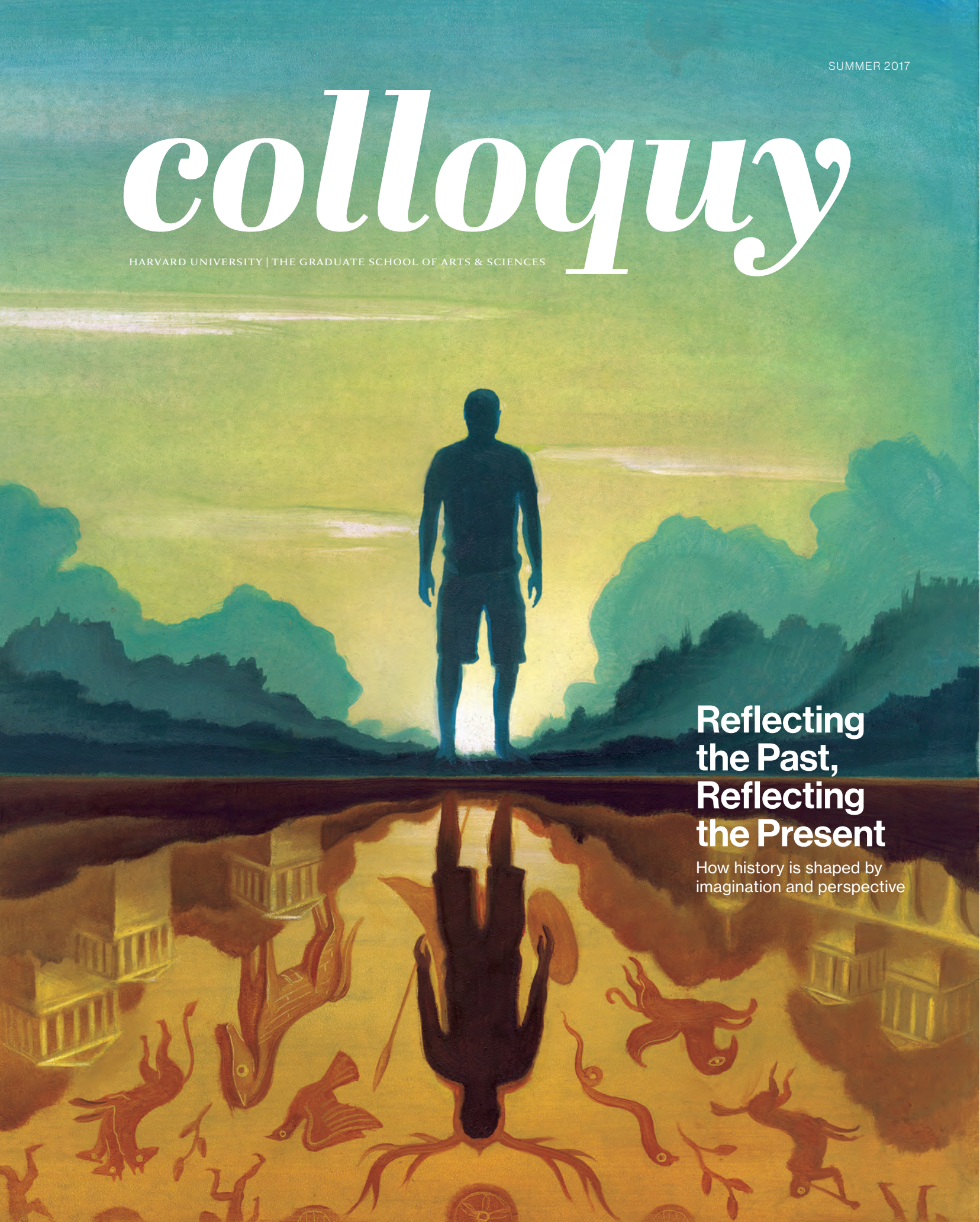


SUMMER 2017

# *colloquy*

HARVARD UNIVERSITY | THE GRADUATE SCHOOL OF ARTS & SCIENCES



**Reflecting  
the Past,  
Reflecting  
the Present**

How history is shaped by  
imagination and perspective





*to note*

# Make Your Connection

**THE HARVARD ALUMNI DIRECTORY** does more than let you search online for friends you made as a graduate student—you can also network with fellow alumni and connect with current Harvard students. Update your profile with career networking capabilities to get started.

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# colloquy

SUMMER 2017

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**SUMMER 2017** marks the end of my first five-year term as dean of GSAS, a role that I continue to find intellectually engaging and energizing. The more I meet with our students and alumni, the more I see the importance of GSAS's efforts in enhancing the benefits and programs that draw master's and PhD students to Harvard.

One latest addition to GSAS's academic offerings is a new SM degree in data science that combines the study of statistics, which dates back at least to the mid-18th century, with the relatively newer field of computer science. This joint program between computer science and statistics faculty is one of many of Harvard's responses to the evolving needs and interests of our graduate students. You can read more about the program on page 4.

As a statistician, I am excited by data science and how it will benefit our students and alumni, as well as by its impact on society and scholarship across the board. Time is of the essence for this rapidly evolving discipline, and hence I am grateful to have the opportunity to take a sabbatical for the 2017–2018 academic year to expand my research on statistical foundational issues for data science, and to assist two statistical societies as they embark on strategic planning for the roles and contributions of statisticians to data science.

In my absence, Emma Dench, McLean Professor of Ancient and Modern History and of the Classics, has agreed to serve as interim dean. A scholar of Roman Republican and early Imperial history, Professor Dench is an outstanding teacher and mentor of undergraduate and graduate students, and a University citizen with an exceptional record of service. As director of graduate studies for many years in the Department of the Classics, she has a deep and nuanced understanding of graduate curricula, the needs of graduate students, and departmental operations and concerns. I am extremely grateful that she has agreed to take on the interim role.

The past five years have truly been a privilege and learning experience. I am very honored that I will serve a second term as dean after my research sabbatical.

—XIAO-LI MENG, PHD '90  
DEAN

## colloquy SUMMER 2017

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**Jon Petitt** director of alumni relations and events  
**Ann Hall** editor  
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### LETTERS TO THE EDITOR

We welcome your feedback and ideas. Write to: *Colloquy*, Harvard University Graduate School of Arts and Sciences, 1350 Massachusetts Avenue, Suite 350, Cambridge, MA 02138-3846; or e-mail [gsaa@fas.harvard.edu](mailto:gsaa@fas.harvard.edu).

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## QUOTES OF NOTE

***“Having such fantastic engineering and applied sciences programs at Harvard is not just good for the University, it is good for society as a whole.”***

— CHEN C. KAO, AM '65, PHD '69, APPLIED SCIENCES, AT THE SEAS REUNION (SEE PAGE 5)

## REMARKS

What is your most vivid memory from your first year of graduate school? — COLLOQUY, SPRING 2017

As the first person in my immigrant, working-class family to attend college (the women's college of my state university), I felt distinctly out of place during my first year, '63-'64, at GSAS. Shyness kept me from even attempting to make friends (no Dudley House then), so I spent all my time working on the difficult assignments for my Classics department courses, hoping not to leave Harvard in disgrace. The payoff was unforgettable, thanks to interaction with some amazing professors: Cedric Whitman's encouragement and kindness to an insecure first-year; John H. Finley's dramatic and dazzling lectures on Homeric heroes; Sterling Dow's invitation to his historic home on Brattle Street for sherry (!)—all indelible memories of a year like no other.

— BARBARA TURZYNSKI DRUSHELL, AM '64, PHD '71; RETIRED PROFESSOR OF CLASSICS AND ENGLISH

I arrived at Harvard in mid-September 1956. I was four months out of the US Navy, where at my last posting (in Taiwan), a kindly commander, learning that I was on my way to Harvard, carefully warned me against the communists I would find there, particularly Professor John K. Fairbank. A few months later, I was enrolled in Fairbank's two-semester Modern Chinese History course, was entranced by his teaching and his scholarship, and later became a historian of China.

— NICHOLAS CLIFFORD, PHD '61, COLLEGE PROFESSOR EMERITUS OF HISTORY, MIDDLEBURY COLLEGE



**The skill sets gained from a PhD in any field would be amazingly beneficial for informing and impacting policy!**

— GARRETT DUNLAP, PHD STUDENT IN BIOLOGICAL AND BIOMEDICAL SCIENCES, APR 15



## ENGAGE

What's your favorite memory of living in Conant or Perkins Hall?

## ERRATA

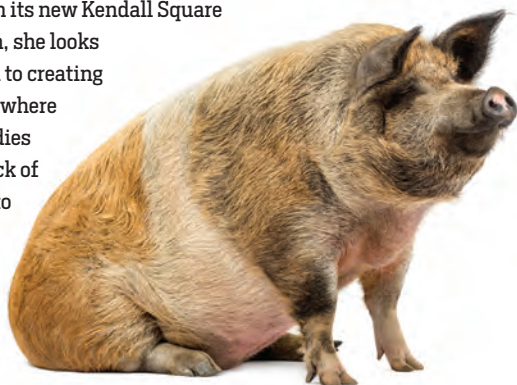
In the spring 2017 story “Human Dignity” about the publication of *Eyeing the World*, the author's name was misspelled. The author's name should have read “Henry J. Steiner, AM '55.” *Colloquy* sincerely regrets this error.

• • • **Share your story with us!** E-mail [gsaa@fas.harvard.edu](mailto:gsaa@fas.harvard.edu). Or write *Colloquy*, Graduate School of Arts and Sciences, Harvard University, 1350 Massachusetts Avenue, Suite 350, Cambridge, MA 02138-3846.



## SAVING LIVES

Luhan Yang, PhD '13, is co-founder and chief scientific officer of eGenesis, a startup based on technology developed in Professor George Church's Harvard Medical School lab. The goal? Make grafting organs from other species to humans a commonplace medical practice. As part of eGenesis' efforts to clone a pig for use in clinical trials, Yang is developing a programmable genome engineering tool designed to overcome transplantation challenges, such as tissue rejection or viruses. As the company grows in its new Kendall Square location, she looks forward to creating a world where no one dies from lack of access to organs.



Eric Mankin, PhD '88, asks a question during keynote address.

## NEW PERSPECTIVES

On April 8, 2017, hundreds of GSAS alumni returned to Cambridge for a day of engagement and interaction with Harvard faculty, GSAS students, and other alumni during the annual Alumni Day celebration. The keynote address and breakout sessions addressed current affairs in the US and in the world and provided new perspectives on scholarship. Save the date for Alumni Day 2018: April 14, 2018.

... Find out what happened at [gsas.harvard.edu/new-perspectives](https://gsas.harvard.edu/new-perspectives)



## MAKING SENSE OF THE DATA

Beginning in fall 2017, GSAS will accept applications for a new SM degree in data science. The new degree, under the joint academic leadership of the computer science and statistics faculties and administered by the Harvard John A. Paulson School of Engineering and Applied Sciences (SEAS), will train students in the rapidly growing field of data science.

Data science impacts almost every scholarly discipline and is changing how we understand business, government and politics, pure and applied science and engineering, medicine and public health, journalism, sports, law, and education. Students will learn the fundamental computer science and statistics methodologies that underpin data science and study advanced topics, such as the principles of experimental design, visualization, massive and distributed computing, and applications drawn from the breadth of Harvard's faculties.

... Learn more at [gsas.harvard.edu/NewDataScience](https://gsas.harvard.edu/NewDataScience)



## HARVARD HORIZONS

The Harvard Horizons program celebrated its fifth year with an annual symposium that included talks about the viral roots of asthma, becoming an imam in the US, what future monuments mean, and more.

... Missed the symposium? Watch the videos at [gsas.harvard.edu/symposium2017](https://gsas.harvard.edu/symposium2017).

## CENTENNIAL MEDALS

The 2017 Centennial Medalists were honored at an event held the day before Commencement, which celebrated the work they had accomplished in conservation, archaeology, racial relations, and urban sociology. Each year, GSAS presents the Centennial Medal to outstanding alumni whose contributions to knowledge, to their disciplines, to their colleagues, and to society have made a fundamental and lasting impact.



**Russell Mittermeier, PhD '77**, has conducted work on the front lines of conservation biology and has made an extraordinary difference in preserving some of the most vulnerable species and geographical areas on earth, working tirelessly to build partnerships with people around the world to promote biodiversity.



**Sarah Morris, PhD '81**, has brought to light countless ancient artifacts at sites throughout the Mediterranean and produced scholarship that encompasses an impressive range of historical periods, in the process sparking new conversations and connections across disciplines, geographic areas, and historical periods to help us better understand the origins of Western civilization.



**Thomas Pettigrew, PhD '56**, has devoted his life to confronting some of the most divisive problems facing human society—racism, discrimination, and prejudice—and laid the empirical and theoretical groundwork for ideas that are now fundamental to the way we think about prejudice in the United States and around the world.



**Richard Sennett, PhD '69**, has shaped our understanding of some of the most fundamental questions of modern life: what it means to live in a city, and what it means to work. His pathbreaking work on the sociology of cities, communities, and cultures has expanded our conversations about the social bonds and systems that shape our personal lives.

●●● Read more at [gsas.harvard.edu/Centennial2017](https://gsas.harvard.edu/Centennial2017).

## ONLINE EXCLUSIVE

# RICH PAST, BRIGHT FUTURE

REUNION HIGHLIGHTS HOW  
ENGINEERING AND APPLIED  
SCIENCES AT HARVARD HAS  
GROWN AND EVOLVED

In April 2017, alumni who earned master's and PhD degrees in engineering and applied sciences returned to campus for a reunion that celebrated the long history, scholarship, and future of engineering and applied sciences at Harvard.

●●● Read a recap at [gsas.harvard.edu/SEASreunion](https://gsas.harvard.edu/SEASreunion)





## CLASSICALLY TRAINED

SCHOLAR OF ANCIENT ROME,  
**EMMA DENCH** TO LEAD GSAS  
AS INTERIM DEAN

Emma Dench, McLean Professor of Ancient and Modern History and of the Classics, will serve as interim dean for the 2017–2018 academic year.

A scholar of Roman Republican and early Imperial history, Dench is an outstanding mentor of graduate students, having served for many years as director of graduate studies in the Department of the Classics. She possesses a deep and nuanced understanding of the needs of graduate students, and in 2015, won the Everett Mendelsohn Excellence in Mentoring Award.

"I was very honored to be asked to take on this interim role, because I have always had huge admiration for GSAS," said Dench. "I look forward to continuing the excellent work of Dean Meng in serving the needs of our exceptional graduate community this coming year."

Dench received a BA with a "double first" in classics and a DPhil in ancient history from the University of Oxford. From 1992 to 2006, she was promoted through the ranks of lecturer, senior lecturer, and reader to professor of ancient history at Birkbeck College, University of London, and in 2007, she joined the FAS as McLean Professor of Ancient and Modern History and of the Classics.

"Professor Dench is eminently qualified to oversee GSAS's academic and administrative operations," said Xiao-Li Meng, dean of GSAS. "I am extremely grateful that she has agreed to take on this interim role."

• • • Read more about Dench on page 17.



PHOTOGRAPHER: KATHLEEN DOOHER





# Top Thinker

GSAS ALUMNA, **MOLLY ROBERTS, PHD '14**,  
LAUDED FOR WORK ON CENSORSHIP

Molly Roberts (PhD '14) was named one of the “Top 30 Thinkers under 30” by the *Pacific Standard*, based on her research on social media and Chinese government censorship. Her book on the impact of censorship in China, tentatively titled “Fear, Friction, and Flooding: The Surprising Impacts of Incomplete Censorship” expands on her dissertation on the same subject. Roberts edited a Virtual Issue of the journal *Political Analysis* on “Recent Innovations in Text Analysis for Social Science,” discussing the ways text analysis can revolutionize social-science research and thinking. Currently, Roberts is an assistant professor in the Department of Political Science at the University of California, San Diego.

## ALUMNI UPDATES



**Eliza Kempton, PhD '09**, an assistant professor of physics at Grinnell College, received a Faculty Early Career Development grant from the National Science Foundation. The grant is the largest Grinnell has received in support of a single faculty member's work. Kempton will build computer programs that model “Super Earth” sized planets in an effort to understand their atmospheres and develop mentoring programs. She will also develop courses for students who need extra preparation for STEM fields.



**Yunqing Tang, PhD '16**, has been awarded the inaugural Association for Women in Mathematics Dissertation Prize for her work on two of the most challenging problems in arithmetic geometry—the Grothendieck-Katz p-curvature conjecture and the Ogus crystalline Mumford-Tate conjecture. She made progress on both problems thanks to a creative use of new and old methodologies. Tang is currently a member of the Institute for Advanced Study in Princeton, New Jersey.



**Lisa Gualtieri, PhD '89**, received a “Women to Watch in Science and Technology” award from the *Boston Business Journal*, one of 10 women so honored. Gualtieri is an assistant professor of Public Health and Community Medicine at Tufts University, a position she has held since 2011. She is also the founder and program director of RecycleHealth, a nonprofit organization dedicated to improving health and fitness by providing refurbished fitness wearables to underserved populations.



**Sheena Chestnut Greitens, PhD '13**, became first lady of Missouri on January 9, 2017. Greitens is an assistant professor in the Department of Political Science at the University of Missouri, a role she has held since 2015. She looks forward to continuing in her academic role, while working to improve foster care and adoption services in her role as first lady of the state. She published *Dictators and Their Secret Police: Coercive Institutions and State Violence* last year.



# PAYING ATTENTION

WORK THAT **CHRISTOPHER CHABRIS, PHD '99**, CONDUCTED ON INATTENTIONAL BLINDNESS WON AN IG NOBEL PRIZE, WHICH HONORS "ACHIEVEMENTS THAT FIRST MAKE PEOPLE LAUGH, AND THEN MAKE THEM THINK," AND CAUTIONS US ABOUT THE IMPACT OF INCREASING TECHNOLOGICAL DISTRACTIONS ON OUR INTERCONNECTED WORLD.

**You studied computer science as a Harvard undergraduate, earned a PhD in psychology, and worked as a radiology research fellow before publishing papers in economics journals—plus you are a chess master. How do these seemingly disparate activities connect with what you do now?**

I think they all are related, but by a series of adjacencies rather than a consistent, unified focus. I learned to play chess when I was five and later developed an interest in computer chess that naturally led to an interest in artificial intelligence. From there, I became curious about human cognition, neural networks, how the brain works, and, most broadly, in the causes and the consequences of the way we think and make decisions.

When I decided to concentrate in computer science, the program required that you take courses in a "breadth area," one of which was psychology. That made sense to me because of my interest in artificial intelligence. Plus, I had tried physics and failed the introductory course!

**So graduate study in psychology was a natural next step?**

Yes and no. One of my undergraduate professors—and favorite people ever—was Stephen Kosslyn [John Lindsley Professor of Psychology in Memory of William James, Emeritus] and he offered me a job in his lab after I graduated. I knew I didn't want to continue on with school, so I said "Great, sign me up." Steve eventually talked me into pursuing an advanced degree.



# ***“Nobody is immune to this kind of inattentional blindness.”***

—CHRISTOPHER CHABRIS, PHD '99

**While you were a graduate student, you collaborated with Daniel Simons on a project about inattention, known as the invisible gorilla experiment. What is the invisible gorilla?**

The invisible gorilla is a cheeky name that Dan Simons and I gave to a book we wrote. It really refers to an experiment we did with students in a Harvard course we taught, inspired by the work of Ulric Neisser at Cornell in the 1970s. Research subjects were asked to watch a video of our students passing a basketball and count the number of times the ball is passed. During the video, a gorilla walks through the action and is visible for nine seconds, but many don't notice it—as though the gorilla is invisible to them. It's not really invisible—it just seems that way because people often don't see it.

I was surprised at the results because the leading idea of how attention worked at the time was the “spotlight model”—that attention amplifies perception of everything within a certain limited zone of space. But the gorilla passes right through the zone of attention, and still isn't noticed. The results added to the evidence for a competing explanation—that attention focuses on individual objects and switches between them. If it moves from object to object, and never happens to alight on the gorilla for some reason, then it's as though you never saw it.

**But about half of people do see the gorilla, yes? Why do you think that is?**

I suspect that some trait must be involved, that some people are inherently more likely than others to see unexpected events like the gorilla. Dan and I and others have conducted studies since then with other types of events, but we haven't found that trait yet, in part because it's hard to trick research subjects repeat-

edly with unexpected events—once they notice one, they are on alert for more.

I'm convinced, though, that nobody is immune to this kind of inattentional blindness. Many drivers are certain that they can talk on their cellphone and observe what's going on around them because they haven't gotten into an accident yet—but that could simply mean they've been lucky or mostly drive on empty roads. They aren't immune to inattentional blindness.

**But aren't you immune when you use a hands-free device?**

The hands-free thing is an illusion because the problem isn't taking your hands off the wheel. Everyone knows you can drive with one hand on the wheel. The problem is that carrying on a conversation with someone far away uses cognitive resources that divert attention from the process of driving. Even a clear cellphone connection is not as good as talking face-to-face; it saps more attention to decode the words and understand what's being said.

**What's next for you?**

I want to continue researching attention and inattentional blindness, which are increasingly critical issues as we develop more ways to distract ourselves. I'm also studying collective intelligence, figuring out how you can measure the intelligence of a team of people and determining how to increase the group's intelligence. I find it interesting to think about the group as an organism with characteristic behaviors that can be measured and perhaps become more effective. It's growing in importance because across a lot of fields, especially within academia, more work is being accomplished by groups. And maybe I'll play some more chess.

## **CURRICULUM VITAE**

Geisinger Health System  
Professor

Union College  
Associate Professor  
of Psychology

*The Invisible Gorilla*  
Co-author, with  
Daniel Simons

Harvard University  
PhD in Psychology, 1999  
AB, Computer Science, 1988

# At a Crossroads

## THE FUTURE OF THE EUROPEAN UNION

Following the devastation of the Second World War, European nations made a commitment toward economic and political integration and cooperation in the hopes that this convergence would bring stability to the Continent. Today's European Union with its 28 member states appeared to be the realization of a vision that was established by the Treaty of Rome in 1957 when the six

RISE OF POPULIST  
MOVEMENTS  
COULD THREATEN  
THE EUROPEAN  
PROJECT

ILLUSTRATION BY  
LINCOLN AGNEW

founding members—Belgium, France, Germany, Italy, Luxemburg, and the Netherlands—created the European Economic Community (EEC) that was to bring an “ever-closer union” of the peoples of Europe.

With the financial crisis of 2008, however, the term “crisis” became synonymous with Europe and challenged its ability to manage issues effectively and equitably among member states. The political winds also

began to shift as populist and nationalist parties became more prominent on the political stage across Europe. The Brexit vote of 2016 was the first manifestation of the changing tide as it opened the door for the United Kingdom's exit from the Union. The election of President Trump in the United States deepened concerns over the post-war order and security.

These developments, among others, have called into question the future of the European Union. Can the European Union successfully manage the persistent debt crisis and address populist concerns? Or will integration break down under the weight of the economic, political, and security challenges?

*Colloquy* sat down with former and current graduate student affiliates of the Minda de Gunzburg Center for European Studies at Harvard to gain perspective on the challenges facing the European Union and the opportunities to address and solve them.





## PARTICIPANTS

**Colleen Driscoll**, PhD student in the Department of Government CES Graduate Student Affiliate and Co-Chair, Populism, Nationalism and Radical Politics Study Group

**Danilo Mandić**, PhD '15, Sociology College Fellow in the Department of Sociology and CES Local Affiliate

**Jonathan Mijs**, PhD '17, Sociology CES Graduate Student Affiliate and Co-organizer of the Seminar on Social Exclusion and Inclusion in Europe



**The UK's Brexit vote seems to be a symptom of a larger issue within the European Union. What are the pressures leading some countries to consider leaving the EU?**

**Colleen Driscoll:** One of the major pressures is, of course, immigration, from inside and outside the EU. The Brexit vote, for example, raised issues of border control, with Leave voters wanting to deny entry to the UK for people that they don't see as benefiting their economy or culture. They are driven by economic concerns, by a backlash against the de-industrialization of Western economies more broadly, and by xenophobia, fear of terrorism, and fear of Islamization of the West, as we see in other countries in Europe. So immigration is a key issue, as well as the idea that leaving Europe gives a country complete control over their national identity and over who may enter national territory.

**Danilo Mandić:** I agree with that. The simplest answer is that when times are bad, voice and loyalty become more difficult, and exit becomes more appealing.

**Jonathan Mijs:** Voice is something that many member states never believed they had. The EU hasn't really built that voice or strengthened their democratic

legitimacy. Many populations across Europe feel they are facing foreign forces who are making decisions that impact their lives. But also they feel impacted by the economic forces of globalization brought in by the European Union, and by the foreign bodies, foreign tongues, and foreign looks brought in by immigrants. For people who themselves are facing hardship, who are seeing their prospects and their ambitions unrealized, that is a threat, and they are calling for, if not national autonomy, then for bringing back a sense of control over their lives—even if that is an illusion.

**So the movement of refugees, for example, as well as legal immigration, would feed into their fears and their desire for change?**

**Mandić:** Sure. But I don't think there's any law of nature that says it has been perceived that way.

---

**“This divide is increasing in Europe as it is across the world, leading to polarization—economic polarization as well as polarization of their sentiments—which they translate into politics.”**

—JONATHAN MIJS, PHD '17



# “The EU is stuck between two goals: increasing the number of member states and developing a deeper and more meaningful integration.”

—COLLEEN DRISCOLL, PHD STUDENT IN GOVERNMENT



Aggressive propaganda campaigns have arisen across Europe, especially in Eastern Europe. The Visegrád countries, led by Hungary, Slovakia, and the Czech Republic, have been absolutely disgraceful. Brexit data shows that migration was by far the most important concern. In a word cloud representing Leave voters, the most prominent word was immigration, a simplistic reference to fear of an Arab or Muslim terrorist threat. The Remain camp did very little to address this in a compelling way, and in many ways it played into fears and xenophobia. This anti-migrant sentiment is very robust. But why not ask the question: Could migration be an opportunity? Nobody asks that. Nobody dares ask that.

**From an inequality perspective, are those in the center more affected by inequality, which leads to the rise in their feelings about immigration?**

**Mijs:** For one group of people, opening borders has provided easier travel and cheaper phone plans. They applaud the market forces that have helped them, and they would like to see these benefits increase. Many are worried about how, with Brexit, the mobility they now take for granted may reduce in the coming years. These are people who generally have good jobs, who have benefited from the forces of globalization and the opening up of the markets.

And then there's a group of people who, in a very real sense, haven't benefited or perceive that they haven't. They have seen their wages drop because of

increased competition. They have not, or feel they have not, benefited from the markets opening up. They do not appreciate increased mobility because that hasn't and will never be on their mind. In fact, they feel threatened and are worried by the fact that the communities they live in are changing in nature away from what they're comfortable with. This divide is increasing in Europe as it is across the world, leading to polarization—economic polarization as well as polarization of their sentiments—which they translate into politics.

**In the United States, many voted for Donald Trump because of lowering wages and job insecurity. Are we seeing something similar going on in Europe?**

**Driscoll:** Yes, definitely. I believe that this relates back to de-industrialization and to the lack of stable, steady jobs that people kept throughout their lives. It's no longer the case that a high school diploma, for example, ensures a lifetime job in the local factory. Job prospects are more precarious, and workers now compete for jobs with individuals from other EU countries or with immigrants from outside the EU—or they might perceive that scenario as a threat. They feel as though their livelihood is being taken away from them by forces they can't control.

**Mijs:** These are legitimate fears. Careers are much less stable. Expectations are bleaker, leading many to oppose the European project's opening up of markets in a rational and well-informed way.

**Mandić:** That's extremely important. I'm always struck by the attitudes around

globalization and the opening up of borders, which allows for the movement of stuff and for the movement of people. In principle, you would expect tremendous advantages and some disadvantages. But the media reports on the disadvantages of moving people around, whereas the movement of stuff is considered wonderful. Goods should move across borders. But no one, based on the same principles of economics, is willing to admit that the movement of people could be considered economically advantageous. You only hear about the negative aspects of moving people around.

**Driscoll:** Yeah, definitely. In France, for example, the right wants to portray France as a sovereign nation that will care for its citizens. The right's natural focus on sovereignty and economic protectionism in France is different from right-wing parties in other countries.

**Mijs:** It probably is a special case in France, although you see a similar coming together of ideas in Holland, where you have Wilders advocating to rid the country of foreigners and increase support for the elderly and for the poor. Wilders began his political career as an economic liberal in what is now the centrist government party, and he left that party to form his own. He adapted his political positions into an effective form of protectionism, a belief he shares with the Socialist Party in the Netherlands. Even though the parties are at opposite ends of the political spectrum, they agree on their positions more than one would expect.

**“This anti-migrant sentiment is very robust. But why not ask the question: Could migration be an opportunity? Nobody asks that. Nobody dares ask that.”**

—DANILO MANDIĆ, PHD '15



A broader trend in many countries is the erosion of social democracy, where we naturally find the defenders of the working class. Many in these countries, particularly the working class, have grown unconvinced that this system of government can address their issues of concern, in large part because it is connected to the European Union as a neo-liberalist and free market project. Perhaps for a while they believed it was possible. But they can no longer.

**Looking forward, is it inevitable that the European Union could be dismantled, or are there things the European Union could do to preserve and strengthen itself?**

**Driscoll:** The EU is stuck between two goals: increasing the number of member states and developing a deeper and more meaningful integration. I see these two goals as fundamentally opposed, because as you increase the number of people around the table, it's much more difficult to build consensus and find projects that will work for everyone. Increased market integration is one concern, and challenges exist in creating social integration, especially among countries that have very different political and historical experiences. That's why the EU is facing this crisis right now, because it's been trying to put forth these two fundamentally incompatible goals.





Mijs, Driscoll, and  
Mandić at the Minda  
de Gunzburg Center for  
European Studies

**Mijs:** I agree. The European Union has perhaps explicitly, but certainly implicitly, been designed with the belief that economic integration would lead to a convergence in terms of economic development across the Continent, which would then lead to a convergence on political, cultural, and other social forms. Neither has happened yet. The only hopes for Europe would be deepening that union and developing a more convincing identity or message. Let's think about voice, to go back to that important term, about giving people a say in this process. And leave it to them to figure out where to take it.

**Could you sum up your thoughts about the future of the EU?**

**Mandić:** I think the EU is on the defensive and has a PR problem. They need to rebrand themselves and coopt the right-wing critique of neo-liberal devastation, which is very compelling to many as European integration moves forward. If the EU doesn't send that message to them, Marine Le Pen will.

On the broader issue of identity, I do think they need to stop being defensive and clearly define an identity, even if it's a laundry list about gay rights, women's rights, and national toleration, for example. An identity that can coherently draw Europe into a pan-nationalist kind of unification.

**Mijs:** I have some optimism about what is driving these populist movements. The rise of the right across Europe, the rise of the populist—sometimes xenophobic, sometimes extreme—right is in many places an interesting combination of socialist, anti-capitalist ideas about what we owe our people and a desire to not rely on market forces to solve our problems. It also includes an appeal to common enlightenment values and a Judeo-Christian identity. Somehow, this message of socialism combined with a message of unity based on a whitewashed version of the European past appeals to many voters. The EU could combine these different values to appeal to different groups.

In a way, the European football championship and the Eurovision Song Contest are the sites of competitions, but also the sites of community building within and between countries. Developing solidarity would make for a deeper union, perhaps a smaller one.

**Driscoll:** The EU has been perceived as an elite-run project benefiting the winners of globalization and the winners of the European project itself. You bring up the Eurovision Song Contest and the European football championship as frivolous examples, but they're not. They bring in the potential losers of the European project and integrate them into the beginnings of a European identity. The key to moving forward with European integration is reaching out to people, especially people in rural locations who are not connected to the elite project of the EU. The more inclusive, centrist politicians need to listen and offer solutions that counteract xenophobic populists. They need to endorse policy solutions that will improve lives. They need to say: "We understand your circumstances, because we have been listening to you." 🍷







HOW HISTORY IS SHAPED BY  
IMAGINATION AND PERSPECTIVE

# REFLECTING THE PAST, REFLECTING THE PRESENT

BY ANN HALL  
ILLUSTRATION BY  
CHRISTOPHER BUZELLI



or non-historians, history can seem like an accounting of time. On this date, that happened, as though the true story of those who lived long ago can be gleaned from recorded events. But speak to those who study the past and the truth of history becomes murkier, depending as much on mythology and the opinions of those who wrote stories down as it does on what may have actually happened.

“When you’re studying ancient history, you mostly learn there’s no true story,” says Eliza Gettel, a PhD student in the Classics. “It’s as though there is a big basket of antiquities and chroniclers and historians pick out the things they like and leave the things they don’t.” Gettel studies Roman imperial history and archaeology, particularly of the eastern Mediterranean, as well as the use of antiquity in 20th century Greek politics. For her, learning exactly what happened is less important than understanding what people of a particular era thought about it.

“It’s more interesting to consider why they thought something happened and how that knowledge influenced the story we’re telling about them,” she says. Ultimately it all boils down to making an argument, with the true story becoming the argument that wins over time, whether that is the argument ancient groups made about themselves or the scholarly narratives that stand the test of decades.

Gettel’s advisor, Emma Dench, McLean Professor of Ancient and Modern History and of the Classics, agrees that historical study is more about argument and less about what could have happened. Rather than reconstructing a singular truth, historians are tuning into the noise of competing narratives, like trying to listen to a faraway station on a radio. “You can pick up the odd moment of clarity, a fraction of a conversation,” she shares. “It’s always an argument, I think, one that involves a choice to exclude other versions.”

*“It’s important for us to go back and learn from the past, and ask, have we really changed that much?”*

—KATHRYN O’NEILL, PHD STUDENT IN CELTIC LANGUAGES AND LITERATURES



#### TELLING A TRUTH



ome truth can be found in sources that survived to the modern era, even though they, too, include interpretations that have then been re-interpreted.

Kathryn O’Neill, a PhD student in Celtic languages and literatures, studies Irish annals, the yearly records of activities at particular monasteries throughout Ireland. While annals in other parts of Europe often recorded material related to the recording monastery and its environs, the Irish annals provide a brief record of events happening throughout the country, for example, reporting that a war was underway, or where an outbreak of plague occurred, or that a comet had appeared in the evening sky. Unlike their continental counterparts, the Irish monks also decided that it was important to preserve stories of the past, many of them pre-Christian.

“Priests felt it was important to record their pagan past,” says O’Neill. “They documented stories that had been told for generations, which preserved a great history of orality.” Up until the 18th century, the monks were recording and rerecording material from as far back as the 500s and putting their own spin on

the content. O’Neill has traced changes in the tales based on the interests of the scribes at the time. Some tales clearly arise from myths or legends, while others could be seen as based in fact, a written history. By investigating the information she finds in the annals and comparing it with the written stories, she hopes to piece together something of the history of the time. “It’s important for us to have this relationship with our past,” she says.

Developing this relationship means, in a sense, that all history is revisionist and subject to interpretation—while claiming to be a true record of events. “Much of the literary activity occurring in Ireland can be seen as an attempt to formulate the past because so much of it claims to be an account of the past,” says Joseph Nagy, Henry L. Shattuck Professor of Irish Studies and O’Neill’s advisor. “And yet, as I think any modern historian will acknowledge, anything that claims to be from the past is also reflecting the present as much as it’s reflecting that past. And it’s also reflecting the imagination.” History becomes a pastiche of influences and sources that resonate with a culture at a particular moment in time. And Nagy is more fascinated with the story itself than the truth of its origins.

“Because the story is telling a truth, which may be an ideological truth,” says Nagy, “or it may be a truth that is based more on the contemporary circumstances of the storyteller and the storyteller’s audience than upon the past that is supposedly being relayed. In some ways, I’m more interested in that ideological and aesthetic truth than in the historical truth.”

#### APPROPRIATING HISTORY



n the essay “On History,” written in the early 1900s, the philosopher Bertrand Russell wrote, “In the 18th century perpetually, and in our own day occasionally, arguments as to the value of liberty or democracy are drawn





## *“Once you freeze an origin myth, you’re saying, there is no alternative reality.”*

—EMMA DENCH

from Greece and Rome; their greatness or their decay, according to the bias of the author, is attributed to these causes.”

Regardless of the truth of their origins, countries and political organizations will often hijack histories as a powerful way of bolstering their legitimacy. In many cases, like in Russell’s example, they build on an identity centuries old, as though they are tapping into a pure source of authenticity.

“We tend to think of the invention of tradition as a modern phenomenon, but it’s always been happening,” says Dench. “One of the greatest examples of history being hijacked was Rome being linked with the myth of Trojan descent. It’s hard to know the exact circumstances of when that happened. But by the period when we can really see Rome, they’re the epitome of Trojan descent.”

Developing an identity based on the past brings people together, a simple truth with the power to capture a national imagination. But it can also do harm in galvanizing a populace to a particular end.

“Once you freeze an origin myth, you’re saying, there is no alternative reality,” says Dench. “You are creating a fixed reality, when there wasn’t any before.”

Gettel agrees. “When we look to history as historians, we’re trying to understand

something about us, whereas when a government appropriates history, they’re trying to mobilize people to a certain end,” she explains. “When it’s used as a tool, it can become much more dangerous.”

And contradictory. In certain cases, competing groups utilize the same story to bolster their legitimacy. In Ireland, for example, the pre-Christian story of Cú Chulainn, a mythological Ulster warrior who fought off an army from Connacht single-handedly, is claimed by both the Unionists and the Republicans as a way of calling on the greater heroes of their past. “Padraic Pearse, the famous 1916 Rebellion leader, was hugely into Cú Chulainn and he trained the young men who were with him to think of themselves as fighting for Ireland in the way that Cú Chulainn does,” says O’Neill. “They’re calling on their past to be able to bring people together, especially in the 19th and 20th centuries to say, we have a distinctive Irish culture, we are distinct from England, and these stories are a manifestation of who we are as a people.”

### WHY STUDY THE PAST?



Despite multiple and sometimes conflicting narratives, scholars who study the past provide a window into how our forebears thought and behaved centuries and millennia ago. Often, they discover that we grapple with the same issues, hold the same viewpoints, make the same jokes. They also discover their importance: without the Irish, for example, our modern world would be very different.

“I believe that the Irish changed European civilization significantly in the medieval period,” says O’Neill. “European scholars and monks were coming to Ireland to learn or were taught by monks who had left Ireland to go on pilgrimage.” Because the Irish learned to speak Latin as a second language, they introduced innovations in writing—such as spaces between words and punctuation—that

we take for granted. “These people helped create the systems that we experience today. It’s important for us to go back and learn from the past, and ask, have we really changed that much? And the answer is no, we haven’t.”

Nagy supports the view that the Celtic tradition, particularly in Ireland, is an important strand of Western civilization. “Ireland was plugged into the Western Christian world during a period of reformulation that builds to what we now consider early medieval culture. There are Irish monks throughout Western Europe, and they influenced what was happening in the court of Charlemagne, and in the courts of his predecessors and successors,” Nagy explains. These Irish, very peripatetic monks, men of letters, were instrumental in finding what they could of classical literature and preserving it.”

From Dench’s perspective, studying the past is an important counterpoint to Gettel’s “basket of antiquities,” where the positive aspects of history can be tied to a particular culture while the negatives fade away. “I dislike it when myth and history are used as a palliative or comforting thing,” she says. “It can often be misappropriated as a kind of DNA, something unalterable.”

Despite the desire to balance the positive and the negative, without a time machine, we will never know what really happened. “We have to accept that we’ll never have the full story,” says Gettel. “There’s something powerful about that.”

In the end, history becomes less about the impossible task of determining what happened and more about understanding the multiple dimensions that have influenced people, and how—and why—they continue to have relevance today.

“It’s culture and representations, and it’s the land and our ancestors and all of these things brought together,” O’Neill says. “That’s where we get our understanding of who we are as a people. That’s really what history is trying to do.” ❧

BY DEBORAH HALBER

ILLUSTRATION BY JONATHAN CALUGI

# UP FOR GRABS

THE MEANING OF  
PRIVACY IN THE  
DIGITAL AGE

In 2012, Latanya Sweeney was talking to a reporter in her Harvard office when she Googled her own name. An ad for a background check popped up next to the links of her published work. “Forget the studies,” the reporter said. “Tell me about that arrest record.”

Sweeney, mystified, clicked on “Latanya Sweeney, Arrested?”, paid the subscription fee and showed the reporter she had no arrest record. “It must be that black-sounding first name you have,” he said. That’s not how ad algorithms work, she told him, and they resumed the interview. But Sweeney kept thinking about the incident.

As professor of government and technology in residence and founding director of Harvard’s Data Privacy Lab, Sweeney knows more than most about the labyrinthine paths of our personal data. Companies can legally tap into details about what we buy, whom we text, even the brand and location of our computers. If your bed contains microensors that allow you to tweak temperature and firmness, you’re handing intimate information over to a third party. If you’re diabetic, insurers can discern how often you indulge in Krispy Kreme—and deny you health or life insurance because of it. Sweeney has read that a third of Fortune 500 companies admit to making hiring, firing, and promotion decisions based on health information. “The way privacy works,” she says, “is that there is no law, and nothing’s a problem until it’s a problem.”





“It’s not just privacy,” says Jinyan Zang, managing editor of *Technology Science*, an online Harvard-based journal that reports and discusses society-technology issues, and a PhD candidate in the Department of Government affiliated with Harvard’s Institute for Quantitative Social Science. “All of our democratic values are up for grabs: First Amendment rights, surveillance, fake news. The rationale for the Data Privacy Lab is to create a movement dedicated to studying the issues challenged or disrupted by new types of technology.”

Like many of his generation, Zang wasn’t overly concerned with online privacy. When the movie *The Social Network* was being filmed in Harvard Square in 2009, his freshman year at Harvard, he recalled aspiring to emulate Mark Zuckerberg’s experiences in Silicon Valley. By the time Zang graduated in 2013, he no longer considered technology a universal good or a simple moneymaking activity.

In the past few years, in classes he co-teaches on the politics of personal data and “Data Science to Save the World,” he’s seen many undergraduates

“Unintended consequences” is Sweeney’s mantra. With her close-cropped graying hair, chunky glasses, no-frills blouses and blazers, and big laugh, she exudes a vibe that’s at once no-nonsense and eminently approachable. Her website features a collection of misguided predictions about, among others, the impossibility of flying machines and the unmarketability of personal computers. The quotes are funny, yet flaunt a very real issue: the inability of smart people to gauge the outcomes of accelerating technology.

Following up on the reporter’s observation about the pop-up ad, Sweeney discovered data fallout that surprised even her: Google AdSense generated ads suggestive of an arrest in as many as 95 percent of searches for names such as DeShawn, Darnell, and Jermaine, while names associated mostly with whites, such as Geoffrey, Jill, and Emma, generated more neutral copy.

“The way privacy works is that there is no law, and nothing’s a problem until it’s a problem.”

—LATANYA SWEENEY

shift their stance, like him, to this: “If I’m young and idealistic and I want to change the world in a positive manner, then I want to deploy technology in a way that’s actually beneficial to the world, or at least figure out a way to address the emerging harms or disruptions that could be unintended,” Zang says.

After publishing her findings in 2013, Sweeney called on programmers and other technologists to think about societal consequences like structural racism in the technology they design. Her latest research goes much farther than gently chiding the keepers of highly personal data.





#### UNLOCKING THE DATA

Being raised by her great-grandparents in Tennessee set Sweeney apart from most of her peers. “Nothing was easy,” Sweeney said of her childhood. Except for math, where she found precision, predictability, and beauty. At Dana Hall in Wellesley, Massachusetts, Sweeney came across the new field of computer science and started writing programs “for everything,” she recalled. “I felt like I could get a computer to do anything I wanted.”

After earning a degree in computer science at Harvard and launching a Kendall Square startup, she pursued graduate degrees at the Massachusetts Institute of Technology, where in 2001

she would become the first African-American woman to earn a PhD in computer science. One day in 1997, she overheard Brandeis University medical ethicist Beverly Woodward expounding on technology’s social evils. Sweeney argued in favor of what she saw as computers’ life-enhancing capabilities. Woodward told her that the state agency providing health, disability, dental, and vision services to Commonwealth employees was giving away copies of their personal data to researchers and others. Was the data truly anonymous?

Sweeney knew that then-governor William F. Weld had recently been rushed to the hospital after collapsing while delivering a Commencement

address at Bentley College. Sweeney found Weld’s date of birth in voter registration rolls, identified the only hospital record for a male with that birthday, and suddenly had access to details of his hospital stay, diagnosis, and prescriptions.

That “simple ad-hoc experiment,” as she describes it, had a profound effect. Within a month, Sweeney, who would be dubbed “the goddess of re-identification” by an Illinois judge, was testifying before Congress as the Health Insurance Portability and Accountability Act (HIPAA) was being drafted. It wasn’t just Massachusetts sharing data, Sweeney told legislators. “All of a sudden,” she says, “for the first time someone was saying, ‘Wait a second. That data is pretty vulnerable.’”



### THE FACEBOOK GENERATION

Sweeney's early attempts to raise the alarm about medical privacy fell on reluctant—if not completely deaf—ears. Pushback from academic journals and a dearth of funding sources kept most of her early studies, including the one on Weld, out of the public view. At the same time that her peers fretted about raising such provocative issues without simultaneously identifying potential solutions, younger generations, like Zang's, were so cavalier about privacy that it hardly registered at all.

Zang had been warned by his parents and others to safeguard his Social Security number, so he dutifully covered it with his hand when he filled out forms in public to keep his information safe. But in Sweeney's undergraduate course on technology and privacy, Zang saw that Sweeney could predict most or all of the digits of students' Social Security numbers from only their birthdays and hometowns. "Wait a second," Zang recalls thinking. "On Facebook, I shared my birthday because I like getting happy birthday messages and I also shared my hometown. And so that means that someone can pull my Facebook profile and predict my Social Security number?"

"For me, that was one of the turning points," he says. "Even if I haven't been a victim of identity theft yet, the fact that it's out there, a threat hanging over all of us, shouldn't be a fact of life."

Months after graduating in 2013, Zang took an unpaid leave from his management consulting job in Silicon Valley to join Sweeney as a research fellow when she became chief technologist for the US Federal Trade Commission. There, he and others documented data's hidden flows, adding their findings to a graphical tool created at the Data Privacy Lab called theDataMap. When Sweeney returned to Harvard, he later followed and began his PhD studies in fall 2016.

Most people don't scroll through—let alone read—the terms of service or privacy policies when they download a new app. When Zang tracked where free iOS and Android health-related apps were sending data, "we learned amazing things," he says, depicted on theDataMap as a constellation of connected orange dots representing the unexpected places data from a doctor's visit or health app could end up: the Centers for Disease Control, media outlets, marketing firms, research labs, and pharmaceutical companies, among others.

"If I use an Amazon app, I would expect it to talk to Amazon.com," he says. "But if it is also sharing your personal data with ad platforms, analytics companies, all sorts of other companies, that's not within most people's expectation."

"We found that many free health apps, specifically ones that track women's menstrual periods, were sharing a significant amount of data," he says. "If I'm a free app developer, I need to make money somehow. If the service is free, your data is the product."

### THE ILLUSION OF CONTROL

Big Data is not all bad. Scientists use artificial intelligence to detect patterns—useful in epidemiology, social science, even cancer research—in the millions of pieces of data darting across the Internet every microsecond. Sweeney wants to balance data's utility with its potential for harm. In the big business of health, well-being, and by extension, healthcare data, the scale is precariously tipped against the consumer.

Take HIPAA. The ubiquitous forms we're asked to sign actually give doctors the right to legally share our anonymized medical histories. Most Americans are unaware that information about their doctor and hospital visits goes to the state, which sells it to data analytic and pharmaceutical companies, among others, that have a financial incentive to





“If I’m a free app developer, I need to make money somehow. If the service is free, your data is the product.”

— JINYAN ZANG



exploit it. The HIPAA forms, Sweeney says, represent trees sacrificed for nothing more than a pacifier, a charade that someone cares about your privacy, and that it’s being protected.

Thirty-three of the states that amalgamate patient demographics, diagnoses, completed procedures, summaries of charges, and names of attending physicians and hospitals give away or sell a version of this information. Only five of those thirty-three have protections as restrictive as HIPAA’s. Certain details are stripped or redacted. Yet by cross-referencing data sets, Sweeney links names to records.

“The fact that we can show that the data is vulnerable to re-identification—but companies aren’t required to tell us whether a new product they produced exploited that data—is a real problem,” Sweeney says.

State by state, Sweeney is re-identifying individuals in so-called anonymous data—and now her studies, more than a hundred to date, are being published. In response to a 2015 study, Washington state passed legislation that makes the public-use version of medical data sets more secure and requires users in search of more detailed data to fill out applications. Separately, California has instituted some of the country’s toughest privacy laws. “That was a total win,” Sweeney said. “You’d think the other 30 would change. Nope. Just Washington state and California.”

#### REGAINING CONTROL

TheDataMap’s ever-widening circles indicate that technology is migrating past the law, Zang says. Health analytics companies, for instance, didn’t exist when HIPAA was drafted. Zang says much of the Data Privacy Lab’s work aims to illuminate this fact. “We want to help legislators and regulators create informed policy by giving them concrete information about how data-sharing actually happens in the real world,” he said. “Then, if you’re a legislator, advocate, journalist, or regulator, you can point to our actual studies instead of conjecture.”

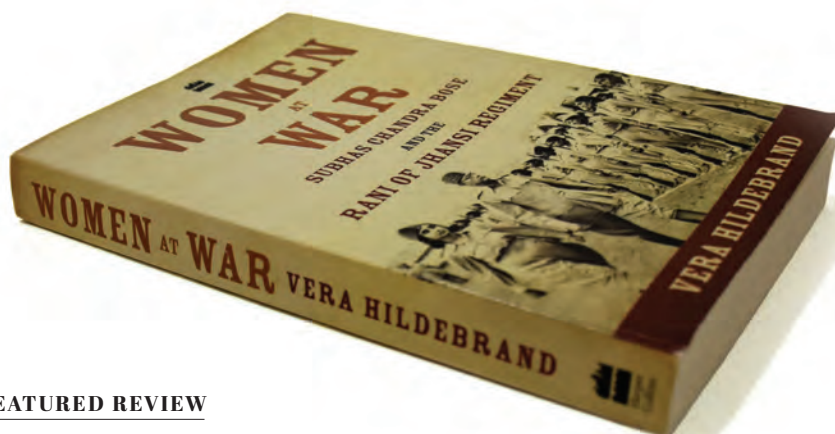
Sweeney says companies should own the fact that the data they share is vulnerable. “We want them to say, ‘We’re going to put some data out. It’s going to be vulnerable, and when we learn about these vulnerabilities, we’re going to improve,’” she says. This means that buyers would agree to stop using compromised datasets—or face consequences.

To add transparency, online registries would document for the public who received what data. “Right now, if a breach does happen, you have no

idea if company XYZ had your data. You don’t even know if you should be concerned about it,” Sweeney says. “But if we had logs of who received a certain hospital’s data, for instance, you can make predictions about whether you’re likely to be harmed.”

Sweeney also is working on a secure platform through which individuals can collect, assemble, and distribute their personal data across disparate silos, giving people the option to participate in research that might improve their own or others’ quality of life.

Zang is excited about the growing energy and awareness among millennials and others who had grown up with low privacy expectations. Being informed is the first line of defense to prevent, as standard-bearer and law professor Paul Ohm once put it, companies knowing more about us than we know about ourselves. “This is a harm that is known, and can be fixed,” Zang said. “How do we fix it, and how do we figure out these other vulnerabilities? That’s a really cool space to be in right now with the Data Privacy Lab.”



FEATURED REVIEW

## AN EQUAL WORTH

*Women at War: Subhas Chandra Bose and the Rani of Jhansi Regiment* (HarperCollins India, 2016) interweaves two stories: the life of Indian nationalist Bose (1897–1945) and an account of the first all-female combat infantry unit, the Rani of Jhansi Regiment (1943–45), which he organized. **Vera Hildebrand** (AM '79) portrays Bose as charismatic and troubled. Her account of the “Ranis” is far more positive. Drawing on impressive new sources (including oral interviews with virtually every surviving member of the regiment), she offers new detail on the Ranis’ wartime experiences and contributions to the empowerment of Indian women.

In essence, Bose was the anti-Gandhi. With respect to women, his vision was more progressive. Gandhi imagined an agrarian future in which Indian women would retain their traditional role. Bose anticipated an economic transformation and believed that women should participate equally in this new India. But Bose took other, less admirable stances: Instead of Gandhi’s nonviolence, he advocated violence and terrorism. Where Gandhi identified with India’s peasants and dressed in simple homespun cotton, Bose “affected the [military] trappings of European dictators, particularly Hitler and Mussolini.” During World War II, Gandhi suspended anti-British protests and urged support for Britain in its fight against fascism. Bose fled India for Nazi Germany and Japan.

When Prime Minister Tojo gave him the go-ahead, Bose began raising an Indian National Army (INA) to invade and free India, never fully appreciating his role as stalking horse for the Japanese. He recruited among Indians living abroad, in Singapore, Burma, and especially Malaya. Rather than well-educated, upper-caste Indians, most rank-and-file Rani recruits were low-status, illiterate Tamils who worked in Malaya’s rubber plantations.

The Ranis, part of the INA, were patriotic and committed to freeing their country from colonialism—and proving their equal worth. Unlike Bose, they didn’t appear to have fascist leanings. Hildebrand also corrects some myths and exaggerations that have grown up over the years. The regiment was far smaller than generally believed: rather than 1,000 to 1,500 women, its roster was probably no more than 450. Of those, only 150 to 170 ever reached the war zone. (None of these engaged in front-line combat, though they were subject to attacks during their retreat.) But Hildebrand’s emphasis is on the Ranis’ achievements. And the women she interviewed—then in their late 70s to early 90s—retained a fierce pride in their accomplishments and legacy.

### REVIEWS

In 1805, William Wordsworth shared a brand-new poem with fellow poet Samuel Taylor Coleridge. It was a book-length account of his Lake District childhood and his maturation into a poet. Now **James Engell** (PhD '78, English and American literature and language) and **Michael Raymond** have published *The Prelude* (David R. Godine, 2016), a new edition of Wordsworth’s poem. Engell’s introduction underscores the role of place in Wordsworth’s self-understanding. *The Prelude* recounts, in Engell’s phrase, a “mutual transformation of place and self.” This edition aims to present the work in its original 1805 form. (Wordsworth never published the poem but continued tinkering with it until his death in 1850.) The verse glows with optimism and love of nature:

... Ye Mountains! and Ye Lakes,  
And sounding Cataracts! Ye  
Mists and Winds  
That dwell among the hills where  
I was born.

If in my youth, I have been pure  
in heart,

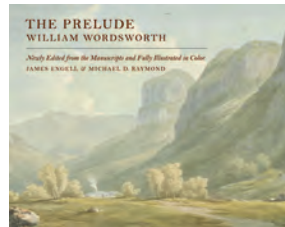
\* \* \*  
The gift is Yours. . . .

This edition is the first to be fully illustrated, featuring contemporaneous paintings and sketches, especially of the Lake District.

**Michael Trotter** (AM '59, history) has practiced law since the 1960s and was a partner or senior partner at several Atlanta



law firms. In *What's to Become of the Legal Profession?* (CreateSpace Independent Publishing, 2016), he addresses various factors that have challenged the legal profession in the years since WWII. Above all, he emphasizes the sheer expansion of the law itself. In 1969, for example, IRS regulations totaled some 16,500 pages; by 2014, 74,608 pages. Likewise important: the impact of technology (in communications, word processing, information storage and retrieval, etc.); the growth of large law firms and corporate in-house legal departments; and an excessive number of law school graduates—exceeding the market's ability to absorb them. In 2015, 33 percent of graduates hadn't found work requiring a law degree 10 months after graduating. But Trotter is no gloom-and-doom prophet: he stresses the resiliency of his profession. Despite dire predictions that online resources or the flood of new lawyers would undermine it, Trotter does not “expect the legal profession in the United States to change *beyond recognition* in the foreseeable future.”

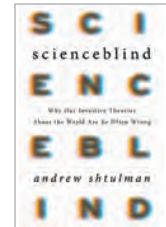


Although Franz Schubert (1797–1828) died at 31, he was quite prolific, composing “more than six hundred songs and hundreds of larger works,” including chamber music, piano sonatas, operas, string quartets, and several symphonies. Yet he was little regarded in his lifetime. *Schubert's Reputation from His Time to Ours* (Pendragon Press, 2017) recounts his rise from obscurity to a place among the giants of 19th-century classical music. **Geoffrey Block** (PhD '79, music) alloys biography, musical analysis, and two centuries of critical and scholarly writing to explain Schubert's growing recognition. For years after his death, his music was criticized as discursive, “feminine” (in contrast to Beethoven's “masculinity”), and marred by idiosyncratic modulations. Yet a number of later composers—in particular, Liszt, Brahms, and



Mahler—championed his work. By the 20th century, Schubert had gained increasing recognition as a composer. Block also incorporates an illuminating chapter dissecting a scholarly contretemps of the late 1980s and '90s revolving around a question that then seemed quite compelling: “Was Schubert gay?” The bottom line, in effect: “Give it a rest, folks. The music still sounds the same.”

Skepticism regarding science is hardly new, but **Andrew Shtulman** (PhD '06, psychology) argues that it's more significant in today's science-and-technology-driven world. *Scienceblind: Why Our Intuitive Theories about the World Are So Often Wrong* (Basic Books, 2017) helps us recognize our own “intuitive theories.” He explores children's understanding of the world, as seen in Piaget's



experiments. Presented with different-shaped glasses filled with equal amounts of water, children believed that a narrower glass, creating a taller column of water, held more. Of course, intuitive understanding can serve just fine in matters close at hand, practical, or short term. Telling time by the sun doesn't demand a heliocentric theory of the solar system. Shtulman also discusses intuitive theories of gravity, causes of illness, evolution, and night and day. (His seven-year-old believed the moon caused night. Asked where it went in daytime, he amusingly replied, “I don't know. Not by California.”) However, unchecked intuitive thinking can have consequences. In the 1990s, measles was nearly eradicated in the United States, but in 2014 hundreds fell ill—mainly because parents wanted to spare their children the “dangers” of vaccination.

## POSTSCRIPT

**Benjamin C. Waterhouse, PhD '09**, published his second book, *The Land of Enterprise: A Business History of the United States*, a history of America told through the lens of executives, bankers, farmers, and politicians. Waterhouse works through the development of American business, noting the critical role unnamed laborers played in helping America's vast businesses grow and shape the country. He is an associate professor and Grauer Scholar at the University of North Carolina, Chapel Hill.

**Jacob Emery, PhD '06**, has published his first book, *Alternative Kinships: Economy and Family in Russian Modernism*, which delves into the complex nature of the Soviet Union's effort to create a global siblinghood of the proletariat, and how those kinships affected the economy and art. Emery is an assistant professor at Indiana University Bloomington, where he teaches Russian, Balkan, and Scandinavian fiction, as well as Marxism and anthropology.

• • • **Would you like your book considered for inclusion?** Send it to Colloquy, Graduate School of Arts and Sciences, Harvard University, 1350 Massachusetts Avenue, Suite 350, Cambridge, MA 02138. Questions? E-mail [gaa@fas.harvard.edu](mailto:gaa@fas.harvard.edu).

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# Sunny Days Ahead

GSAS CONFERS MORE THAN 600 PHD AND MASTER'S DEGREES

**COLD AND RAIN** never dampened the festive atmosphere that surrounded Harvard's 366th Commencement in May. PhD and master's degree candidates and their families braved temperatures 15 degrees cooler than average as they participated in the daylong festivities.

After breakfast with the deans, the degree candidates marched down Oxford Street toward Harvard Yard, following a drummer and bagpipers in one of GSAS's favorite traditions.

After the Morning Exercises, when Harvard President Drew Gilpin Faust conferred their degrees and entrusted to them "the free inquiry of future generations," graduates and their families made their way to the diploma awarding ceremony to receive their diplomas from Dean Xiao-Li Meng in Sanders Theatre. A luncheon followed, and hooding ceremonies for those who earned their degrees in medical sciences and engineering and applied sciences completed the day.

Students wave  
GSAS and Dudley  
House flags during the  
Morning Exercises.



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*“My entire life changed because I received an exceptional education and training at Harvard.”*

— **Alberto F. Ades, PhD '94**, on why he pays it forward through the Graduate School Fund

**Alberto F. Ades, PhD '94**, remembers trying to apply to the Graduate School of Arts and Sciences in 1988, right as the postal service in Argentina had collapsed. Email access was uncommon, and his home country was in a financial crisis. Despite this, he was able to contact administrators at Harvard who assisted him in finding resources to cover his tuition.

“I am deeply grateful for the opportunities Harvard extended to me,” says Ades, who earned his doctorate in economics and went on to a career in finance. He is now head of research at Light Sky Macro, a global macro hedge fund, and volunteers as a co-chair of the Graduate School Fund.

“I want to make sure other students receive what I received,” he says. As a parent of a current Harvard student, he is also keenly aware of the value graduate students bring to undergraduate classrooms. “Graduate students ensure that Harvard is not only a top research institution, but also provides an unparalleled undergraduate experience.”

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