Patterns in Nature

BY SAVANAH HIPPERT

Donald Tarallo's designs are inspired by his research in the history of Italian typography and printing. "I always like to go to the source of where things began. For me, that helps me ground myself in the present, and have a perspective where things have come from and where they're going, what is really new and innovative versus what is mimicking the past," he said. This past summer, Tarallo was able to go back to Italy and thumb through some of noted typeface designer and printer, Giambattista Bodoni's, original collection of 300 books.

"I just find myself looking at a lot of modern design, and seeing connections with how design has evolved from these key movements... we want designers to be innovative and when you have an education that gives you a context on what has happened in the past, you know what's been done before and you know when innovation is actually happening."

This past spring he released a new typeface to his growing collection on tarallodesign.com. Varese, inspired by old Italian travel posters of the 1900s

to 1930s, follows strict, rigid, geometric forms. Currently, two new typefaces are underway: a secret project that is going

in a new direction for Tarallo, and another pattern font. FormPattern Three, which Tarallo collaborated on with his twelve-year-old son, will be available in black and white and color (from primary colors to color theme concepts like vintage old world).

FormPattern fonts in mind, Tarallo has started venturing into the world of textiles.

With an eco-friendly mind, Tarallo has created bold, durable and reusable totes available for purchase on Etsy. Now having his own fabrics printed, he plans to sew and experiment with different fabrics this winter.

Another significant component of Tarallo's work is addressing climate change and environmental concerns through design. In his freelance practice, he services clients who strive for the greater good. "We know how to use design for selling more things [but] now there's this whole new movement in design

to design for social change, design for change and for me, it's interesting to think about what that really means? How can we really do that, and what tools and methodologies and strategies are there? I think a lot about the environment and care about clean water and I love nature. It's being exploited, and it doesn't have a voice to protect itself, but there are people who speak up."



Understanding Consciousness

AN INTERVIEW OF DAVID SVOLBA BY KURTIS KENDALL

Can you speak on your recent work?

Within the last 10-15 years there's been an explosion of interest in a field called consciousness studies. So a few years back Tom Schilling (Behavioral Sciences) and I got together and started talking about how cool it would be to team-teach a consciousness course. We've now taught this class three times and it's been a blast, but our one complaint was that we haven't been able to find a good textbook. What we wanted was a textbook aimed at people new to the subject and that was interdisciplinary in its scope, so that it covered the science and the philosophy.

How have you two worked to remedy this problem?

So we thought, 'well, what we're going to have to do is write our own book.' We made a good case to a book publisher for the absence of the kind of textbook we would want to use in a class like ours, and the likelihood of classes like ours continuing to become more popular at the university-level. I was asked to put together a book proposal, which I did while on sabbatical last spring. They loved the proposal and asked for a sample chapter, so I wrote a sample chapter and we got a book contract.

Now all that's really left is the hard work of writing the book—which will be titled *Consciousness:* An Interdisciplinary Guide for Students. Right now, we're in the draft stage, with Tom [Schilling] covering the chapters on recent scientific research while I work on the chapters covering philosophical work on consciousness.

What is consciousness studies?

It is a really interdisciplinary subject where you have cognitive scientists, neuroscientists, and philosophers working together to try to understand the physical basis of consciousness and some of the philosophical puzzles and problems to which that gives rise.

What challenges have you experienced in the process?

Consciousness is a terribly difficult phenomenon to understand, even by philosophical standards. As one influential contemporary philosopher puts it, our own consciousness is something we know more intimately than anything else in the world, but the nature of consciousness remains

utterly mysterious Much to us. recent work on consciousness tends to he technical very and assumes great deal of background knowledge in both philosophy and the sciences, so encapsulating this work for the layperson, and explaining it clearly and simply, can be a real challenge.

Also, with respect to some of the chapters I have a lot of homework to do before I'll be able to begin writing, as there are topics we'd like to address but are not yet sufficiently knowledgeable about. For example, both Tom and I would like to include a chapter on different views about why consciousness evolved, but this is a fairly large literature that neither of us are yet very familiar with.

What is your goal with this textbook?

From the start, Tom and I have thought of our overarching goal as preparing our students and all interested, non-specialist readers to engage with all the articles currently being published on consciousness in academic journals

and popular magazines. Even when written for a general audience these articles usually presuppose a certain philosophical and scientific background. We're hoping our book can provide this background so that interested readers can engage with this literature and have some sense of what's going on.

Could you share some of your work?

The sample chapter that earned us this book contract is a chapter on why consciousness is so hard to understand. Why is the nature of consciousness so difficult to grasp and why does it strike many as

intractable, given the normal methods

of the physical s c i e n c e s . There's been a good deal of interesting philosophical work which, rather than attempting to solve the problem of consciousness,

focuses instead on explaining why it's a problem that is unlikely to be solved anytime soon.

The crux of the mystery here is how physical, electrochemical brain processes and events could somehow add up to your inner, conscious life, that movie playing in your head from the moment you wake-up in the morning to the moment you fall into a dreamless sleep. It seems like there is a huge chasm between explanation in terms of electrochemical processes in the brain and our actual first-person experience of our own minds. That's what's so mind-bending about this stuff; good, common-sense, secular naturalism seems to require that our mental lives are ultimately reducible to these electrochemical processes in our brains. On the other hand, this is almost incomprehensible; we have no idea how this reductive picture could be true.



Browser Extensions for Fake News Sites

Fake News Detector

Chrome Extension | Created by New York magazine journalist Brian Feldman

B.S. Detector

Multiple Browser Extension | Created by Daniel Sieradski | Users can submit requests and modifications for review of sites.

FiB

Chrome Extension | Created by students at Princeton University | Detects fake news on your Facebook News Feed

For more resources Fratantonio has gathered, see her <u>research guide on fake news</u>.

Combating Information Apathy

BY ELISE TAKEHANA

Renée Fratantonio has spent the past three years researching information literacy combat the scourge of misinformation that surrounds us. Since 2016, she's been troubled by how readily people spread information without interrogating its sources, its authority. "If you have a social media presence, you are creating knowledge, and you are contributing to a community where people are going to consume that information and walk away with a certain perspective. That implies a great amount of responsibility on us as consumers of information, but also as creators of information." Even more, how we construct our online presence then becomes how outlets like Facebook not only see us, but filter content, and thus a worldview, for us.

Fratantonio's recent work has been in concert with J.J. Sylvia IV, Wafa Unus, and Kyle Moody, who each bring their disciplinary expertise to what they hope to be a book project. For Fratantonio, that means advocating for stronger information literacy instruction so that media consumers and creators are cognizant of their responsibility to the truth. "A lot of people think they're still living in a world where they can trust most information.

People are not approaching things as skeptically as they should." Her portions of the book will not only address the role librarians play in teaching people about mis and disinformation, but also how libraries and librarians have to "evolve with the technologies that are being used the most," particularly social media.

With this call to scrutinize source material, the library community has to combat a rising nihilism for wellestablished research and reputable institutions. but Fratantonio combats such questions with a question: "Why don't you trust the CDC, but you're more willing to trust some nobody online?" In this case, "it's skepticism gone too far" and calls for educators and librarians to ask "are you teaching students to be apathetic about their information consumption?"

Such apathy is dangerous especially in the echo chambers social media platforms create, which ultimately help fuel tribalism and ease the spread of misinformation. Fratantonio has been working with Kisha Tracy on how meme culture appropriates medieval imagery to spread misleading and false interpretations of history. The goal here is to have students "reflect on how information affects perceptions on social issues."

For the Association of College and Research Libraries, combating apathy means adjusting information literacy standards away from skillbased education and moving towards threshold concepts. One such concept that interests Fratantonio is of authority as constructed and contextual. "Different situations and different information needs are going to call for different levels of authority. Sometimes you're going to be in a discipline area where recognized authorities look different." Rather than relying on checklists like the CRAAP list, "it's more about developing mindsets."

Calling authority "constructed" has sparked debate amongst librarians who fear the term is easily conflated with "fake", but for Fratantonio, "construction is not necessarily a bad thing. You build your reputation, that doesn't necessarily mean that it's fake."

Beyond the book project, is Fratantonio chasing down several tangential concerns from the effects of passive information consumption like scrolling and skimming newsfeeds to offline sharing practices that are difficult to track. She is also interested in establishing a more robust media and information literacy program on campus particularly for future educators for whom the stakes are high and limited librarian support in their schools likely exist.

Moving Away from One-Size-Fits-All Treatments

AN INTERVIEW OF TARA MARIOLIS BY ELISE TAKEHANA

You recently published a study diverges from your substance abuse work and frequent presentations on the adolescent population. Your 2018 study was on end of life care for the mentally ill. What brought that about?

It was a pilot rather than a study. One of the things nursing education is facing is the drying up of clinical placements for teaching nursing. We have been using the foundations lab to conduct simulations in order to teach undergraduates. I applied for and received a grant in order to hire actors play standardized mental health patients. One of the scenarios included a patient with end stage alcoholism and liver disease who was nearing the end of life. This gave me an opportunity to collaborate with Communications department. We ran rehearsals, coordinated with the director and wrote scripts. Nursing students and I, along with Carol McKew, got to work

You've spent much of your life as a psychiatric nurse. How has your experience as a psychiatric nurse changed your perspective on drug use disorders?

with 10 actors, and the students

reported learning a great deal and

having a lot of fun. It proved to be

valuable, but it was hard to sustain

due to the work involved.

I started taking students to substance abuse units as part of their mental health clinical experience because there was a big push for psychiatric nursing to do more teaching of substance abuse. I just fell in love with it. The stories that patients told us about how they developed an opioid use disorder was a real eye-opener! A lot of them took Percocet for surgical related pain and ended up becoming physically dependent on them. Patients can become physiologically dependent after taking as few as four Percocet pills. I became curious about how and why this happens. In my early days as a post-surgical nurse, people took maybe a shot of morphine or shot

of Demerol or Dilaudid after surgery, and maybe one

more the next day, but quickly transitioned to Tylenol for pain. So how did opioid use disorder become such a huge problem? I learned quickly that drug companies were developing

potent and addictive forms of opioids, and pushed physicians to use them a great deal.

Could you tell me a little bit about what you're working on now on opioid use disorder?

The opioid epidemic really has hit hard, and there are many myths about what helps people once they are in the throes of it. For example, the American Society of Addiction Medicine has put forth clinical practice guidelines for treating opioid use disorder, and they pretty much mandate that everyone participate in counseling treatment. Thev medication treatment as an adjunct to counseling. So my advisor and I wanted to find out just how effective counseling is in the treatment for opioid use disorder?

One hunch we had is that medications really are the primary treatment, and the therapy is actually

an adjunct to medication treatment. My advisor had coded a data set of 11,000 subjects and I was able to use it for my dissertation research. My research tries to determine out how much counseling extends the benefit of medication treatment. We looked at the use of Suboxone, a trade name for buprenorphine combined with naloxone, which is the primary medication for opioid use disorder. Unfortunately, we couldn't use all the subjects because a fair amount of the data set wasn't reliable. Physicians and nurses took health histories and entered the information into the electronic medical record but often they did not verify it. After conducting a sensitivity analysis of about 800 subjects whose counseling history was verified, we decided to use that sample for the study.

We found that present counseling treatment is durina largely ineffective for improving treatment outcomes. It didn't extend treatment benefits or utilization. It also did not improve medication compliance. We found, however, that having had prior counseling does. There significant difference between the two for helping patients remain compliant to their medication and utilize treatment, which was both surprising and interesting. It didn't reduce the use of methamphetamines or benzodiazepines, but we think that people who are in treatment for opioid use disorder were perhaps taking these substances for other reasons, like anxiety disorders or attention deficit disorder.

It sounds like quite an extensive study. Did you arrive at other conclusions or paths for future research? Another thing I found in my research was that women present quite differently than men when they have an opioid use problem. They tend to have more trauma, anxiety, and mental health problems. They're taking care of children. They're more likely to be living with someone who not only also has an opioid use disorder but may also be abusive to them. There is not a lot of research being done on this population. That would be the next area that I'd want to study.

The other thing that came out of our study was that nurses, advanced practice nurses, and healthcare professionals need to be a lot more aggressive in pushing for changes in policies and practice. Nurse practitioners can prescribe Suboxone, but there are many restrictions on them in many states. In states that restrict nurse practitioners, only 2.8% prescribe medications to treat opioid use



disorder. In states where they are less restricted, twice the number of nurse practitioners prescribe.

Nurse practitioners could do more if they had fewer regulations imposed on them. If states don't want to lower their restrictions, they should at least connect nurses who want to prescribe with physicians who are willing to supervise them so we can increase access to care. Nurse practitioners need to get involved with their professional practice groups in order to lobby for changes in regulations on their practice.

From the Co-Coordinators

With another semester winding down and the holiday season

quickly approaching, we would like to thank our colleagues across campus for their kind support of the Center. We've appreciated all your feedback thus far. Even if it takes longer than we would like, we are always still thinking about and working on your suggestions. We've recently been busy at work on developing

recommendations to recalibrate some of the Special Projects Grants to address faculty concerns and have launched a new webpage featuring digital humanities projects and classes on campus as well a resources for those new to the field. If you have projects or courses you would like included on the page, let us

We are currently working on recording the Faculty Speaker Series lectures as audio files so those unable to attend can still hear about their colleagues' work. We'll also be releasing a casual, conversational podcast

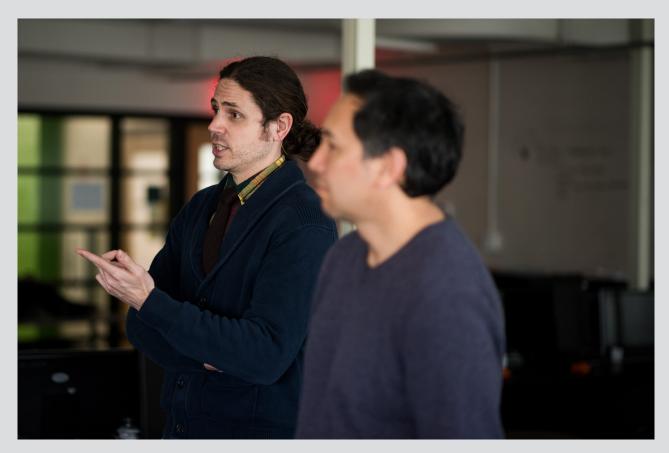
know!

shortly as well. To further our goals of improving the intellectual community on campus, the Center is in the midst of developing a social media presence with the gracious assistance of our friend, Kyle Moody.

The Center is hosting three more events. On December 2, Jeff Warmouth delivers a talk in the Faculty Speaker Series. On the following day the President's Hall will be set up for a BYOL brown bag. What a wonderful opportunity to all eat together and enjoy one another's company! We are also hosting a panel of senior faculty reflecting on their approaches to the profession, titled "If I Knew Then What I Know Now." Join us on December 4th in Ellis White to hear from our compatriots Jane Huang, Ron Krieser, Ben Lieberman, Ben Railton, and Jeff Warmouth.

When you return from the winter break, be sure to mark your calender for our invited lecture on March 4. Dr. Moya Bailey of Northeastern will be with us to speak on her work as a digital humanist as it applies to her research on race, gender, and disability. If you have courses next semester that broach these topics, we encourage you to bring your class.

Peace to you and yours this holiday season. We look forward to sharing 2020 with you.



Mindful Immersion and the History that Surrounds Us

BY ELISE TAKEHANA

Although Joe Wachtel is an historian of colonial America, his approaches blend traditional processes historical with thoroughly modern output. Breaking from the more skeptical views of digital history that peppered his doctoral studies, Wachtel now is focused on the work he is doing with Jon Amakawa to provide a unique interdisciplinary experience for his students. The History by Design course is currently building a demo of an augmented reality tour for the Minute Man National Park.

Wachtel sees great value to this model of historical instruction because not only do students learn historical methodologies, but they learn to see how others see history, like designers or narrative fiction authors. Even more, it reinforces the idea that history isn't about building grand narratives but putting together pieces of a puzzle.

Gaming functions as an excellent structural analogy for Wachtel, a self-proclaimed gamer, who prefers those with expansive worlds to explore. "I think that's very similar to what history is. We know the events that happened and the main stories that happened, but what the historian is doing is building the world that surrounds those events so that you can better put them in context."

As he sees it, digital history is a new model for public history, updating the previous emphasis on visiting museums. "People love history! We just need to be thinking about how do we reach people in the 21st century." Beyond providing a pedagogical model, Wachtel hopes to engage public historians who have a vague awareness of digital tools but struggle to connect those tools to historical work.

he's worked augmented reality thus far, Wachtel is interested in exploring the use of virtual reality for history as a kind of time travelling device. The worry though is that humans are prone to believe what they see, so such representations must be done well and "to the nuanced detail." He's even considered experimenting with what students retain from a VR experience versus a conflicting account from an academic article, if only the means presented themselves.

But Wachtel still has a foothold on producing old media. He is currently working on a proposal for a coauthored book on the origins of the Pennsylvania State Constitution. His interests in constitutional history and state government stem from the apparent reality that Americans are not engaged with understanding how their government is meant to function. "If you don't know how something works, you can't have it," so his research now is "about empowering, it's very much about civic education."

The Reach of the Digital Humanities

Anne Burdick, Johanna Drucker, Peter Lunenfeld, Todd Presner, and Jeffrey Schnapp, in their book *Digital Humanities*, provide an invitingly broad view of DH:

"Digital humanities understands its object of study as the entire human record, from prehistory to the present. This is why fields such as classics and archaeology have played just as important a role in the development of Digital Humanities as has, for example, media studies. This is also why some of the major sectors of Digital Humanities research extend outside the traditional core of the humanities to embrace quantitative methods from the social and natural sciences as well as techniques and modes of thinking from the arts."

DH needs people of all disciplinary backgrounds. Here are a few examples beyond Fitchburg State that might help you recognize DH in your work and interests.





Historians Geographers

Placing Segregation

A project that uses GIS technology to chart "spatial patterns of residential segregation in Nineteenth Century American cities, exploring issues of wealth, occupation and race."

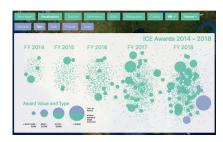


DeepBach: harmonization in the style of Bach generated using deep learning

Musicians
Computer Scientists
Mathematicians

DeepBach

A SONY labs project using artifical intelligence and deep machine learning to generate compositions readily attributed to Johannes Bach. The tool is ultimately aimed at assisting human composers.



English
Historians
Hispanic Studies
Library Science

Torn Apart

A series of data visualizations including one of ICE facilties and private contractors made in response to the 2018 humanitarian crisis at the US-Mexico



Bioscience
Poetry
Genetic Engineering

The Xenotext

Poet, Christian Bök, translates his poetry into a DNA sequence using a double cipher. The poem "acts as a set of instructions which cause the bacterium to manufacture a protein" and that protein is its own poem when translated back to English.

Events

Please send details of events related to faculty research or intellectual life to etakehan@fitchburgstate.edu for inclusion on the Center for Faculty Scholarship's calendar and newsletter.







12:30 CTL



11:30-1:00 President's Hall Faculty Brown Bag Lunch.

Bring a lunch and drop

by any time for lunch

and conversation. You're

welcome to bring food to

share if you like.

Jeff Warmouth appears in the Faculty Speaker Series with his talk "Urgent Blowout: How I Learned to Stop Worrying and Enjoy the Process." Q&A to follow.





3:30 Ellis White

The CFS hosts "If I Knew Then What I Know Now" a panel discussion featuring the insights of senior faculty on academic life.





Laura Baker appears in the Faculty Lecture Series with her talk "Critical Digital Rethinking Pedagogy: the Immigration History Course."





digital exhibit on childhood sexuality features faculty and student panels on the author's archives and themes of his work.

2:30 Hammond Main Lounge

Graphic novelist Jarrett J. Krosoczka, speaks on his nonfiction memoir, Hey Kiddo, on growing up with drug addicted parents.

















Reading and Listening

<u>Undergraduate Research Supervision."</u>

Publishable Research: Best Practices."

The Council of Independent Colleges.

colleagues might enjoy.

Share recommendations on articles, books, and podcasts that

Frontiers in Psychology recently published a piece on navigating

conducting research with undergradutes, complete with a

healthy bibliography: "Strategies for Preserving Faculty Time in

Also see their article <u>"Providing Outstanding Undergraduate</u>" Research Experiences and Sustainable Faculty Development in Load" and literature review "Engaging Undergraduates in

If there are faculty in the humanities looking to do research with

undergraduates, external grant funding is available through

Catherine Buell, Kisha Tracy, Joe Wachtel, and JJ Sylvia present papers in a panel on the digital humanities across their disciplines.



12:30 CTL

J.J. Sylvia IV appears in the Faculty Lecture Series with his talk "Becoming Data: A Digital Humanities Project." Conversation to follow.



3:30 Randall Sci. Lecture Hall Prof. Moya Bailey, digital humanist and race, gender, and disability studies scholar delivers an invited lecture. Reception to follow.

Michael Hoberman delivers his talk "Don't Know Much About Theology: The Case Building Religious Literacy into the University Curriculum."

CTL Awards and **Grants** Mid Nov. Spring '21 MSCA Prof. Dev.

Mid Nov.

Mid Dec. **Whiting Travel Grant internal** approval

Early Jan. **Whiting Travel Grants (external)**

Mid Apr. **Fall '20** MSCA Prof. Dev.

Internal Grants Timeline

Late Apr. **Harrod Lecture Awards**

Late Oct.

Late Oct.

Center for Italian

Culture Grants

Late Nov. **CFS Faculty** Student Grants

Early Dec. **Faculty Award** applications

Mid Feb. Summer '20

MSCA Prof. Dev.

Late Apr. **Special Projects Grants**

Irish Culture Endowment Grants

Research Live

The Center for Faculty Scholarship

Co-Coordinators: Eric Budd and Elise Takehana Newsletter Staff: Savanah Hippert and Kurtis Kendall

If you are interested in having your research featured in Research Live, contact Elise Takehana at etakehan@ fitchburgstate.edu

Faculty Book Publications: Home

featuring a book and an article a month along with a brief profile of its faculty author. October's spotlight featured Charles Sides and Daniel Welch. November's features Michael Hoberman and Audrey Pereira. If you have publications you've not yet shared with the library, do share your

work with them so you too can

be in the spotlight.

Visit the Amelia V. Gallucci-Cirio

library's "Faculty Spotlight"

