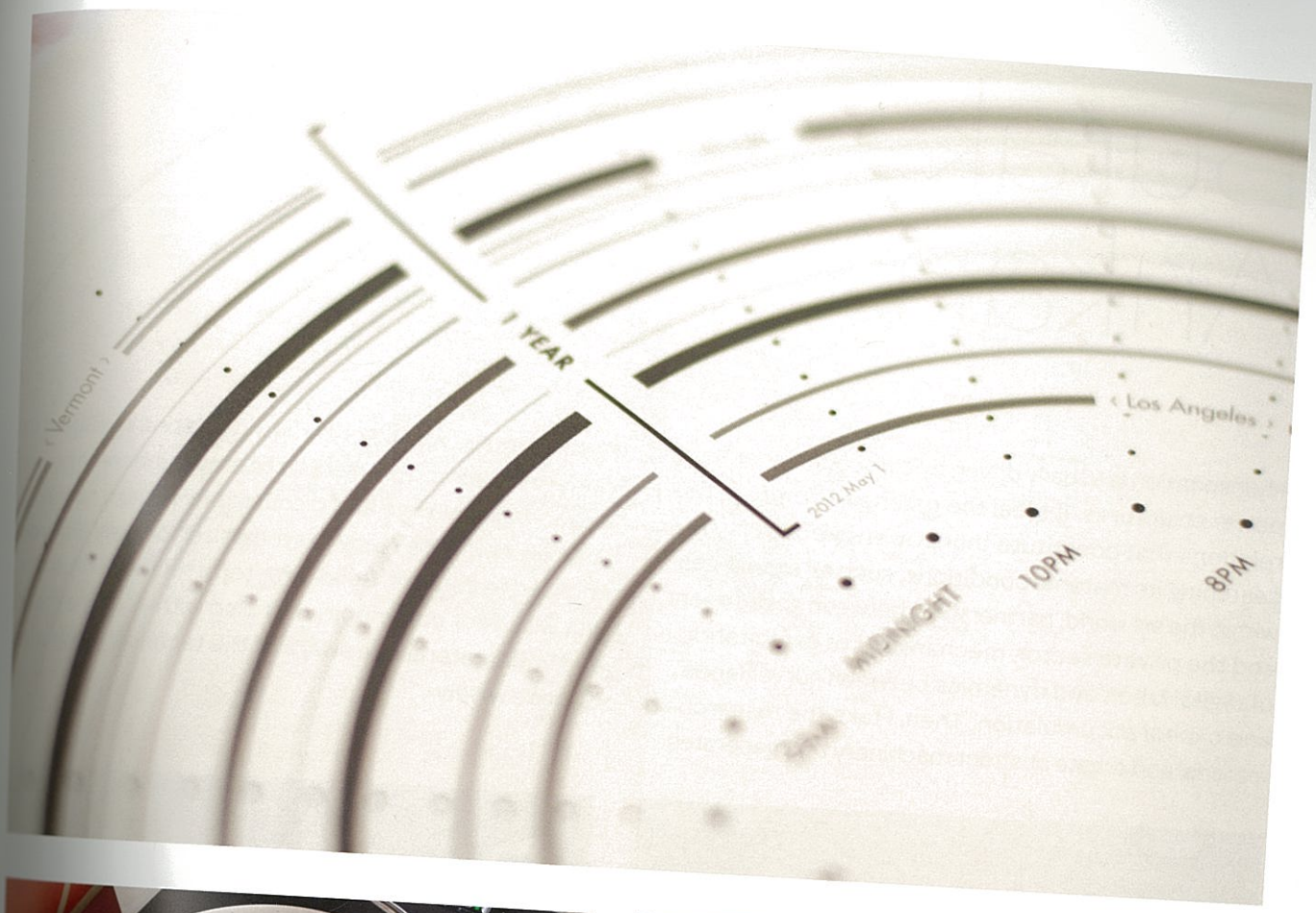
Brian House
brianhouse.net
@h0use

Photographer: *Carlin Wing*

at eyeo 2014

"The ideas that drive work today come fro same place as the ob sions I had as a kid."

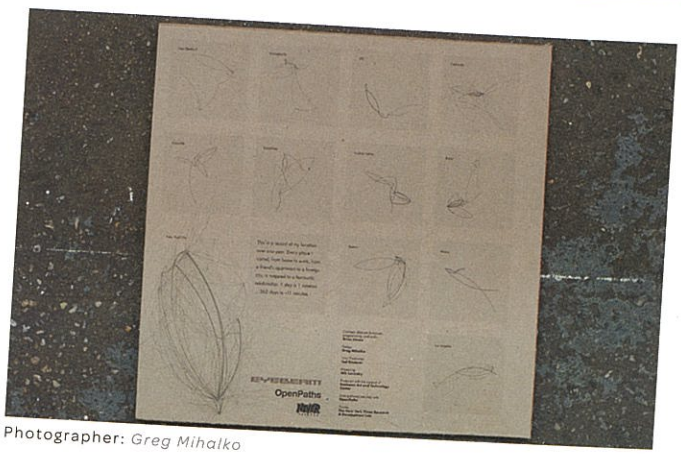
My work negotiates between algorithms and the rhy life—I've always been involved with geography and m music and performance, and data and machine lea studied computer science at Columbia in NYC a Chalmers University in Göteborg, Sweden, and ov been fortunate enough to work at truly inspiring l Projects and the New York Times Research and De Currently I'm a doctoral student in music and m Brown University, and I moonlight teaching experi at RISD. Shout-out to Eyebeam for supporting m to Sue Huang, with whom I frequently collaborate I like mountains.



Quotidian Record

2012

Quotidian Record is a limited-edition vinyl recording that features a continuous year of my location-tracking data. Each place I visited, from home to work, from a friend's apartment to a foreign city, is mapped to a harmonic relationship: 1 day is 1 rotation, 365 days is about 11 minutes. As the record turns, its markings indicate both the time as it rotates through every 24 hours and the names of the cities in which I travel. The sound suggests that our habitual patterns have inherent musical qualities, and that daily rhythms might form an emergent portrait of an individual. The visual design is a collaboration with Greg Mihalko.



Photographer: *Greg Mihalko*

Jessica Hagy

My work is 90 percent observation, only 10 percent documentation. The documentation, the artwork itself, is just the evidence of the observation—each piece is just an artifact of a thought process. I've found that thinking of my work that way lets me be more spontaneous with it, less precious about what I'm doing, and it helps to keep the self-critique out of the idea-generation (mostly). Nobody will be able to tell you how to do your art but you. You'll g and guidance, and there will be editors an and mentors of all kinds, and they are so and so valuable, but they can't provide the artists who can accept that, and work ou their little sparks, they don't ask as much and they make work that other people seem to more deeply and fiercely.

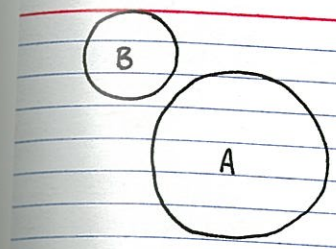
Jessica Hagy
jessicahagy.info
@jessicahagy

Photographer: *Jason Merryman*

at eyeo 2014

"Nobody will be able t tell you how to do you art but you."

I'm an artist and writer, technically, but I like to th a professional eavesdropper. I use very simple, si graph-like objects to make fun of some things and On a day-to-day basis, I take commissions for p organizations, various media outfits, and of course:



A = Jobs that are available

B = What you want to do with your life

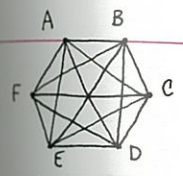
(A > B) = Stagnation

(A = B) = Implementation

(A < B) = Imagination

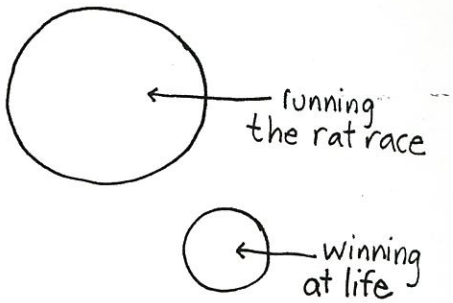
A = Reality

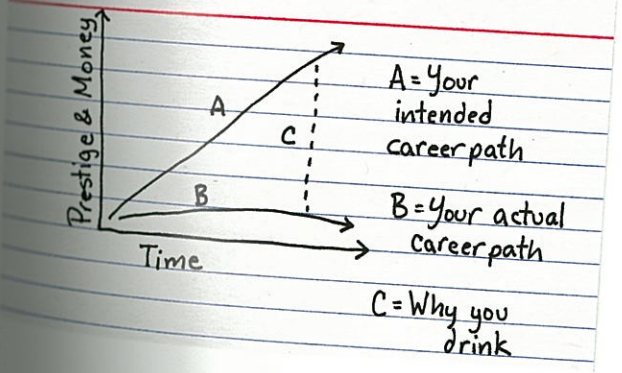
B = Ideas

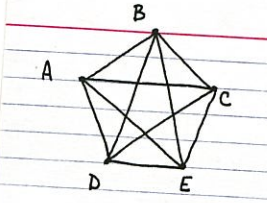


A = Global Warming
B = Abortion
C = Taxes
D = Gay Marriage
E = Healthcare
F = Iraq

$\overline{AB}$ = Manmade
$\overline{AC}$ = Prius Rebates
$\overline{AD}$ = Time for the Rapture
$\overline{AE}$ = Heatstroke
$\overline{AF}$ = Oil
$\overline{BC}$ = Inescapable issues
$\overline{BD}$ = Red tape at the adoption agency
$\overline{BE}$ = Save mom
$\overline{BF}$ = Too late now
$\overline{CD}$ = Everybody wins
$\overline{CE}$ = Europe
$\overline{CF}$ = Your grandchildren's children
$\overline{DE}$ = Benefits not everyone gets
$\overline{DF}$ = Don't ask
$\overline{EF}$ = Walter Reed







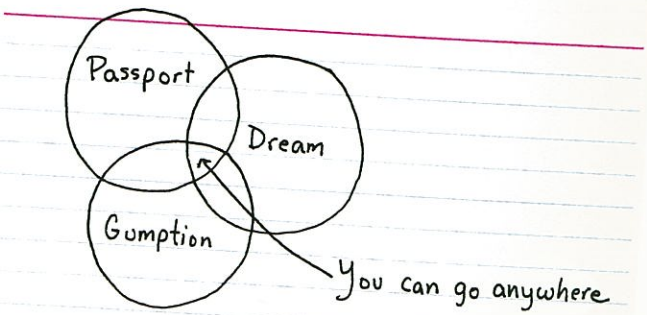
A = Eat
B = Sleep
C = Work
D = Reproduce
E = Die

$\overline{AB}$ = Ambien
$\overline{AC}$ = Snack machine
$\overline{AD}$ = Fancy dinner date
$\overline{AE}$ = Poison
$\overline{BC}$ = Narcolepsy expert
$\overline{BD}$ = see $\overline{AB}$
$\overline{BE}$ = Not a bad way to go
$\overline{CD}$ = Puppy mill dogs
$\overline{CE}$ = Stress
$\overline{DE}$ = Black widow spiders

Indexed

2006–

Talk through the thoughts and observations that get turned into graphs for my blog, *Indexed* (thisisindexed.com).



Images courtesy of Jessica Hagy

Lillian F. Schwartz

Although I am known as a pioneer in computer art, analysis, animation, effects, joining peripherals, etc., I began drawing as a toddler. Then my older brother, Barney, began work doing cels at Disney, and he brought me more tools. I drew abstract works, some optical illusions. I was then sent to occupied Japan and subjected to ionizing radiation. I developed diseases. One, chorioretinitis, caused colors to dim, so I started oversaturating certain colors. I invented 2D/3D without pixel shifting in 1969–1970. Even though I was already known to the world for my computer animation, I kept working on the physiology and psychology of perception. I spent time with Béla Julecz, Leon Harmon, and Edwin Land, discussing t
UFOs (1971) was my first 2D/3D film using
saturation of certain colors plus a form of
that would not let the eyes' cones refresh.
numerous techniques at the Labs, but afte
my eyesight began to fade. I had numerous
but lost vision in one eye and much of th
the other, thus destroying 3D sight. I've sp
years developing enhancements to 2D/3D
pixel shifting. I'd still like to see my collecti
images merged into a themed film, applyi
uration and new techniques. My son and c
Laurens, will be my eyes.

Lillian F. Schwartz
lillian.com

at eyeo 2014

*"I worked with a comp
for the first time at Be
in 1968. I learned mac
language—yeah, I sor
loved zeros and ones
a long time."*

Lillian F. Schwartz began drawing as a child with a sidewalk canvas and a brush of slate. In Japan during the occupation, she caught polio. The treatment for overcoming paralysis consisted of learning to move her muscles until she could slowly draw with pen and ink. She never recovered from her stay near Hiroshima, where shadow bodies that had been real people decorated remnants of buildings. Her early acrylics were often dark, bleak. She studied art techniques with well-known artists, but oils and acrylics were not enough. She moved to plastic paintings over lights and then to c
Then kinetic fluid in lit boxes, electronic mobiles, pla
through changing the chemical composition, and a c
in MoMA that led to her entry into Bell Labs in 1968
developed programs, special color filters, editing te
art and historical analyses, art films, and graphics th
viewed in 2D or 3D without pixel shifting. A pioneer,
a new technique for 2D/3D.

Images courtesy of Lillian Schwartz

Computer Films: 1970–Present

2014

Several of Lillian's groundbreaking films were screened at eyeo in 2014. Additionally, a remote conversation was staged and audience members were able to ask her about her films, processes, and experiences.