SUMMER 2014

COLUNABIA MAGAZINE

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Irwin Garfinkel is the Mitchell I. Ginsberg Professor of Contemporary Urban Problems at the Columbia School of Social Work. An economist and social worker by training, he is a founding director of the Columbia Population Research Center. His most recent book is *Wealth and Welfare States: Is America a Laggard or Leader?* **>> Page 30**



Joshua Ginsberg teaches in the Department of Ecology, Evolution, and Environmental Biology and at SIPA. A retired field biologist, Ginsberg is the senior vice president in charge of the Wildlife Conservation Society's global conservation program. This fall he will become president of the Cary Institute of Ecosystem Studies in Millbrook, New York. **>> Page 34**



Kristopher Jansma '06SOA is the author of *The Unchangeable Spots of Leopards*, which received an honorable mention in the 2014 PEN/Hemingway Awards. His work has been published in the *New York Times*, the *Believer*, and the *Millions*. He is an assistant professor of creative writing at SUNY New Paltz. **>> Page 42**



Claire Shipman '86CC, '94SIPA is a regular contributor to *Good Morning America* and other national programs for ABC News. She has interviewed George W. Bush, Bill Clinton, Hillary Clinton, Dick Cheney, Al Gore, and Queen Rania of Jordan. She is a University Trustee. **>> Page 60**



Beau Willimon '99CC, '03SOA studied painting and playwriting at Columbia. His play *Farragut North* was made into the Oscar-nominated film *The Ides of March*. He is the creator and writer of the Netflix political drama *House of Cards*. **>> Page 24**

COLUMBIA

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letters

MONEY SHOT

Reading in the Spring 2014 issue about the Columbia Campaign raising \$6.1 billion, I wonder sometimes where Columbia University and the rest of academia are going with enormous construction projects and ever more specialization. Is the world a safer place? Are the graduates wiser? Are politics more settled and reasonable? Are the problems that confront society any closer to resolution? Even a cursory reading of the headlines provides the grim answers.

The issue is not how much money a university can raise, but whether the very purpose of education is being undercut by an emphasis on the marketing of education rather than upon developing the criticalthinking skills without which knowledge has no real place or meaning.

> Stephen Schoeman '69SIPA Westfield, NJ

POT SHOTS

Paul Hond's remarkable journalistic skill reaches a high point in "Breaking Through" (Spring 2014), his investigation of what I would call the anti-marijuana establishment at Columbia. The researchers he interviews include a former drug czar under George H. W. Bush. With tact and patience he takes us on a tour of researchers who make emotionally fraught statements, such as Guohua Li's "The legalization of marijuana is open surrender" and Herbert Kleber's condemnation of the medical-marijuana movement as "a stalking horse for legalization." This emotionalism, he goes on to show, is a conspicuous part of the history of marijuana legislation. Emotional rhetoric combined with political expediency has driven presidents and governors to condemn or silence the reports of prominent commissions and task forces that recommended reason-based policies.

Hond brings his tour of institutional bias to an end in the office of the neuroscientist Carl Hart, where the light of reason burns brightly. Hart points out illogical thought and flawed hypotheses operating at Columbia. Is anyone listening?

> William Himelhoch '83SW Jamaica Plain, MA

I was appalled by your article on marijuana. You didn't interview anyone who uses marijuana to treat a particular illness, and you didn't talk with any researchers who are actually looking for ways marijuana can benefit people. Instead, you interviewed researchers who seem to want nothing more than to prove marijuana dangerous. What I find curious is that within the debate about marijuana in America, there is rarely any mention of the Netherlands, where marijuana has been legal for decades, or Uruguay, which just recently legalized it. Have the Dutch gone insane? Has their society collapsed or deteriorated? Is there an epidemic of couch-sitting ice-cream eaters wreaking havoc in Uruguay? I don't think so, and yet here we are still wrestling with ideas about marijuana that are more appropriate to the 1950s than 2014.

People are finding marijuana to be a godsend after years of taking pharmaceutical drugs with unpleasant or dangerous side effects. Show your readers the respect they deserve by acknowledging the good things cannabis can do.

> Marc Peraino Mount Vernon, WA

How proud Columbia must be to be home to neuroscientist Carl Hart, who does not equate lowering IQ to getting "dumber," so long as the lowered IQ "stayed in the normal range." I guess that means the New Zealand study is wrong, so long as only people with higher than average IQs partake of Mary Jane.

> Bob Fately '82BUS Van Nuys, CA

Carl Hart argues for evidence-based conclusions and well-constructed arguments to further a discussion about drugs, crime, and, it seems, race. Yet he implies that equating a regression of IQ with getting dumber is somehow misleading or inaccurate. How does that elevate the discussion? Hart further states that many researchers "don't know anything about drugs" but come to conclusions that support their perspectives. His views, and "research," do just that. I don't question the truth of Hart's experience, but I think the discussion needs to be based on fact. There is too much at stake.

John Anderson Old Bethpage, NY

It's great to hear that Columbia faculty are so involved in marijuana research. I believe this is the school where I learned Plato's warning that knowledge without justice will never lead to wisdom. While we're academically splitting hairs about what marijuana does and does not do, citizens of African or Latino descent are overrepresented in the 750,000-plus marijuana arrests each year. These are real people with real lives shelling out cash for fines and legal fees, burning hours that they could spend more productively. Law-enforcement officers who could protect us from violent crime are busy fingerprinting people for owning a plant before hurling them toward a clogged court system. Perhaps these issues deserve as much coverage as ivory-tower conjecture about hypothetical gateways and imaginary symptoms of dependence.

> Mitchell Earleywine '86CC Slingerlands, NY

A NECESSARY WAR?

In Paul Hond's article about Jerome Charyn's Lincoln-channeling novel *I Am Abraham* ("The Blue Unholies," Spring 2014), Charyn says of Lincoln, "Then he ends up being president of the United States, and having to kill hundreds of thousands of people." This sentence is profoundly shocking. Why did he have to kill? Where in the Constitution does it say that a state cannot secede, that the Union must be preserved at all costs, that the president has the right and duty to wage total war on his fellow citizens, kill their young men, steal their property, burn their cities, destroy their farms, and deprive them of their rights? Don't we normally call people like that despots?

Were the liberated slaves immediately established as free and equal citizens in Southern society, or were they discriminated against for a hundred years more? Would not the Confederacy have ultimately freed its slaves in a more just and amicable fashion, as agricultural technology and the growing recognition of human rights around the world made slaveholding untenable? Might not the Confederacy have ultimately petitioned to rejoin the Union?

Did not the Civil War mark the beginning of the end of states' rights and the total federalization of our country, where the states are merely administrative units carrying out the dictates of federal bureaucracies, the Congress is a subsidiary of special interests, and an imperial federal judiciary annihilates the traditional values of Judeo-Christian civilization and morphs us into a homogenized province of the global New World Order, with the political-correctness police ready to pounce at every slight?

Impatient to advance civilization, Lincoln chose the path of brute force. There was a better way. We continue to pay the price in our inner cities and in our deracinated culture and democracy.

> Arthur E. Lavis '61CC, '65BUS Montvale, NJ

PAPAL RESCUE

Thank you for printing Caroline Moorehead's review of Susan Zuccotti's new book, *Père Marie-Benoît and Jewish Rescue* (Spring 2014). In a world in desperate need of heroic models, a book about an unsung hero of World War II is greatly appreciated. However, I was saddened and disappointed by Moorehead's defamation of Pope Pius XII. She claims that his "attitude toward the Jews in Italy was at best ambivalent and whose public statements seldom touched on anything more specific than the need to 'show compassion' toward victims of war."

Pius XII faced two options: speak out assertively against the Nazis and their unspeakable brutality against the Jews, a tactic that had proved disastrous, or speak in more veiled terms and quietly but aggressively work to save as many Jews as possible. Pius XII chose the second option and is excoriated for it.

Albrecht von Kessel, an official at the German Embassy to the Holy See during the war who was also active in the anti-Nazi resistance, wrote in 1963: "We were convinced that a fiery protest by Pius XII against the persecution of the Jews . . . would certainly not have saved the life of a single Jew. Hitler, like a trapped beast, would react to any menace that he felt directed at him, with cruel violence."

Pius XII supervised a rescue network, which saved an estimated 860,000 Jewish lives, more than all the international agencies put together. It is estimated that 60 to 65 percent of Europe's Jews were exterminated during World War II. Yet only 10 percent of Roman Jews were exterminated, thanks in large part to the efforts of Pius XII.

Pius XII had a deep love and appreciation for the Jews, as reflected in first-person accounts by many of the thousands of Roman Jews who found refuge behind Vatican walls, in Roman convents and seminaries, and in the Apostolic Palace of Castel Gandolfo, where smoke marks from cooking fires lit by Jewish refugees during the Nazi occupation remain today.

Jewish historian, theologian, and Israeli diplomat Pinchas Lapide sums up Pius XII's role this way: "Unable to cure the sickness of an entire civilization, and unwilling to bear the brunt of Hitler's fury, the Pope, unlike many far mightier than he, alleviated, relieved, retrieved, appealed, petitioned and saved as best he could by his own lights. Who, but a prophet or a martyr, could have done much more?"

> Luanne Zurlo '93BUS New York, NY

I condemn the vile continuing denigration of the great Pope Pius XII as seen in Caroline Moorehead's review. At the time of the pontiff's death in 1958, leaders of the free world applauded his humanitarian efforts on behalf of those who were murdered by the Germans. Even now, as archival materials in abundance prove the heroism, magnanimity, and sacrificial love of the beloved pontiff, the vicious lies are still disseminated. Enough! Soon the Roman Catholic Church will beatify and canonize Pius XII, a move that should have been made years ago.

Michael Suozzi '72GSAS La Mesa, CA

Caroline Moorehead responds: The role of Pius XII during the Holocaust must be addressed quite apart from Père Marie-Benoît. It is true that the pope declined to speak out aggressively against the Nazis. It is also true that he spoke in "more veiled terms," as Luanne Zurlo put it, about the need to show compassion for all victims of a cruel war. Far less clear is the extent to which the pope "aggressively work[ed] to save as many Jews as possible."

Almost no priest, monk, or nun who hid Jews in Rome testified after the war that he or she had worked because of a specific papal directive. Also, there is no indication, in documents or testimony, that Jews were hidden at the Apostolic Palace of Castel Gandolfo as a matter of policy, although individuals not identified as Jewish may have been among the Romans who sought refuge there from bombing raids during the days before the Allied liberation in June 1944. Because of the courage of men and women of the Church, however, several thousand Jews were, without a papal directive, hidden in other Catholic institutions in Rome, including two or three hundred in certain Vatican extraterritorial properties. Documents published by the Holy See after the war suggest that about forty Jews were hiding within the walls of Vatican City itself in the weeks before the liberation. Roughly a third of the forty had been baptized.

The much-repeated figure of 860,000 Jews throughout Europe saved directly or indirectly by Pius XII comes from the Jewish diplomat and historian Pinchas Lapide, whose book on this topic is highly subjective and filled with errors. Lapide explained that he reached the figure by subtracting from an estimated 8.3 million Jews in prewar Europe first the six million dead, next the one million who fled abroad, and then what he called "all reasonable claims" of rescues made by Protestants and non-Christians. Clearly this is an unsustainable methodology. But even Lapide did not say that the 860,000 were saved only by the pope and his representatives. He included Catholics in general among the rescuers.

A DESIRE TO SHARE

I am deeply disappointed that the Spring 2014 issue of *Columbia Magazine* devoted only three column inches to a brief news item about the Distinguished Columbia Faculty Awards honoring excellence in teaching.

During my years as a grad student in the engineering school, I had the good fortune to study under some wonderful faculty; Morton Friedman and Raymond Mindlin come immediately to mind. Sure, they did great work in their respective fields, but their desire to share their knowledge with their students is what made them special to me.

A great university is more than buildings, research, and grants. It's also teachers teaching students. Giving great teachers the recognition they deserve in *Columbia Magazine* is one way to remind us all of their contribution to our lives.

> Milton Hess '66SEAS Santa Barbara, CA

SMART INTERVENTIONS

It is inspiring to read about the efforts of Manmeet Kaur and Prabhjot Singh to address the perversity of a health-care payment system that rewards the diagnosis and treatment of illness and disease over the benefits of prevention ("The Wages of Health," Winter 2013-14). Despite our formidable tools and training, those of us who practice medicine in the United States are often limited by our underutilization of community-health interventions and other systems-based approaches, limited by a system that too often favors treatment over prevention; expensive diagnostic methods over a physical exam; expensive designer drugs over less expensive, tried-and-true generics; and so-called life-sustaining treatments such as intubation and mechanical ventilation that in many circumstances may improve neither quality nor quantity of life.

Indeed, just as we have the potential to improve patient care by focusing on prevention, we also have the potential to improve outcomes and decrease costs by modifying our approach to medical care at the end of life. Studies show that 25 percent of Medicare expenditures support patients in the last year of life. This is particularly notable in light of intriguing recent data suggesting that patients with terminal diseases offered early palliative care alongside standard medical care demonstrate improved quality of life and, perhaps more surprisingly, live significantly longer than matched counterparts, despite opting for less aggressive (and therefore less expensive) end-of-life care. Shifting to a health-care model in which early palliative interventions and hospice care are more routinely offered to those with advanced age or advanced illness - care that is provided with the support of families, friends, and community members in concert with social workers, nurses, and physicians — is another way in which we might benefit both as individuals and as a society by adopting some of the practices of our neighbors in the so-called developing world.

> Beth Olearczyk '03PS Cooperstown, NY

For more letters to the editor, please visit magazine.columbia.edu/letters/summer-2014.



HELP TO CATCH HUNS. A World War I poster by John Hassal from the collection of Maurice Frankenhuis, which is on view at Columbia's Rare Book and Manuscript Library through September 12.

Race for the Cure

By Paul A. Marks '46CC, '49PS, president emeritus of Memorial Sloan Kettering Cancer Center, from his 2014 book On the Cancer Frontier: One Man, One Disease, and a Medical Revolution (PublicAffairs).

The media coverage [of cancer research] reflects the seemingly random intensity and unpredictability of the disease and a widely shared frustration that American ingenuity has failed to find the final "cure" President Nixon promised when he launched the "war on cancer" nearly a half century ago. The other war at that time, in Vietnam, was mired in an insurgency. The enemy was relentless, absorbing our bombs and then regrouping and fighting back. The war on cancer, everyone expected, would be different. I think many people felt, instinctively, that it would restore our moral edge.

From the start, the campaign against cancer was laced with a sense of heroism by being compared to the race to the moon — a race that, of course, we won. It was to be a medical Manhattan Project, another heroic success. And that has been the problem. If American scientists could build an atomic bomb in just a few years in the New Mexico desert, if they could fly a man into the heavens and land him on the moon ahead of the Soviets, if we could cure smallpox and polio, then surely nothing could prevent us from defeating cancer. How could any barrier stand in the way of American spirit, American technology, and American money?

It was a seductive narrative, which in no way prepared people for the reality that all cancers would never be curable by a single pill. The metaphorical failure of the metaphorical war on cancer felt to many people like a reaffirmation of the rottenness of the end of the Nixon era, as though it were a moral failing on the part of government that denied us a cure. It is a story without foundation, one that pays no attention to the singular power and elusiveness of the disease itself.

Liner Notes

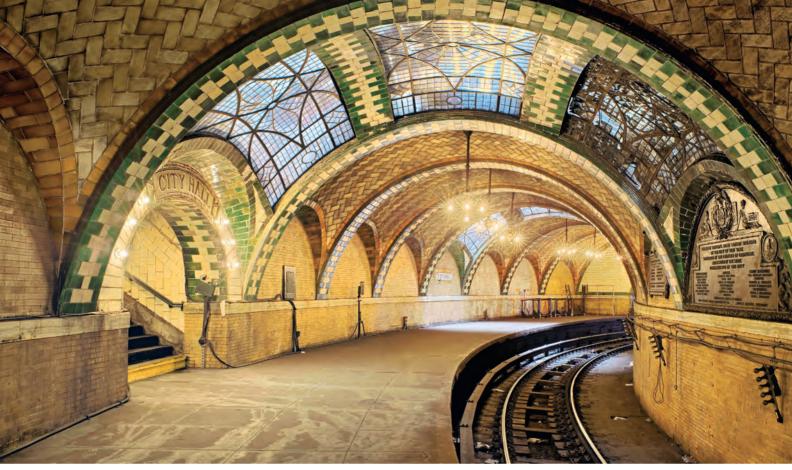
By Nico Muhly '03CC, a classical composer, from a December 2013 post in the online magazine The Talkhouse, analyzing Beyoncé's just-released self-titled album.

Let me tell you a story about my phone. Four times in the last few years, it has made a certain series of Noises. My current theory is that the Noises are generated when a critical mass of gays text one another at the same time. The first time, it was when Michael Jackson died and I was in a feverdream in St. Petersburg, Russia, having just interviewed the homeless-looking and possibly insane conductor Valery Gergiev. The second time, it was when Whitney died, and I was absurdly having gnocchi with certain friends and then other friends rang and we had to pull the whole evening over "to be together in this time of need." The third time, it was when I got off a plane last week in Rome, and I thought to myself, "Girl, not Janet, not tonight." It was a false alarm: it was just that English diver announcing that he was fuxing a man.

Then, last Thursday night, I was asleep in a very, very rural hotel in Iceland when the phone made the Noise again. I was almost too scared to check it, but then, in my benighted fumbling, my computer and iPad turned on, and they started making sonic ejaculations too, which they hadn't made for Michael or Whitney. What is it, I thought, the President? My mother? Of course the answer was that the internet wanted to send me many gigabytes of Beyoncé's new unannounced album and its attendant videos, and of course I moved heaven, earth, ice, and lava to have my computer in the one square meter of the hotel that could actually make this happen, because I am a homosexual and these Knowlesian dispatches are treated, by cultural necessity, as oracular and as gospel: gnomic, poetic, abstract, and very, very relevant.

A SUBTLETY by Kara Walker, a Columbia School of the Arts professor. Her massive sugar-coated sculpture was exhibited this summer at the former Domino Sugar refinery in Williamsburg, Brooklyn.





CITY HALL SUBWAY STATION, opened in 1904, features the distinctive tiled arches by Rafael Guastavino Sr. and his son, Rafael Jr. Architectural drawings and other materials from the Avery Library's Guastavino archives are on display through September 7 at the Museum of the City of New York.

Beam Me Up

From a conversation between Columbia physicist Brian Greene and journalist and screenwriter Gideon Yago 'OOCC hosted by the Columbia Alumni Association and the Columbia College Alumni Association in Beverly Hills on April 29.

GIDEON YAGO: Thirty-nine percent of the American people believe that teleportation is going to be possible within the next fifty years. Um, does that strike you as . . . high?

BRIAN GREENE: Well, it is disturbing for people to say that, because we can do it *now*.

YAGO: I'm sorry, come again?

GREENE: It depends on precisely what kind of teleportation you're talking about, but we do teleport individual particles right now from one location to another. Which is, to me, amazing. There's this fellow Anton Zeilinger who presumably will win the Nobel Prize . . . who has a wonderful laboratory set up in the Canary Islands . . . and he routinely teleports particles from one island to another . . .

One of the weirdest characteristics of quantum mechanics, which was revealed back in the 1930s, is that you can have a particle over here and a particle over there, and you can set these particles up in such a way that if you do an experiment on one, it has an effect on the other . . . Einstein called that *spooky*. Spooky action at a distance. So these two particles, even though they're far apart, they somehow, in a quantum mechanical way, talk to each other.

How can you leverage that into teleportation? If there's something I want to teleport, I can bring it next to this particle in New York, allowing them to commingle. Through their commingling, . . . properties of the particle I want to teleport get imprinted on the particle in Los Angeles. Then, with a little extra detail — and that's where quantum mechanics, the math, comes into the story — I can manipulate this particle to make it an exact copy of the particle that I wanted to teleport. And weirdly, the particle that I wanted to teleport, because it commingled, gets affected, gets changed, so the original no longer even exists. The only version of the original is this one in Los Angeles. So in some sense, I took the particle

from New York and I made it *appear* in Los Angeles. I have teleported it.

Go behind the Primary Sources.



he has a commanding presence, even in old age. Her height, her slenderness: time can't really take these away. Standing before her, you can see how she attracted movie idols, artists, and presidents, and why she was the love of at least one man's life.

When the naval architect William Francis Gibbs 1912GSAS watched the christening of his steamship *United States* in June 1951, she was his greatest vision made real. That year, she was freshly painted in shiny red, crisp white, deep blue. The colors accentuated the grace of her narrow hull. Once, someone suggested to Gibbs that he loved his "big ship" more than his wife, to which he replied, "You are a thousand percent correct."

At Pier 86 in Manhattan, seventy thousand people lined up for ten blocks to see her off. She left New York Harbor on July 3, 1952, commanded by Amelia Earhart's former copilot. Three days, ten hours, and forty minutes later, she passed Bishop's Rock, a tiny piece of Great Britain at the easternmost end of the North Atlantic shipping route, breaking the *Queen Mary*'s record for fastest transatlantic crossing by a passenger liner.

For almost twenty years, she's been anchored at Pier 82 in South Philadelphia, across from an Ikea and a LongHorn Steakhouse. This stretch of waterfront is not known for its scenery. Driving directions to the ship from the highway might go something like: take a right, keep going



past the movie theater and the gentlemen's club, and after a few stoplights you will see the red ocean liner's mighty stacks, twelve decks high. There is something magnificent in the moment you first see her, and something jarring.

The SS United States carried passengers to and from Europe for seventeen years. Now she's been stranded on this industrial stretch of the Delaware River for longer than she sailed. Gibbs had made the grandest, fastest ocean liner in the world just as the golden age of the ocean liner was cresting. He died in 1967, and two years later, the ship was removed from service. The growth of air travel helps to explain her retirement. But her survival, even in an unlikely berth beside a shopping center, is a testament to her power. Whether it's her history or her physical stature — or something beyond both — she has an effect on people.

Susan Gibbs '89SIPA and Dan McSweeney '07SIPA understand this well. They work for the SS *United States* Conservancy, which owns the ship. Gibbs was the conservancy's founding president and now serves as its executive director. Her grandfather was W. F. Gibbs. McSweeney manages redevelopment for the conservancy, which hopes to transform the ship's empty decks into functional spaces. McSweeney's father emigrated from Scotland to New York for a job on the *United States*, and worked onboard as a steward. For McSweeney and Gibbs, saving the *United States* from the scrap yard has become a calling. "When my father died in 1995," says Gibbs, "I cleaned out his garage and found a bunch of boxes full of old family papers. I went through them and saw my grandfather on the cover of *Time*. I had no idea he had achieved the renown that he had." A few years later, she took her small daughter and her husband to see the ship in its current location.

"I brought some items from my father's garage with me, including my grandmother's trip diaries," she says. "My grandfather, who was obsessed with the ship his whole life, went on only one voyage — the maiden one. Which was interesting. And mysterious. But my grandmother? Lots of trips back and forth. I started reading her entries out loud, about the cashmere stoles and the orchestra and the champagne. The juxtaposition of that vision with what I saw when I finally went onboard was haunting."

In 1952, after her own first tour, Vera Cravath Gibbs wrote, "On the ship were scenes of great activity. A great many men were scrubbing floors, or polishing this or that. The movie theater was a gem; soft grey, with fluted wall . . . One room had black walls with brilliant diamond stars of illuminated glass." From the docks, "we all looked at her as a child gazes at a Christmas tree, full of wonder."

Looking at the same ship sixty years later, Susan says, "It was incredibly sad to see how forgotten and forlorn she was. But there was also a sense of the spirits still onboard, and the spirit of the ship herself. I didn't think I was on a carcass, or that the story was over. There was hope."

McSweeney feels similar optimism. In 1999, driving from New York to Quantico for service in the Marine Corps, he pulled over in Philadelphia and was enthralled by the sight of the fading red stacks. His father had kept a set of souvenir playing cards with a little painting of the ship on the back of each card. From looking at them, McSweeney understood that the *United States* was a "beautiful, well-crafted vessel." Driving along the Delaware, he contrasted that image with what was left. "It was so touching," he says, "because I realized the ship was such an important piece of history, and because I could imagine my father being on it. He was somebody who spent most of his life on vessels, but the *United States* was the one he was really proud of." Though the ship had been permanently docked by the time McSweeney was born, he says it remained "a part of my consciousness, a symbol of greatness." His father died when McSweeney was eight. For the son, connecting to the ship is also a way to "connect with the dad I really didn't know well, and remember his life."

W. F. Gibbs and his firm, Gibbs & Cox, designed the ocean liner for the United States Lines. As the company's flagship, the United States provided luxury travel to Grace Kelly, Marilyn Monroe, Salvador Dalí, and John F. Kennedy. She brought immigrants to US soil, and American students to Europe (when Bill Clinton won a Rhodes scholarship, he took the SS United States to England). Then, in 1969, she was docked, and over the years, sold to various owners, stripped of her furniture and fittings, and towed all the way to Turkey for asbestos removal. McSweeney has heard that her last private owner, a New Jersey real-estate developer, may have won her in a card game. When the owner died, Norwegian Cruise Line bought her, with the intent of returning her to service. That plan never materialized, and in 2011, NCL's parent company came awfully close to selling her for scrap. "At the eleventh hour," according to Susan Gibbs, philanthropist and Columbia Trustee emeritus H. F. "Gerry" Lenfest '58LAW, '09HON made a large donation to the conservancy, which then bought the ship before the scrapping company did.

"She was built at a time when 'made in America' really meant something," Lenfest has said, "and that is a legacy that cannot be lost." In fact, Lenfest's father worked for a firm that made some of her windows.

The conservancy hopes to transform her into a stationary business and public space: one area would be dedicated to a museum, and another area would become a commercial enterprise, like a hotel, event space, restaurant, or market. At nearly five blocks long, she has the room for creative redevelopment. Indeed, she has always been a multipurpose space. In a speech he gave at Columbia in 1959, W. F. Gibbs asked a gathering of engineers to imagine his creation as the Waldorf-Astoria built on top of the Queensborough Bridge, built on top of a power plant.

With such dreams in mind, Gibbs and McSweenev recently invited a group of architects and developers aboard. They boarded the ship through the once-crowded crew area, climbed a narrow staircase, and entered the first-class accommodations. What were once two-room suites with private bathrooms were now distinguishable only by raised edges in the floor. The furniture was gone, as were the walls. The first-class dining room, where Duke Ellington played for guests, was dark and silent. In the middle of the old lounge, a large, sculpted, aluminum bar still stood, and one barstool still had its brown cushion. (The metal bar was evidence of the architect's obsessive fireproofing: interior designer Dorothy Marckwald strictly used noncombustible materials, down to plastic shuffleboard pucks, though Gibbs allowed one mahogany piano, because "the damn fools we went to couldn't build a piano unless it was made of wood.") On the rear sports deck, one of the ship's four propellers, designed by engineer Elaine Kaplan, was strapped upright to the shuffleboard court. And on the windowed upper promenade, where passengers once looked out over the open ocean, a goose had built a large nest.

You could call it patriotism, or respect for design, but people talk about the SS *United States* with something that sounds like love. By way of example, Susan Gibbs says this about her grandmother: "You would think that being married to my grandfather, who was clearly in love with the ship, she might have felt a little threatened, a little jealous. But she was clearly infatuated herself." — *Phoebe Magee*

Choices with Stories

n the screen above the speakers' heads, little Laura peeks out of the passenger door of her father's lemoncolored hatchback. The rear of the car is crammed with construction detritus, and her face is bright and beaming, full of mischief.

"Keep the slide show behind me in mind when I'm reading the depressing bits," says George Estreich, Laura's father and the author of The Shape of the Eve, a memoir that traces his family's experience when their youngest daughter was diagnosed with Down syndrome shortly after her birth. Estreich is speaking at a Heyman Center for the Humanities event titled "Parenting, Narrative, and Our Genetic Futures." He is joined this spring-semester evening on the stage in Buell Hall by Alison Piepmeier, director of women's and gender studies at the College of Charleston, and Rachel Adams, author of Raising Henry and professor of English and comparative literature at Columbia. All three are parents of children with Down syndrome.

"We were undone by the news for a long time," Estreich says, reading aloud from his memoir. But he came to learn that the syndrome is variable. Although Laura had heart surgery when she was three months old and experienced other medical difficulties, the photos in the slide show capture Laura in a red dance-recital tutu and leading a llama on a leash for her 4-H work, laughing after the animal tried to kiss her — scenes that Estreich could not have imagined when the initial diagnosis came through. In his book, Estreich was primarily concerned with representing Laura fairly without downplaying her struggles. "I wanted to write in a way that doesn't weaponize her," Estreich says, referring to the debate over whether mothers should give birth to babies with genetic disorders.

Piepmeier, who shares pictures of her daughter Maybelle reading cozily in bed, has been working on a book that gets to the marrow of what is at stake with these new tests. For her forthcoming *A Choice with No Story: What Prenatal Testing and Down Syndrome Reveal about Our Reproductive Decision-Making*, Piepmeier initially interviewed women who chose to keep their babies after a prenatal test confirmed the likelihood of Down syndrome, and then interviewed women who chose to abort. "My research suggests these are interviews that have rarely been done, if they have been done at all," Piepmeier says.

What surprised Piepmeier was the overwhelming number of women who chose to terminate their pregnancies out of the desire to be a good mother. She identified startling similarities between the two groups. "One woman who terminated saw it as selfless love; one who kept her child worried she was selfish," Piepmeier says. Both decisions were repeatedly described as "torturous" by the interviewees.

As diagnostic tools like the \$1,000 genome become a reality, there will be more personal stories to tell about these decisions. "Memoir is at once so popular and widely read and yet so devalued when compared to science," says Adams. "Narrative is powerful because it helps us make sense of ethical questions."

"That's also the paradox," Piepmeier says. "These stories threaten because they don't offer answers."

But unlike science, story strives for truth as opposed to fact. "For most people, Down syndrome is a medical condition," says Estreich. "But for me, it's Laura's way of being human."

— Kelly McMasters '05SOA

Jimmy's Blues

immy, there is too much to think about you, and too much to feel," began the writer Toni Morrison in her eulogy for her friend James Baldwin in 1987. Her reflections on Baldwin's life also capture something essential about his work as an essayist, novelist, poet, and activist. "Your life," she continued, "refuses summation — it always did — and invites contemplation instead."

Now, a yearlong citywide celebration of James Baldwin (running through June

2015), organized mainly by Harlem Stage, Columbia's School of the Arts, and the dance organization New York Live Arts, commemorates — and contemplates the man and his work in what would have been his ninetieth year. In May, the School of the Arts held an intimate discussion of *Another Country*, Baldwin's best-selling 1962 novel.

The choice of this book, which explores the complexities of race and sexuality, is not surprising, though the choice of speakers — author and professor Colm Toíbín and actor Jake Gyllenhaal '02CC — might be. A long line of people assembles outside the Frank Altschul Auditorium, among whom it is tough to decipher who came for a love of Baldwin, who for a respect for Toíbín, and who for the rare opportunity to see Gyllenhaal up close. A young student turns to her friend and asks the question on so many minds: *What's Jake going to do?*



Surely, Toíbín could speak to his and Baldwin's shared literary concerns: their wrestling with nationhood (Toíbín is Irish) and sexual identity. But how exactly does the handsome actor, who studied religion at Columbia, fit in the picture?

Inside the auditorium, Toíbín and Gyllenhaal walk to center stage and sit in wooden chairs. Toíbín, the unassuming academic in his black jacket and blue jeans, and Gyllenhaal, the heartthrob with his hair slicked back in a ponytail, look like a professor and student sitting down to coffee during office hours. After a roar of applause, Jake reveals that his sister, the actress Maggie Gyllenhaal '99CC, gave him a copy of Another Country while he was a student. "The place where I was, the streets of New York," he says, "and grappling with this intellectual hierarchy . . . I just found this book to be everything when I read it." Toíbín, too, is compelled to justify his presence at this discussion, remembering the thrill of first learning that Baldwin was gay. "Oh my God! I

thought I was the only guy who was like *this*, no one else."

At that moment, anyone wondering why a talk on Baldwin was being led by two white men - and not, for instance, by Rich Blint, Columbia's associate director of community outreach and education, and the event's organizer, who is black, gay, and a Baldwin scholar - would have found the answer: Toíbín and Gyllenhaal are two members of the diverse group who make up what Baldwin referred to as his "tribe." This tribe, composed of the artists who have been touched by his works, reinforces Baldwin's legacy not just as a writer but also as a humanist. As Farah Jasmine Griffin, a Columbia professor of English and African-American studies, points out in her introduction for the evening, Baldwin's writing helps us trudge through "the muck and the mire of our historically inherited and constructed identity to meet each other face to face as human beings." Novels like Go Tell It on the Mountain (1953) and book-length essays like The Fire Next Time (1963) accomplish this through their examination of identity politics and spirituality.

Another Country begins with Rufus Scott, a young black musician searching for purpose and fulfillment. "It's almost as if Rufus is a kind of Hamlet," says Toíbín. "In other words, he can transform himself. He can put an antic disposition on. He can be bad. He can be funny." This was key for Baldwin, who was determined to create black characters with full agency - something he felt his friend (and future ex-friend) Richard Wright was never able to accomplish. Hence, Rufus's downfall is as much a result of self-destruction as outside social forces. That is precisely what makes him so real. The rest of the novel follows Rufus's sister Ida, his best friend Vivaldo, and their friends Richard, Cass, and Eric. "They're moving towards, and trying to have, love, whatever that is," Gyllenhaal observes, and Baldwin exposes "the cruelty of that and the beauty of that." We know these people. They are our friends and lovers. It took Baldwin almost twelve years to

complete the novel - an exhaustive process in which he experienced some of his lowest lows while wandering from New York to Paris to Istanbul. Labeled brilliant and obscene, Another Country, with its interracial love affairs and same-sex relationships, addresses many taboos that still exist today. Its mixed reception seems fitting for a man of so many contradictions. James Arthur Baldwin loved his home of Harlem, flourished in Greenwich Village, and spent many years in Paris. He had countless famous friends but was often lonely. He made massive contributions to our culture, yet he is frequently left out of the curriculum in American schools.

Among his tribe in the auditorium, though, Baldwin is very much alive. He is there when Gyllenhaal recites his words and when Griffin declares him "preeminent." On this night, Baldwin, like his tormented hero Rufus, "is the center of the universe," as Toíbín explains, "and then he's gone" leaving us with the task of remembering, and now, reviving.

- Lauren Savage

COLLEGE WALK

Magic Trip

few months before entering the Graduate School of Journalism, Matteo Lonardi '14JRN visited the Marrakesh art studio of seventy-eightyear-old painter Farid Belkahia. The two men sat at a table upon which a butler placed a tray holding two glasses and a steaming copper pot of thick coffee with vanilla seeds. Before drinking, Belkahia stared straight into Lonardi's eyes and asked: Who are you, what are you doing here, and what do you want from me?

Lonardi had come to Belkahia's studio, as he had to many Moroccan artists' studios, to talk about art, cultural identity, and politics. But mostly, Lonardi had come to take Belkahia's picture. For six months, the Italian native was traversing Morocco, building a portfolio of thirty portraits — men and women, young and old, famous and unknown, painters and sculptors and conceptual artists — that he hoped would crack open a new conversation about the artist's role in society. Lonardi traveled to Casablanca, Tétouan, Tangier, Playa Blanca, and Rabat, riding in the artists' cars, sharing their food, watching them work, and photographing them.

When Lonardi arrived in New York to begin graduate school, Belkahia's questions replayed in his mind. *What do you want from me?* The Moroccan artists he'd interviewed had acted as guides to a culture about which he'd known little. What he did know, he realized, was based on the assumptions of the Western media. The work convinced Lonardi that mapping countries through their visual artists could offer a depth that parachute reporting could not.

Last fall, Lonardi saw a chance to continue his project. The Brown Institute for Media Innovation, established in 2012 by author and editor Helen Gurley Brown as a collaboration between Columbia's jour-

Read more on the Magic Grants: www.magazine.columbia.edu/magicgrants nalism school and Stanford's engineering school, was offering "Magic Grants": teams of Columbia and Stanford students, faculty, alumni, and postdocs would compete in a six-month process to build and refine their media-project proposals in hopes of winning one of eight grants for mentorship and financial support of up to \$150,000.

Lonardi pulled aside fellow journalism student Ioão Inada '14IRN. "Ioão is a beautiful cinematographer - just amazing," Lonardi says. The men started brainstorming a way to integrate video into the project. They soon realized that as artists, they would need a data person to bring journalistic heft and analysis - someone who could determine, for example, whether artists born just after a political upheaval tend to work in a particular medium or style. Inada immediately thought of Alexandra Glorioso '14JRN, who came to the program with a background in economics, intending to focus on data and investigative journalism. Plans for a multimedia project based on Lonardi's Morocco work began to take shape.

The first task was to choose a country. "We wanted a place that was a symbol of being misunderstood, and even demonized, in the media," Lonardi says. "Iran fit that model, and is also one of the oldest and most complex cultures in the world."

The group set to work on what they called Reframe Iran, envisioning a Web experience that would enable users to feel as if they were stepping into the studios of thirty Iranian artists, using video, photography, and text to tell a new kind of story about Iran and create a comprehensive picture of ways each artist's creative and political experience intersect.

As they worked on the project, the reality of their limitations set in. For one thing, none of them spoke Farsi. Second, they had to confront their own prejudices. "Like everyone, journalists are biased," says Glorioso. "We had to find ways to check our biases." They recruited, as advisers, Iranian cultural experts like the Munichbased art theorist Bavand Behpoor; the curator of the Asia Society's *Iran Modern* exhibit, Laya Diba; and the New Yorkbased arts reporter and producer for BBC Persian Television, Katayoun Vaziri. The advisers suggested books to read and new artists to search out, while paging through the team's materials to be sure they were culturally accurate.

A few months in, another problem arose: two artists and a data analyst couldn't get the technical part of the endeavor off the ground. Then, in February, some of the Stanford engineering students were invited to Columbia for a mixer, and the team met Stanford's Matt Yu, who saw the potential for using Jaunt VR, a 360-degree immersive video technology. With one month left before the grant proposal was due, they became a bicoastal team of four.

"When Matt joined we had to start over again," says Glorioso. "This was incredibly frustrating and time-consuming." Yet four people with different perspectives was exactly what Reframe Iran needed to move forward.

In March, the team learned they were finalists for the grant. Glorioso turned down two investigative-reporting job offers, while Lonardi didn't even have time to apply for one. The students waited three long weeks until their final presentation in April.

Two weeks before graduation, Reframe Iran was awarded one of eight Magic Grants. (Other winners include Earnings Inspector, which will use algorithms to help detect financial fraud in US companies; Science Surveyor, a tool to help science writers gather information on given topics; and Cannabis Wire, a news site devoted to the intricacies of cannabis legalization.) The team was elated, and relieved. "The Magic Grant was so much harder than school," Glorioso says. "We knew what we needed to do for school, but for the grant we had to come up with an idea, prove our idea was viable, and pull it off." Along the way, of course, they'd stripped the project to its skeleton and started over — twice. "The demolishing and reconstructing was so difficult," Lonardi says, "but it made the idea so much stronger."

In September, the group will move into an office in the Brown Institute's sleek new space in Pulitzer Hall. During their year at the institute, they will continue to work to bring their concept closer to fruition. They'll also go to Paris, Los Angeles, and Iran to begin interviewing Iranian artists.

The travel aspect should be familiar to Lonardi. Back in those artists' studios in Marrakesh, Lonardi couldn't have imagined the new technologies and innovative platform that would become the hallmarks of Reframe Iran. No more than he could have imagined forgoing a job search in order to compete for a Magic Grant.

"That's the risk of life," he says. "This process took so much effort, I couldn't even think about not getting it."

- Kelly McMasters '05SOA

Friendship

A last Roman dawn glazes the windows, like the isinglass of his incomprehension. Never to know someone, in spite of many tries —

The cool odor before the morning's heat, of crushed herbs, mint, dust and water; the fountain's clatter not awakened yet;

the new day a faint blush in the east: these things I know at least, and how profoundly the Palazzo Farnese and its triple arch are lost

in darkness still, while the towers of Trinità dei Monti, are lit, slender and gray, on the Pincian Hill, and in the middle distance, the Chiesa Nuova

offers its massive pediment — like a geometer's proof of how he stood aloof, always, from my intent, protecting the integument of a vulnerable self, a sacred perimeter, really, he would let no one cross, behind which his ideas kept him always company, a golden empery, a beautiful fastness.

I waited so long with that leopard-colored gaze, and carefully parsed replies from that smiling mouth, as if the slightest breath intended more or less.

The *Messaggero* sign glowed blue all night, and yet I never got the message, if there was one. I waited alone, and now it is too late.

The lantern on the dome of Sant'Andrea will gather light in its vessel of alabaster: come, morning come. It is time for me to go home. Lead, heavenly light of my failure.

— Karl Kirchwey '81GSAS

Kirchwey's seventh book of poems, Stumbling Blocks: Roman Poems, is forthcoming. He is a professor of English and the director of the graduate creative-writing program at Boston University.



elcome to the heart of darkness. I'm home." Deogratias Niyizonkiza has hardly slept in forty-eight hours. Yet after a night in his New York office and a long trip to Burundi, his arrival at Bujumbura International Airport seems to have energized him. He is heading to Kigutu, a mountain village about sixty miles south of Bujumbura, but it is too dangerous to travel outside the city at night.

He is met by a member of his staff, and his bags are loaded onto a white pickup truck with armed soldiers sitting in its bed. The security detail comes courtesy of the Burundi government. Niyizonkiza '01GS speaks to his staffer in a combination of French and his native Kirundi, and switches to straight Kirundi when he talks to the driver. "We had French drilled into us in secondary school," he explains in English. "Even after our Belgian colonial masters left, we continued their education, and were taught that our 'primitive' language was inferior. So we default to French with others who speak it. We're a confused country."

The center of Bujumbura, the country's capital, is dark; except for a few illuminated billboards and lights twinkling on a distant hillside, one would never guess that this is a city of five hundred thousand. The truck passes a brightly lit building, the Primus Brewery. "Another gift from the Belgians," Niyizonkiza says with disgust. "That brewery never closed once during thirteen years of war. So the militiamen could get drunk, and fuel themselves for more raping and killing."

It is the first time since leaving New York that Niyizonkiza has referred to Burundi's civil war. Stoked by ethnic tensions between the usually dominant Tutsi minority and the Hutu majority that had been simmering since independence in 1962, it became one of Africa's most intractable conflicts, lasting from 1993 to 2006. When the spasms of killing finally subsided, more than three hundred thousand Burundians had died and eight hundred thousand had fled the country; rural villages were burned to the ground, the cities' infrastructures nearly wiped out.

For Niyizonkiza, who is Tutsi, the war was life-altering. It uprooted him and carried him halfway around the world: from the bush in Burundi, where he ran for his life, to New York's Central Park, where he slept, and, later, to Columbia's School of General Studies, Harvard's school of public health, and Dartmouth's school of medicine. It was a journey so unimaginable that it moved author Tracy Kidder to chronicle Niyizonkiza's experience in the best-selling book *Strength in What Remains*.

Kidder's book ends in 2006 with the birth of the idea for a nonprofit public clinic in the mountains of Burundi that would come to be called Village Health Works (VHW). Eight years later, VHW has four full-time doctors and two nurses providing nonsurgical treatment to an average of 150 patients a day. People line up outside the gates hours before the clinic opens; some travel by foot from as far as Tanzania, or by canoe across Lake Tanganyika from the Democratic Republic of the Congo.

THE ROAD TO BY STACEY KORS

PHOTOGRAPHS BY KRISTY CARLSON

Deogratias Niyizonkiza barely escaped the genocidal war in Burundi in the 1990s. Years later, he returned to the small African nation with a big idea.

CAN HE HEAL WHAT REMAINS?

THE ROAD TO KIGUTU

"I'm eager to get to Kigutu," Niyizonkiza says as the truck stops at the guesthouse where he will spend the night. "Not so I can fix things, but so I can show others how to fix things."

TO DRIVE IN BUJUMBURA BY DAY is to negotiate an obstacle course of potholes, pedestrians, bicycles, and herds of goats. People carry fifty-pound bags of cassava, mattresses, and barrels of palm oil, either balanced on their heads or strapped to the backs of groaning two-wheelers, which are then often pushed to their destination, sometimes a half or full day's journey uphill.

Located in the Great Lakes region of East Africa and roughly the size of Maryland, Burundi, with ten million inhabitants, is Africa's second most densely populated country and the world's second poorest, with an annual per-capita income of roughly \$240. More than 90 percent of the population lives in rural villages, without electricity or running water. Although the country exports coffee and tea, the agricultural economy is mainly domestic. When Bujumbura's central market burned down in January 2013, the government estimated the loss to be 40 percent of the country's national income.

"The city is much crazier now because of the fire," says Niyizonkiza, as the white pickup weaves past women with baskets of mangoes and bananas perched on their turbaned heads. "People lost their businesses, so they're selling things by the side of the road. Many borrowed money and then couldn't pay it back. Some were so desperate that they committed suicide."

South of the city, traffic quickly disappears as the road curves around the eastern coast of Lake Tanganyika. The lake is more than four hundred miles long and forty-five miles across at its widest point. Neighboring Congo, to the west, is invisible beyond the horizon. The impression is that landlocked Burundi, with Rwanda to its north and Tanzania to its east and south, sits on the shores of an ocean. Palm and fruit trees grow in this tropical valley, as do fields of rice, maize, and cassava, staples of the nutrient-poor Burundian diet.

Piles of bricks punctuate the road next to rows of tiny houses. "This land down to the lake is owned by the government," Niyizonkiza says. "People can be kicked off at any time." While some of the intrepid builders lost homes during the war and are reluctant to return to their villages, most are refugees returning from Tanzania, which closed its last camp early last year, leading to a sudden influx of tens of thousands of exiled Burundians. "The UNHCR built so-called peace villages for repatriation," says Niyizonkiza, referring to the Office of the United Nations High Commissioner for Refugees. "But many people don't want to live there because it feels like being back in a refugee camp."

About an hour into the trip, the truck pulls into Rumonge, a dusty, ramshackle town and Burundi's third-largest city. Niyizonkiza wants to visit the local hospital, the closest to Kigutu. There is a subsidized public health-care system in Burundi, where the average life expectancy is about fifty-two; but with the government spending about fifty dollars per person annually, the quality of services is inadequate. "Look how unsanitary it is," says Niyizonkiza as he walks through the dilapidated buildings, where paint is peeling off walls, glass doors are broken, and window screens are torn and covered with dirt and debris. While many of the hospital's patients suffer from malaria, tuberculosis, cholera, and malnutrition, many others are women with at-risk pregnancies.

Niyizonkiza enters the maternity ward, a dark, claustrophobic space jammed with women on rusted cots with ripped mattresses, pushed tightly up against one another. "Women come here straight from childbirth, from C-sections, still bleeding. Even if they live through childbirth, they often die of infection. And the hospital detains you if you can't pay," he adds. "It's beyond dehumanizing. Many people would rather stay at home, and die at home, than come here."

A few minutes after leaving Rumonge, the truck begins its ascent up the mountain toward Kigutu. At the base of the last road leading to the village sits an army barracks, where the soldiers who accompanied Niyizonkiza are dropped off. Another, standing guard, nods as the truck turns onto the seven-mile-long road, which is steep, winding, and unpaved. "This is UN refugee housing," he says as the truck passes a handful of small brick structures. "It's a TB incubator. There are often ten people living in one room, with no ventilation, no sanitation, no dignity."

Niyizonkiza's spirits climb with the altitude. Seeing people he recognizes walking up the road, he opens the window and waves. Shouting children run alongside the vehicle; an old man in a tattered blazer puts his hands together and bows. The road levels off near the top of the mountain, about six thousand feet above sea level, and ends at a security gate. A short, cobblestoned drive leads to a roundabout, in the center of which stand two flags: one Burundian, the other American. Niyizonkiza gets out of the truck, stretches, and smiles. "Now," he says, "I can breathe."

This is Village Health Works, the nonprofit public clinic that Niyizonkiza founded in 2007. Situated on ten acres overlooking Lake Tanganyika and the surrounding mountains, with grassy berms, hedge-lined paths, and landscaped gardens, it looks more

The Shannon McKenna Health Center, Village Health Works' first building.



like a European-style sanatorium than a public clinic in a povertystricken African country. Entering the campus, he enthusiastically points to one of the many buildings. "This is the very first one we built," he says. "We didn't even know what we were doing. I keep waiting for it to collapse!"

As he strolls down VHW's main pathway, Niyizonkiza grows increasingly animated, greeting people and sharing stories. He identifies other buildings along the way, including a community center and a new residence to accommodate his growing staff, which now numbers 265. Flowers are everywhere: a mixture of multicolored tropical varieties common to the region, such as birds of paradise and poinsettia, planted next to imported marigolds and asters. "I smuggled in a lot of seeds from the US," Niyizonkiza says. "I wanted to create a place of beauty and dignity. A place of healing.

"There are many mass graves here," he adds somberly, "buried under the lawn. The community told me where we could build and where we couldn't."

Walking through the heart of the clinic, Niyizonkiza descends from the plateau toward the lake, where about a hundred villagers have gathered. Men, boys, and women, some with babies strapped to their backs, are working a section of the hillside, flattening the land with hoes, shovels, pickaxes, and machetes. They sing, calland-response style, as they work, hitting the ground in time to the music. "It's the site of the future women's health pavilion," Niyizonkiza says. "We don't have the facilities to perform C-sections here, or deal with high-risk pregnancies. In one month, we lost three community-health workers in childbirth."

The workers stop when he approaches. Forty-two years old, five feet nine, and bald, with a slender build and a light, lilting voice, Niyizonkiza is far from an imposing presence, but he commands respect. He speaks to the villagers, whose traditional brightly patterned skirts and headscarves contrast with his gray pleated corduroys, pale-blue oxford shirt, and navy Brooks Brothers sweater draped around his shoulders.

"So many women have died," one woman says. "To be here and help to control that death is a blessing for us. We come from different areas, but we're united in our work, united in the hospital."

"These are people who fought each other before," says Niyizonkiza. "Yet they're coming together to change things. They don't want to wait for engineers and watch more people die. They'd build the whole thing if I let them. They're unstoppable."

Though it took more than twenty years for Niyizonkiza to realize his vision, he had been dreaming about establishing a clinic since he was a teenager. At fifteen, he tried to build his own clinic in the hills near his high school, convincing a handful of classmates and his father to help. "I lost many childhood friends, classmates, and neighbors growing up," he says, "and it really affected me." Unfortunately, after a relentless rainy season, the would-be clinic was washed out.

The facilities, while basic from a Western point of view, are shiny and clean. There's new medical and lab equipment; solar "I'm eager to get to Kigutu," Niyizonkiza says. "Not so I can fix things, but so I can show others how to fix things."

electricity with generator backup and plans for a micro-hydroelectric system to take advantage of the nine-month rainy season; fresh, filtered water piped down from a mountain spring to the clinic and to spigots distributed throughout the community; even satellite Internet for electronic medical records.

But VHW's approach to healing has moved beyond the medical. In the last couple of years, Niyizonkiza has transformed his clinic, and the

surrounding village, into a grassroots utopia. In addition to a small demonstration garden with programs on nutrition, and a multi-acre production garden growing fruits and vegetables, there are seven life-skills co-ops that train villagers in vegetable and fish farming, animal husbandry, baking, sewing, weaving, and honey production, with a coffee co-op in development. For the village children, professional musicians lead an after-school music program: 150 students are learning to play drums and other African instruments.

"It's not just about medicine," Niyizonkiza says. "It's really about building a society, one that's ready for hope, for change that matters."

As Niyizonkiza's vision grows, so does the budget needed to fulfill it. With nonprofit status in Burundi and the United States, VHW receives assistance from the two governments, from aid organizations such as UNICEF and the UNFPA (the United Nations Population Fund), and from American donors, whom Niyizonkiza attracts through regular talks and fundraising events in the US. "I make noise wherever I can," he says. Though he has been honored with People to People International's Eisenhower Medallion, as well as an Unsung Heroes of Compassion award, presented by the Dalai Lama this past February, such honors interest him only inasmuch as they generate interest in his clinic and the country. "There's been an amazing lack of media attention," he says. "Hardly anyone talks about Burundi, except when we talk about ourselves and no one is around to listen to us. We're off the map."

IN KIGUTU FOR BARELY TWO HOURS, Niyizonkiza hits the road for the ninety-minute drive back to the capital for a meeting with the minister of health. The next morning, on his way back to Kigutu, he stops at Bujumbura University's Faculty of Medicine. The government pays students a stipend to attend the public institution, and, with no advanced training programs, sends the best out of the country for specialized training. Most do not come back.

Niyizonkiza traverses the campus with a slight swagger, a lifetime away from the self-consciousness of his student years, when he was a country bumpkin who patched and re-patched the pair of pants he wore daily. He shakes his head as he wanders the halls, pointing out the crumbling concrete, the daylight shining through holes where

THE ROAD TO KIGUTU

emergency-exit doors were ripped out of the structure. "It was beautiful when I was here," he laments, peering into a classroom with trash littering the floor. "Now look at it. And they're still using textbooks from the 1980s. For medical school!"

The early 1990s were a promising time. After twenty years of relative stability, Burundi held the first democratic presidential elections condoned by the Tutsi-led government, electing Melchior Ndadaye, a peace-preaching Hutu, in 1993. Within a few months of taking office, however, Ndadaye was assassinated by a small band of Tutsi soldiers. The retaliation was swift and severe, with twenty-five thousand Tutsis, mostly civilians, slaughtered by outraged Hutu radicals. It took almost ten years before the UN deemed the massacre a genocide.

Niyizonkiza was then in his third year of medical school, interning at a rural hospital in northern Burundi, happy to leave the chaos of the city behind. Unaware of the president's assassination the night before, he woke up one morning to an eerily quiet hospital, with no doctors to be found. While he was doing the rounds alone, a patient told him about the attack, and that Tutsis all over the country were being targeted.

Soon Niyizonkiza heard the sounds of trucks, and of whistles and drums outside the hospital. Inside, patients were wailing, running when able, locking the metal doors to their rooms and praying for their lives. He rushed to his room and crawled under his cot, clinging to the rusted springs of the frame. Hearing the sounds of shattering glass and doors being kicked open around him, Niyizonkiza realized that he'd forgotten to lock his own. He saw it open, saw a man's legs and feet, and heard him say, "The cockroach is gone. He ran away." The legs and feet then disappeared.

The story of the hospital massacre and Niyizonkiza's subsequent months on the run are powerfully recounted in Kidder's book, the descriptions of what he witnessed — people beheaded and burned alive — so dreadful that they're almost unreadable. Niyizonkiza hasn't read the book, and won't discuss the experiences it chronicles. "It was excruciatingly painful," he says. "I was in tears, trying to talk about these things. I almost walked away."

Back on the rural roads leading to Kigutu, Niyizonkiza is in a more relaxed mood. He points out sights along the way: a rock commemorating the two nights Stanley and Livingstone spent there, in 1871; the spot where the pope's envoy to the 2003 peace negotiations was assassinated; a hippo swimming in Lake Tanganyika. Seeing more refugees building shelters by the road, his mood changes. "If, God forbid, I was ever in politics," he says, "I would do this differently. But," he adds with conviction, "I'm not interested in that; I'm a US citizen."

While Niyizonkiza may have no political aspirations in Burundi, he remains one of its most influential diplomats. "The minister of health calls me the ambassador for Burundi," he says, "because there's no one to speak for us. But I'm only one man; it's very isolating and exhausting."

With scant media attention paid to Burundi, both during the war and after, most Westerners haven't even heard of the country, much less its conflict. The Tutsi genocide in Burundi occurred one year before Rwanda's, but the sheer scale and speed of the latter atrocity, and the subsequent international guilt over failing to prevent it, pushed Burundi into Rwanda's shadow. Even now, with gleaming modern hospitals and mirrored skyscrapers in its capital, Rwanda continues to receive considerably more international development assistance and humanitarian aid than Burundi. Even an emergency appeal by the International Red Cross in 2012 failed to raise enough money for the basic needs of Burundi's returning refugees.

Helping Burundi has its own set of challenges. Although the war officially ended in 2006, armed militias could be found in the bush until 2009; they continue to be active in nearby eastern Congo, an area from which many crossed the lake to join in Burundi's bloodshed. (Because it is so easy to reach, the area around Kigutu was especially hard hit.) Travel advisories remain in effect from governments around the globe. Hutu president Pierre Nkurunziza won a contested election in 2010 and in 2013 passed a law banning media criticism of the government and another amending the power-sharing provision in the country's peace accord. In spite of the constitution's term limits, Nkurunziza still plans to run again next year, heightening concerns about Burundi's continued stability.

For Niyizonkiza, who maintains a good working relationship with the government and eschews politics, these are abstract issues. "It's not about the government," he says. "It's about the people, about social investment in a post-conflict country. The people here feel so abandoned, so betrayed; by giving hope to them, we're restoring our greatest resource."

WHEN NIYIZONKIZA FIRST CAME TO NEW YORK, he squatted in an abandoned building in Harlem with other African immigrants. With the help of one of them, he got a job delivering groceries. But the building's conditions were so awful that the once-promising

Families gather at Village Health Works' annual community forum in December.



med student moved out, preferring to sleep in Central Park, which at least reminded him of Burundi's bush.

One day Niyizonkiza made a grocery delivery to a church rectory. He was greeted warmly by a former nun, Sharon McKenna, who, after his poor attempt to speak a couple of words in English, asked the skinny twenty-two-year-old if he spoke French. Excited by the human connection, he chatted briefly with McKenna; as he left, she gave him a substantial tip, and, more importantly, a hug. It was the first act of genuine warmth that he had experienced since escaping the war.

A second delivery followed, and Niyizonkiza soon found himself telling his story. Having heard about the ordeal of this homeless refugee, McKenna worked to help him. After an extensive search she found a couple, Charlie and Nancy Wolfe, who were willing to take him in. With the support of McKenna and his "American parents," coupled with his intellect and determination, he thrived. In less than two years after arriving in America, Niyizonkiza had learned English and was attending Columbia's School of General Studies.

"None of this could have happened without her," he says, pointing to a banner on the side of the clinic's original building that reads Sharon McKenna Health Center.

As he walks away from the clinic, he spots VHW's education director and suggests a tour of the site for the planned earlychildhood development facility. Even though it will be many years before his ideas can be fully implemented — Niyizonkiza has raised only a fraction of the \$3 million required to build the women's health pavilion, which is his current priority — he has a rendering of the proposed campus to show anyone who's interested. In true Niyizonkiza fashion, it's an elaborate, multifaceted design: classrooms configured in an arc ("It's like arms stretched out in an embrace," he says, "hugging the children"), an outdoor performance pavilion, an arts pavilion, and a children's instruction garden, where even the youngest villagers can learn about nutrition.

So far, though, the site doesn't do much to inspire. Dirt and scruffy grass surround three large, white UNICEF tents usually used for refugee housing, equipped only with floor mats, each of which holds thirty children. "How can they learn in that kind of environment?" he says. "UNICEF spent all this money on latrines for the primary classrooms that don't even have running water. It's unsanitary and dehumanizing. I had to add a spigot outside so the children could wash their hands.

"We want to do things our own way," says Niyizonkiza, who takes no salary from VHW. "I want to build something with dignity."

It's not that Niyizonkiza is ungrateful for the support, but his desire to make every aspect of his clinic the best it can be, to heal the people of Kigutu and give them hope, is so powerful that no one can ever do enough to satisfy him, including himself.

Niyizonkiza's suitcase is waiting for him at the new staff residence. With all his travel, Niyizonkiza lives like a nomad, staying in his old room at the Wolfes' when in New York and any available bed when in Kigutu. It's a frenetic existence that comes at "The minister of health calls me the ambassador for Burundi, because there's no one to speak for us. But I'm only one man; it's very isolating and exhausting."

considerable cost to Niyizonkiza, who has little time for a private life. "But what's the cost of doing nothing?" he says, pulling out his pajamas. "And what kind of life would I have anyway, knowing others are suffering and not being able to lift them out of their misery? Just because I had the good fortune to have gotten out."

Once unpacked, he steps out onto the covered balcony, sits down at a bistro table, and gazes at the spectacular views of the lake and Congo. But within a few minutes, he loses interest in the scenery and starts complaining about problems

with the building's design. Growing restless, he decides to take a short hike to the top of the mountain to watch the sun set over the lake.

Partway up the hillside, he stops. To the left of the path is a raised white-tiled grave, typical of this rain-soaked region. Below the simple wooden cross is a cracked glass display window with a faded photo of a man smiling under a fedora: Niyizonkiza's father. "Every time he needed to go somewhere to think," says Niyizonkiza, "he sat in this spot." Niyizonkiza isn't sure of the cause of his father's death in 2009, but he attributes it to complications from years of alcohol abuse, an all-too-common problem during the war. "People lost everything," he says. "There was so much shame for the men, not being able to take care of their families."

This land at the top of the mountain once belonged to Niyizonkiza's parents, who gave it for the clinic. As a boy, Niyizonkiza grazed cattle here; at night, under the stars, he listened to his grandfather's stories. "I used to write poetry about the beauty of this place," he recalls. "My mother told me I was too romantic."

As the sun sets over Congo, Niyizonkiza sits down on a rotting wooden bench, one of three he built after he returned. So many years later, it remains his special spot, the place where he allows himself moments of contemplation. He says he hopes someday to build a house there with 360-degree views of the countryside. Stars fill the equatorial sky, and hundreds of lights illuminate the lake, as fishermen set out in small, lantern-lit boats for the night, hoping for a catch to sell the next morning.

"Life is beautiful," he says, staring straight ahead. "But it's been very hard."

SUNDAYS ARE QUIET AT THE CLINIC, a time for families to visit and gather at the pavilion constructed for them, with its open-air cooking space. Beyond the clinic gates, however, Kigutu is alive with activity and song, as villagers return from services at the local

THE ROAD TO KIGUTU

Catholic and Pentecostal churches — the former left over from Belgian rule, the latter brought by post-independence missionaries.

Like most Burundians, Niyizonkiza used to attend church, but was put off by the religious hypocrisy he witnessed during the war. "These pastors talk about loving one another and don't practice what they preach. Many of them were complicit in the killing: they'd tell people to gather in the churches, that they'd be safe there, and then signal the militia, who would burn the church down."

Passing through the clinic's security gate, Niyizonkiza gives the guard a big hug, says something to him in Kirundi, and laughs. "I built that guardhouse for him a little over a year ago," he says, pointing to a turret-shaped building between the entrance and exit gates. "He was always standing out there in the rain!" Walking away, he adds, almost in passing, "He was one of my killers. He's a Hutu, and is known for killing a lot of Tutsis."

To the unaccustomed eye, it's nearly impossible to distinguish between the two ethnic groups. They speak the same language, practice the same religions, and, with the exception of a difference in height — Tutsis, on average, are taller than Hutus — there are few obvious physical differences. Tutsis, however, tend to have greater wealth and social status than Hutus. Burundi's past kings were Tutsi, and, under Belgian rule, Tutsis were kept in control of the government. Tutsis also prefer cattle ranching to farming, which is the typical livelihood of Hutus and considered a lower-class occupation.

But in a country as destitute as Burundi, even slight economic differences can feel significant. By local standards, Niyizonkiza's parents were well-off, owning three pieces of land in different parts of Burundi and able to pay the roughly one-dollar annual tuition to send their son to boarding school. Yet theirs was still a hand-tomouth existence: Niyizonkiza's father was usually traveling, buying goods in Tanzania that he resold in Burundi, leaving his eldest sons to tend cattle. "We were all poor," Niyizonkiza says. "And we all used to get along. The war was about an overall scarcity of resources. Poor villagers were taken advantage of — by politicians, by church leaders — and told whom to blame for their suffering."

Walking down the road, Niyizonkiza is greeted by villagers, who wait in line to grasp his hand and say *amahoro*, a greeting that means "peace." In a rumpled white T-shirt and cargo khakis, with a personal security guard on his heels and a golf umbrella at the ready, he can seem like a pop star. But Niyizonkiza never puts on airs: he is of the community, known by young and old simply as Deo.

As he takes the hand of one middle-aged woman he knows well, Niyizonkiza becomes transfixed by her palm, which is rough and calloused, scored with deep lines. He asks if he can photograph it, and quickly snaps a shot with his iPhone. She, in turn, looks at his palm, which has grown soft and smooth during his twenty years in America. "She's asking me, What happened?" he translates with a chuckle. "So I told her that if we worked side by side for one day, my hands would look like hers." As they part, he pats her on the shoulder and says with a big smile, "I'm laughing, crying on the inside."

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Niyizonkiza crosses the soccer field and heads down a dirt path, away from the village, into the bush. In Kigutu, as in America, it is hard for him to find time for himself, though his roles in each country couldn't be more different. Here, he is in charge, presiding over a large staff, making things happen, listening to the villagers' stories and requests. In America, he is the one telling the stories, the one who needs to ask for help.

"People ask me to speak, and want me to talk about the genocide, but then not to show any photos of dead bodies. It's 'too traumatizing' for the audience. Even when I talked about helping my mother deliver her baby when I was five, a woman came up to me afterward and said that I shouldn't mention that anymore, because she found it too upsetting."

A couple of goats bound across the path, followed by a young boy with a herding stick. "That was me a hundred years ago," Niyizonkiza says. "Tending animals in the fog and rain, alone." He greets the boy, then kneels to examine his heavily calloused feet. The heels are badly infected. "He needs a pathology lab to figure out which antibiotic would be right to treat him. But we don't have that yet." Niyizonkiza asks the boy some personal questions, which he answers shyly, eyes averted. "He's in the second grade, the top of his class. His father died two months ago." Niyizonkiza shakes his head slowly, and walks on. "I told him that I know it's hard, that we all grew up in the same conditions, and that he shouldn't give up hope, shouldn't despair."

Despair was everywhere when Niyizonkiza first returned to Burundi in December 2001. With the war, which he sometimes calls "the horror," raging, he took a brief and dangerous trip to Bujumbura to see his father, who was in the hospital. "I saw the horrible conditions," he recalls, sitting down on a large boulder overlooking other mountain villages, small brick houses snaking their way up the hillside. "Patients were detained, with no hope. It was killing me after I came back." Niyizonkiza continued his studies at the Harvard School of Public

"People ask me to speak, and want me to talk about the genocide, but then not to show any photos of dead bodies. It's 'too traumatizing' for the audience." Health, and worked with the physician and anthropologist Paul Farmer and his aid organization Partners in Health, traveling to Haiti and Rwanda. "I remember asking myself, 'Why am I doing all of this work for Rwanda and Haiti, when I know a place where no one is coming and people are suffering?"

Niyizonkiza was in his second year at Dartmouth medical school when he decided that he needed to return to Burundi. He traveled to Kigutu in December 2005, stopping on the way at Rumonge Hospital to observe the conditions. "There were Hutus and Tutsis," he says, "locked in together each night. And they



Early in the morning, people wait outside Village Health Works for the gates to open. Patients come from as far as one hundred miles away.

were friends. I said, 'You spent all those years hunting each other, killing each other's family members, and now you have no one left but yourselves. Is that normal? Can you remain friends if you get out of here, and do something for yourself and your community?' They all looked at each other and said, 'Well, now we know.'

"It took me so much time to understand," adds Niyizonkiza, who studied not only biochemistry but also ethics and moral philosophy at Columbia, hoping it would help explain what his country went through. "But when I was at Rumonge, I realized that these people don't hate each other. It's the conditions that they grew up in that helped to dehumanize them. What we really need to do to help this country is to confront these conditions."

Despite what he'd witnessed years earlier in Bujumbura, Niyizonkiza was unprepared for the devastation that awaited him in Kigutu. "Most of the houses were destroyed. People were living in the bush. There was almost nothing left. I knew that the country had suffered, but I had no idea how much." On Christmas Day, he was talking with the owner of one of the remaining compounds when other people started coming, including the chief of the district. "Soon there were nine chairs outside," Niyizonkiza remembers. "We talked about lots of painful things, about death, from both genocide and disease. The committee was formed right there."

While Niyizonkiza wasn't met with hostility, there was a fair amount of suspicion. "People were asking, 'Is this guy really going to do something for us? Is he normal, talking to all those people who killed us?' They were afraid to trust, afraid of authority after what happened. So I kept preaching, using loudspeakers to mobilize people, telling them that they're not who someone else had been telling them that they are. They're all neighbors, and they're suffering together."

Inspired, a group of community members got together to choose a site, and offered to donate their land. The land was transferred in 2006; the villagers, however, were at work well before then, digging up rocks and grading the site. Niyizonkiza took a leave of absence from Dartmouth and spent fifteen months living in a tent in Kigutu, overseeing the project. "I went from being a medical student to a construction manager," he says with a laugh.

Niyizonkiza's father was excited about the prospect of a clinic, and proved instrumental in rallying the men, many of whom had turned to alcohol during the war. "By seven a.m., many of them were already drinking banana beer, and by ten a.m. they were drunk. My father was drinking, too. But he woke men up in the middle of the night to cut down trees and get things done."

One of the biggest obstacles Niyizonkiza faced was the area's relative inaccessibility. While steep mountain paths existed, there were no roads for ambulances or other vehicles. He spoke with an engineering firm and was given a quote of \$50,000 to build a road. When he broke the news to the committee, one woman, Cécille, spoke up. "She had a crying baby on her back," Niyizonkiza recalls, "and she said, 'If you have only one franc, don't spend it on the road. We are not poor because we're lazy." The next day, hundreds of people started at the bottom of the hillside, cutting down brush with machetes to clear the way for the seven-mile road to the clinic.

"It was during the time working on the road that people who spent years running away from each other, killing each other, really came together," Niyizonkiza says. "It was the beginning of reconciliation."

The road was eventually re-graded by the government, after the president made his first visit to VHW in 2011. "The government was slow to get onboard," Niyizonkiza says. "We started talking to the government before building the first structure, and submitted the proper documents, but got no response. So we decided we had to do it without permission. By the time the minister of health arrived for a site visit, unknown to him, he was coming to the opening."

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Niyizonkiza asked his friend Dziwe Ntaba, whom he'd met at Harvard, to join him as a cofounder and head up the clinic's medical staff. The government sent two salaried nurses in 2009; a doctor followed in 2011. "The more visits government officials pay here," Niyizonkiza says, "the more help I get. Because they can really see what it is." The government is now so impressed by his accomplishments that they've asked him to bring the VHW model to other parts of the country.

A dense fog rolls in, and Niyizonkiza hustles back toward the road, hoping to dodge the impending rainstorm. He meets his younger brother Peter, who handles procurement for the clinic. The deluge hits, and they dash into a nearby store: a wooden counter and two shelves displaying a meager collection of tea, batteries, and a handful of fruit. "It's downtown Kigutu!" shouts Niyizonkiza to his brother, trying to be heard over the roar of rain on the corrugated metal roof. Over the last couple of years, a row of tiny shops and restaurants has popped up outside the clinic, catering to patients and visiting families.

After the rain subsides, Niyizonkiza walks into the heart of the village. He stops in at a yellow house with a thatch fence. "This is the compound where it all started. And this," he says with excitement, as a woman with heavy-lidded almond eyes appears in the doorway, "is Cécille, who said that incredible thing about the road." He gives her a big hug, then fills her in on the earlier discussion, as curious children quickly appear around them. "That Christmas was the best day of my life," she says, "and at the right time. Things had been so hard."

Near the end of *Strength in What Remains*, Tracy Kidder acknowledges that, despite having spent many months in Niyizonkiza's company, there remained a side of the man that he would never know. Niyizonkiza may share the facts of his story for the sake of Kigutu and his clinic, but much of his emotional suffering stays hidden, an enduring darkness.

Heading back through the security gate, Niyizonkiza is stopped by an elderly woman, who hugs him and then blesses him. "Every time I see you, I feel that God is here," she says. "I remember how horrible it was here before. I just wish you had somebody," she adds. "You always come alone."

ALL OF NIYIZONKIZA'S TRIPS TO BURUNDI ARE BUSY, and the time around the annual community forum is especially chaotic. Board members and other guests from America are invited, as are dignitaries and government officials from Burundi. While preparations are underway, Niyizonkiza makes several more trips to Bujumbura, trying to wrangle a last-minute meeting with Burundi's minister of health to discuss changes to the clinic's drug-purchasing protocol. "It's why I like the Rwandan government so much, despite its issues," he says, after a promised meeting fails to happen. "They're organized and get things done."

Only after returning to Kigutu midweek does Niyizonkiza find the time to visit his mother, who lives near the clinic. After escaping to America, it took him several years to locate his parents. With Niyizonkiza's family was extremely fortunate, with both parents and all seven children surviving the war. When he returned to Kigutu in 2005, Niyizonkiza had a new three-bedroom brick home constructed for his parents in the compound where their two previous houses — both burned to the ground — once stood. Lush landscaping decorates the front; inside, the rooms are spare, with concrete floors and minimal furniture. High on the walls of the receiving room hang family mementos: a portrait of Niyizonkiza's late father, with images of a medieval Madonna and a tropical beach tacked around it in the shape of a squat cross; snapshots of grown children and small grandchildren; a souvenir plate of the Statue of Liberty; a photo of Niyizonkiza in blue cap and gown, arms folded, a proud and smiling Columbia graduate.

Niyizonkiza gives his mother a gentle kiss. Small and pearshaped, with a high, sloped forehead, receded hairline, and glasses, Clémence is in her sixties, he guesses, but looks older. She speaks softly, and with consideration; a benign brain tumor has made her prone to debilitating headaches.

While her first name is French, Clémence's second name, Mkikiri, is Kirundi. There are no surnames in Burundian culture that link a

Deogratias Niyizonkiza examines an expectant mother at Village Health Works.



The next day, hundreds of people started at the bottom of the hillside, cutting down brush with machetes to clear the way for the sevenmile road to the clinic.

family; children are given two names when born, at least one in Kirundi, and often tied to the circumstances of the birth. Nearly dying in labor, Clémence named her second son Deogratias Niyizonkiza, the former Latin for "thanks be to God" — the one phrase she remembered from attending a Latin mass — the latter meaning "God, you are my savior" in Kirundi. His father, born during a calf boom, was named Buhembe, or "Little Horns." "We don't have to tell our stories," says Niyizonkiza, "our names tell so much."

After the war, Clémence added a third name to her others: Mpozenzi, which means, "I am quiet, but I know." When his mother was ready to tell her story to her sons, Niyizonkiza, sobbing, turned and walked away, unable out of filial love to hear his mother recount her suffering. He still doesn't know what his parents endured during the war; his mother, in turn, doesn't know what happened over the dozen years her son was absent from her life. While Western psychology promotes sharing traumatic experiences as a means of catharsis, Burundians don't ask even those closest to them to relive the pain and shame of the past through retelling. The belief is so strongly ingrained in the culture that there's a term in Kirundi for this sort of emotional coercion: *gusimbura*.

Promising to visit again, Niyizonkiza leaves his mother and arrives back at the clinic just in time to catch a dress rehearsal for the forum's musical performance. Men and boys in traditional Burundian drumming uniforms of red, white, and green beat on giant barrel drums while young girls sing beside them. The idea for VHW's afterschool music program arose from necessity: with parents working on the clinic, children were usually left to fend for themselves. "It was a way to bring children together and keep them out of trouble," says Niyizonkiza, "and then hopefully get them to school."

As a group of boys begin to dance, their arms moving as if rowing a boat, Niyizonkiza translates the words of their song: "We're going to make the hospital shine, and be an example to the rest of the world. And we can only do this if we join hands and link arms, and work together."

The boys sing, arm in arm, as their bare feet dance on the grass covering one of Kigutu's many mass graves.

A COUPLE OF DAYS LATER, hundreds of people arrive for the forum, packing the three-hundred-seat community center and spilling onto the adjacent covered patio, which is outfitted with a flat-screen and loudspeakers. This year's gathering is focused on early-childhood education and mental health. Concerned about the stigma of mental health, Niyizonkiza didn't advertise the topic, yet once the subject is announced and microphones are passed around, the stories don't stop: a woman struggling to care for her sister's family after the mother died in childbirth; a mother tired of seeing girls thrown out of their homes; a widower whose second wife burned his children alive because she didn't like them.

But along with the tragic tales come words of deep thanks. Abandoned for so long, the people of Kigutu are grateful for anyone willing to listen and help. They have tasted hope and dignity, and are eager for more. By the forum's close, there are already plans to form both women's and men's mental-health groups.

The ceremonial drumming is in full swing as people exit the forum. "They're singing 'Come to Kigutu, and see what we are!'" exclaims Niyizonkiza to his American guests. After a series of highly acrobatic solos, two men emerge from the arc of drummers and dance together, embracing and shaking hands. "One's Hutu, the other Tutsi," says Niyizonkiza, grinning. "It's amazing."

The afternoon is filled with more tours and stories. Niyizonkiza, ever the pitchman, works to win additional support. Satisfied with the day's work, he takes a late-afternoon walk to his favorite spot at the top of the mountain. Considering the location where he has imagined building a home, he suddenly dismisses the idea. "It's a pipe dream," he says. "How can I have that for myself when the villagers still have so little?"

But he does have at least one plan for himself: a long-postponed return to med school next year, with the hope of entering academia, and, down the road, transforming VHW into a teaching hospital.

Given the scope of his vision, it's difficult to imagine Niyizonkiza taking a step back from Village Health Works, even for something that would ultimately benefit the clinic and community. "I love this clinic like I love my own heart," he says, "but it can't just be about Deo. I want to train people so there can be more and more Deos, doing this in different places."

Niyizonkiza grows quiet. Sitting down on one of his benches, he stares fixedly at a point in the center of the glistening lake, lost in thought. "You know," he says, "after I built that house for the security guard, he came to me and said that he needed to talk. He brought me right here. We sat on this bench, and he started crying. He said, 'I love you, but I also hate you. You're the only person

in my life to really love me, and I could have burned you, killed you slowly. Every time I see you, I am reminded of what I

See video and more photographs. www.magazine.columbia.edu/burundi

did, and I realize that everything I was taught was wrong. And it makes me want to kill myself, thinking about how many more Deos there could have been.'"

He pauses, running his hand over his scalp as if caressing the memory. "When the guard was done," Niyizonkiza continues, "he stood up and hugged me, and said, 'Thank you. Now I'm healed."

Stacey Kors is a freelance arts writer.

CARD SHARKS

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BEAU WILLIMON'S House of Cards grabs US and doesn't let go.

BY PAUL HOND

ILLUSTRATIONS BY CARLO GIAMBARRESI



rquhart here. I might look a bit drawn and peaky, but that's because I have just watched, in unbroken succession, all twenty-six episodes of the American version of *House of Cards* (it's rather habit-forming, I'm afraid), a political thriller whose subject is Power. If I may say so, the show's creator and writer, Beau Willimon, has reinvented the 1990 BBC miniseries in ways I scarcely could have imagined, back when I was putting a bit of stick about in Parliament as chief whip.

Yes: I, Francis Urguhart, the original F. U., precursor to Willimon's Francis Underwood (and Kevin Spacey's Underwood, I should say), have cleared my busy schedule to taste the Machiavellian juices of Willimon's concoction. Now, while I still have my wits about me, I introduce to you the story of a young artist who became a playwright, jumped into the waters of campaign politics, wrote a play based on the adventure that became a major motion picture, signed a most unorthodox deal to remake House of Cards for an outfit called Netflix, and then, at thirty-five - the age of presidential eligibility, come to that ---shot like a Bloodhound missile to the very heights of American television.

I use the term television loosely, of course.

The show's subject is much bigger than political power," says Beau Willimon '99CC, '03SOA during a break from writing the third season of the Netflix drama *House of Cards*. "It's about power in all its forms. Power over one's self, and the power dynamics of relationships — friends, spouses, family. I think political power, to a degree, is an attempt to master our fate. For politicians, it's an attempt to cheat death: 'I can't cheat death completely, but I can control as much of the universe as possible while I'm here.""

In the show's first episode, Congressman Francis Underwood (D-SC), snubbed for a promised cabinet post by the new president, plots a course of vengeance that will mimic the cold calculus of his legislative style. "Forward: that is the battle cry," he says in one of his Richard III-style asides. delivered with a Dixie drawl. "Leave ideology to the armchair generals, it does me no good." Underwood has a way of summing things up. Early in season two, while taking a breather from his battle, he relaxes in his window with an electronic cigarette. "Addiction without the consequences," he says. Of all his pungent epigrams uttered to the fourth wall, this one speaks less to Underwood's condition than to ours: having been made complicit by his direct appeals, we then participate in his evil with the luxury of immunity. House of Cards may hook us with top-notch storytelling, but the rush is provided by the show's brand of wish fulfillment: Underwood's wicked manipulations and forceful takedowns provide vicarious satisfaction (if not inspiration) for anyone who has toiled in a bureaucracy. Other characters fight other addictions in House of Cards, but power is the strongest intoxicant of all.

"It's an interesting paradox," Willimon says. "A lot of people think of power as a form of control, and yet addiction to power in some ways removes control from the equation. It's a balancing act. The more you become addicted to power, the less control you have over yourself, because of what you're willing to do to acquire it or maintain it."

1995. AUTUMN. A rowboat glides along the Harlem River, propelled by eight Columbia oarsmen. Two members of the crew seem different from the rest. A scruffy hint of the free spirit about them. The hair a little long.

One is Jay Carson '99CC, of Macon, Georgia. The other is Beau Willimon, of St. Louis.

Carson's kick is politics. At thirteen, he was riveted by the 1992 presidential campaign, wowed by the brains of Bill Clinton's young communications director, George Stephanopoulos '82CC.

CARD SHARKS

Willimon is an artist. A painter who could draw before he could talk. He wants to use the canvas to tell stories.

The two met at freshman orientation, drawn to each other by a shared sense that no one else wanted to hang out with them. They quickly became best friends.

1997. Carson sees a flyer in Hamilton Hall advertising an internship with George Stephanopoulos. As Clinton's senior policy adviser, Stephanopoulos has left the White House after the president's second-term victory over Bob Dole, and returned to Columbia to teach.

Carson applies for the internship and gets it. While Stephanopoulos teaches a seminar on presidential power, Carson spends hours in the International Affairs Building, doing research for his mentor's political memoir *All Too Human*.

Stephanopoulos sees his protégé's hunger for electoral politics and gives him a tip. "There's a little-known congressman from Brooklyn who's running for the Senate," he tells Carson. "He's in third place right now, but I know him from my time in the White House, and he's going to win. Go work for this guy."

The candidate is Chuck Schumer. He is running against the powerful three-term Republican senator Alfonse D'Amato. Stephanopoulos makes a phone call, and Carson joins the campaign.

Though he's never worked on a campaign before, Carson senses that this one is special. Much later, he will remember it as "one of those times when a group of people comes together and it's all the right people — the next generation of talent in a party. That was that race." He tells Willimon how much fun it is.

Willimon, in his paint-splotched pants, is interested. He shows up at Schumer headquarters in Midtown, ready for action. The senior staff christens the two friends "Beau and Luke Duke," after the freewheeling Georgia cousins in the 1980s TV show *The Dukes of Hazzard*. (Carson is a little miffed that he's lost his name, while the newcomer gets to keep his.) The friends work tirelessly, a pair of unpaid interns too naive and energetic to say anything but "Yeah, absolutely" when asked to do something.

For instance, Schumer has a campaign stop in Buffalo tomorrow, but the shipment of yard signs has failed to go out. The last planes have left La Guardia, so there's no way to overnight them. It's a cold night, sleeting and snowing. The senior staffers look around the war room and see Carson and Willimon sitting there. "Hey, guys," one staffer says, "can you drive these yard signs to Buffalo tonight?" Carson and Willimon look at each other, then at the staffer. "Yeah, absolutely."

Beau and Luke Duke drive their own rented version of the General Lee all night to Buffalo, get the signs there, and meet the Schumer motorcade the next morning.

In an upset, Schumer wins the election. Carson, who will become press secretary for the presidential runs of Howard Dean (2004) and Hillary Clinton (2008), still calls the Schumer race "the greatest campaign I've ever done."

Willimon, too, remembers it as "an incredible experience. Your candidate wins, and you feel that in your own minuscule way you made a difference, and helped change the face of the country." After Schumer, Willimon goes on to work with Carson on Bill Bradley's presidential campaign of 2000, and Hillary Clinton's Senate run of the same year. His idealism and optimism are riding high.

Then comes the Dean campaign.

"SUBVERT THE TROPE." These words pop from a sign plastered in an office in New York's financial district. The walls are otherwise covered with dry-erase boards and corkboards. This is the writers' room, where Beau Willimon is bunkered this summer with six handpicked writers, in the midst of a seven-month writing binge that will result in thirteen more hourlong episodes of *House of Cards*.

The writers spend the first few weeks plotting a grid (episodes one through thirteen across the top, characters down the side), looking at the season as a whole and figuring out characters' story lines and the big plot moves. Then they dive in, episode by episode. Each episode takes about six weeks to write. "It's an intensive process," Willimon says. "Monday to Friday, eight hours a day. A bunch of brains launching themselves against a wall, hoping to break through. The creative process is always a trial-anderror game. The moment it stops being trial and error is when you've gotten comfortable, when you're not taking risks, when you're doing things you already know how to do. We endeavor to challenge ourselves to do things we don't know how to do, and the only way to do that is to bang your head against the wall until you break the wall or the wall breaks you."

One of the writers in the room is Frank Pugliese, a playwright and scriptwriter who teaches at Columbia's School of the Arts. Born in Italy, Pugliese grew up in the Italian-American neigh-

"THE MORE YOU BECOME ADDICTED TO POWER, THE LESS Control you have over yourself, because of what You're willing to do to acquire it or maintain it."

borhood of Gravesend, near Coney Island — "a very masculine place with a real vocabulary of violence about it." His family was ostracized, considered foreigners, outsiders. As a teenage writer contemplating the theater's empty space, Pugliese wanted to fill it "with language, music, and people that aren't often seen there," he says. For him, that meant his Brooklyn neighborhood. "As difficult a place as it was, I wanted to put it in that space and celebrate it and share it with other people who had similar experiences — to say, I know your suffering, I know your joy. We can share that."

His play Aven'U Boys, about three young Italian-American guys in Brooklyn, was produced off-Broadway in 1993, when Pugliese was twenty-nine, and won an Obie Award for best direction. Though Pugliese went on to a successful career writing for television and film — including winning a Writers Guild Award for his



work on David Simon's TV series *Homicide*, and writing the HBO movie *Shot in the Heart* (2001), about the executed murderer Gary Gilmore — he has never stopped writing plays.

Willimon is partial to playwrights. He feels they have an advantage, being steeped in a form in which "you can't hide, you can't edit your way out," and for which there is scant financial reward. "Those are the people I want," he says. "So hungry they'll crawl across a desert to tell a good story."

Pugliese is one of four playwrights in the writers' room. "The quality and level of the writers is tremendous," he says. "Some of the best writers in the city, and particularly in the theater, are in that room. Writers who are strong at character, who have a real sense of the subtextual power behind relationships, which provides a lot of energy — there's a titillation in the subtext between characters that's fun to watch and even more fun to write."

Like a musical ensemble, the writers play off each other, riffing, noodling, telling stories, composing. Good is never good enough; there is always a sense that a thing can be better. In such a demanding atmosphere, trust is paramount. "If you're not allowed to fail in the writers' room, then why would you bring something in tomorrow?" says Pugliese. "When you do, that's when the great stuff happens."

It all starts with Willimon. Television, its literary profile raised over the past fifteen years by shows like *The Sopranos*, *Oz*, *Deadwood*, *The Wire*, and *Breaking Bad*, is considered a writer's medium. The writer runs the show.

"House of Cards is fortunate to have Beau in charge," Pugliese says. *"Beau is there from the beginning to the end, and so carries the story in hand. He's the protector of that story; he champions it, argues for it."*

And he's serious about that sign on the wall.

"What's amazing about Beau," says Pugliese, "is that he has this strong sense of structure, yet also a profound and courageous ability to experiment and go for it and break rules — to do the unexpected."

IT'S CAUCUS TIME '04 IN IOWA, and Jay Carson has a decision to make. The press advance isn't up to snuff. As Howard Dean's press secretary, this is Carson's problem to fix. Carson calls his friend Willimon and asks a big favor.

The past few years have marked a change for Willimon. Back in his senior year of college, frustrated with the narrative limits of painting, he entered the competition for Columbia's Seymour Brick Memorial Prize for playwriting. His play, which he would later describe as "terrible," won the cash award. This gave him just enough confidence to keep writing. After graduating, he lived on the Lower East Side and worked odd jobs, then audited a playwriting class at Columbia taught by Eduardo Machado. Machado, who was the head of the playwriting program, saw Willimon's promise and urged him to apply. Willimon did, and was accepted. Among his classes was a screenwriting course for playwrights taught by Frank Pugliese.

Now a year out of grad school and busy with his writing, Willimon answers Carson's call. Like Carson, Willimon caught the political bug during the Schumer campaign, and the chance to work for the insurgent candidacy of the former governor of Vermont, whose antiwar message and Internet army have made him the unlikely front-runner in a field that includes John Kerry and John Edwards, is seductive. Willimon moves to Iowa to be the press advance guy for Dean.

"Age-wise," says Carson, "we were children. I'm still amazed at how much responsibility I had at twenty-six, and wonder why anyone gave it to me."

Willimon enters this campaign as he did the others — with the highest hopes and deepest desire to contribute to changing the country.

In Iowa, Dean finishes a disappointing third. During a never-saydie speech to his supporters, the candidate unleashes a hoarse battle yell. Microphones isolate Dean's outburst from the crowd noise, and the media play the clip ad nauseam. A month later, the damage done, Dean drops out of the race. Willimon is heartbroken.

A few years later, Willimon writes a play, *Farragut North*, loosely based on his experiences on that campaign. The protagonist is Stephen Bellamy, a precocious, ambitious twenty-five-year-old press secretary for a presidential candidate, who falls prey to backroom politics. The play opens off-Broadway in 2008 to excellent reviews, and moves to Los Angeles the following year. The film rights are sold to George Clooney and Leonardo DiCaprio. Willimon is suddenly very hot. Trips to LA, meetings, phone calls. One of those calls is from director David Fincher (*Seven, Fight Club*, *The Social Network*), who wants to remake *House of Cards*, the British miniseries based on a novel by former Conservative Party chief of staff Michael Dobbs and written by Andrew Davies. Willimon watches the show and loves it. He has a million ideas. So does Fincher. The two are in sync. They see it. They hear it.

CARD SHARKS

In 2011, the film version of *Farragut North*, titled *The Ides of March*, is released, and Willimon earns an Academy Award nomination for best adapted screenplay. Meanwhile, he writes a pilot for *House of Cards*, and it doesn't hurt that actors Kevin Spacey and Robin Wright are attached to the project. He has meetings with the big cable networks, and also with Netflix, an online-streaming and DVD-delivery giant that wants to get into the original-programming game.

Using its subscriber data, Netflix sees potential for a remake of the esteemed British show. Still, the whole thing is a gamble — neither Netflix nor Willimon nor Fincher has done TV before.

No matter. Netflix proposes something extraordinary. As Willimon will later put it, "They made an offer we couldn't refuse."

Urquhart here. Still awake. Pity about Dean. And to think that that scream nonsense happened *before* social media — nowadays a gaffe can finish you off in seconds rather than hours. But a quick death is so much more desirable, don't you think?

I believe our Underwood would agree. He has no time for such useless things as suffering. A merciful man, Underwood. And Mr. Spacey does get his teeth into a role, doesn't he, much as Willimon provides the meat. How fitting that Spacey, just before *House of Cards*, played the lead in a world tour of *Richard III*, and that Willimon attended the final performance at the Brooklyn Academy of Music. I, for one, find it impossible to watch Underwood's exploits and not think of dear Richard's public disavowal of kingly ambition even as he laid waste to those in his path.

But it's not just the spirit of Richard III dealing from the deck's bottom in *House of Cards*. There's a dash of the Macbeths, and some Iago for good measure. Mostly, though, there is Willimon, whose handsome Underwoods, I feel, are not devoid of morality — there is always a price for getting things done.

I love that woman. I love her more than sharks love blood. — Francis Underwood

What draws me to the show is Frank and Claire Underwood," says Pugliese. "I hadn't seen a relationship like that on TV. It's something that everyone on the show, the actors and directors, could get — even its elusiveness, even its sublime mystery. It's the heartbeat of the show."

In Francis and Claire Underwood, Willimon's childless DC power couple, we see an attraction that is narcissistic and tactical, tender and devout, like that of two androids in a corrupt human world who share a singular affinity. Theirs is an open marriage, yet prone to suppressed jealousies both sexual and professional, in which tense conversations are cut short on the stairs by innocuous-sounding yet pointed exit lines. But mostly, their same-species rapport feels like the one thing as powerful as their ambition. Pugliese hadn't been in a writers' room in seven or eight years. Though he'd been working on TV shows and writing plays, the writers' room scenario meant a serious grind. He'd told himself that only the right marriage would bring him back.

"I met with Beau before the season started," he says. "We had a remarkable, liking-the-same-things kind of meeting. He reached out and asked me if I wanted to come into the room for this season. I had promised myself that it had to be an extraordinary person and situation. This was it."

"KEVIN SPACEY'S performance in *Richard III* hugely influenced the conception of Francis Underwood," says Willimon. "Kevin was able to bring a humanity and humor to Richard III, one of the more nefarious characters in Western literature, and have him rise above near sociopathy so that you saw someone who was three-dimensional and human and flawed — which doesn't excuse his actions, but layers them in such a way that they don't come off as pure evil. That's something I constantly remind myself of, because we try to do the same thing with Francis. I've never wanted Francis to be a mere sociopath — he has to be more. That's why we have access,

"WHAT'S AMAZING ABOUT BEAU IS THAT HE HAS THIS Strong sense of structure, yet also a profound AND courageous ability to do the unexpected."

glimpses, even if they are few and far between, of his humanity his moments of vulnerability, his ability to love and even to have compassion, in his own way. The sociopath is incapable of empathy, and Francis is very capable of empathy. He makes the choice, when necessary, to suppress it, but that doesn't mean it's not there."

"WE CAN'T PAY YOU MUCH, but it would be really great to have you help out with this. It's so intricately political, and it's so important that we get the details right."

When Jay Carson got Willimon's call, he was working as executive director of the C40 Cities Climate Leadership Group and senior adviser to Bloomberg Philanthropies. It was 2011. Willimon had just signed a deal with Netflix to make *House of Cards*.

The whole thing sounded a little crazy to Carson, as it might have to anyone who thought of Netflix as the company that conveyed DVDs in red-and-white envelopes, Mercury-like, to your home. Still, Carson was in a good position to help. After the Dean campaign, he had worked four years on the senior staff of Senator Tom Daschle (D-SD); was communications director for the William J. Clinton Foundation; and, in 2009–2010, was chief deputy mayor of Los Angeles.

In some ways, Willimon's request felt to Carson like the reverse of the Dean situation, when Carson had called on Willimon for



help. Carson and Willimon were no longer the guys who said "Yeah, absolutely" at the drop of a hat. But Carson agreed to become the political consultant for *House of Cards*.

The two friends spoke casually early on. They'd sit around and talk politics, and discuss how things worked. Procedural stuff. Obscure parliamentary rules. Carson knew a lot about Congress from his years with Daschle, and if he didn't know something, he knew whom to ask.

"The show requires a lot of interaction with high-level people in Washington," Carson says. "There were some brave and kind people who talked to us in the beginning, when we were just some show that was going to be on the Internet. I called friends in Washington: 'Can you take us on a tour of the White House? Of Congress?' Many nice people did that for us."

As political consultant, Carson reads the outline of a script, the rough draft, and the completed draft, checks it for accuracy, plausibility. Much of the time, he finds, the writers hit the mark.

"The job is becoming harder because the show is getting much smarter about politics," he says. "It's also becoming easier, because the writers' room and the team is getting a much better feel for the world of politics and power."

One of the many surprises of *House of Cards*, given its vision of a political system rank with ambition, vanity, and lobbyists, is how many fans it has inside the Beltway.

"People in Washington love it," Carson says. "They appreciate our attention to detail. We respect the political world and take it very seriously."

WHAT NETFLIX OFFERED WILLIMON was this: two seasons guaranteed up front — twenty-six episodes — and full creative control. It was an arrangement unheard of in television.

"The two-season guarantee was huge," Willimon says. "It really liberated me as a storyteller because I had a much broader canvas to work on, and I didn't feel the need to fight for my life the way a lot of shows do on regular broadcast networks week to week. It meant that there were things I could lay in early in season one that might not come back fully until season two, which allows for more sophisticated storytelling." This sort of freedom makes Willimon the envy of other TV writers. Next to the average showrunner on network or cable television, who is subject to corporate notes and the tyranny of weekly ratings, Willimon is Butch Cassidy in a world of singing cowpokes.

House of Cards has been a critical as well as a popular success. In 2013 it received nine Emmy nominations and became the first online program to win an Emmy Award — three in all, including best director for David Fincher, whose dark color palette of blues and browns, noirish sensibility, and sharp compositions established the *House of Cards* style. What also distinguishes the viewing experience is the way it is consumed: in the Netflix model, each season is released all at once, allowing viewers to stream the show anytime, on any Internet device, and to watch in chunks, in dribs and drabs, or in obsessive marathon sessions known by the catchword of the online media-streaming age: "binge-watching."

ell, yes, quite.

Like lamb stew or marriage, *House of Cards* is even better the second time around. I have, I confess, gone on another "bingewatch," and am competent to state that with repeated viewing, the cunning of Willimon's structure, the design of his tapestry, is all the more evident and impressive. So it goes with any artful narrative, I gather, though we're not always compelled to have another go at it, are we? Without doubt, part of the *House of Cards* phenomenon is the ease and accessibility of the streaming technology — you can watch on your phone while sitting on the throne at three a.m. if you must. That's well and good. But what is the thing, the scent, the food, that so attracts us, that keeps us in pursuit?

Let's have Willimon answer that.

"I am attracted to the same things a lot of the viewers are the deliciousness of a man who is bound by no rules. Who has unshackled himself from the law. There's a reason why Orson Welles said that Shakespeare's greatest characters were villains: it's because they give us access to that part of ourselves that says, 'I don't have to play by the rules.' In Francis you see someone who is living that dream."



FICKLE FORTUNES

A surprising number of Americans cycle in and out of poverty. Columbia researchers have embarked on an ambitious study to find out why.

n the summer of 2010, everything was looking up for Jessica Lopez.

A thirty-year-old high-school dropout who had been working for years at a Popeyes restaurant, she landed a job as a teacher's assistant at PS 287 in downtown Brooklyn. "It was always my dream to be a teacher," she says. "I was so excited."

Around the same time, Lopez and her four-year-old son, Nolan, moved into an apartment in the Bedford-Stuyvesant neighborhood of Brooklyn. It was the first home they had called their own. They needed no moving van: they had previously lived for six months in a homeless shelter, after unexpectedly getting kicked out of a room in a friend's apartment. "We moved into our new place on Nolan's fourth birthday," Lopez says, sounding happy at the memory.

Then everything fell apart. In November, Nolan began having tantrums so violent he had to be hospitalized. Doctors said he had a combination of attention deficit hyperactivity disorder, oppositional defiant disorder, and mixed receptive-expressive language disorder. Lopez, with no help from Nolan's imprisoned father, was forced to quit her job to care for her son.

Today, Lopez gets by on a combination of cash assistance (\$138 a month), food stamps (\$210 a month), Medicaid (about \$300 a month for Nolan's medication), and Supple-

mental Security Income (\$740 a month). She is still unable to work, because Nolan often can't go to school or must be retrieved early.

"When I get that call — 'He won't get on the bus' or 'Nolan took off his clothes' — I have to get over there as fast as I can," Lopez says. "So I'm not working. I worry about money every day. It's that kind of life."

That kind of life — erratic employment, health problems, lifting oneself out of poverty only to sink back in again is familiar to a surprising number of Americans. Whereas some fifty million people in the United States, or about one in seven, are now living below the official poverty line which, for a single parent of one child, means earning less than about \$16,000 a year — tens of millions more have either recently escaped poverty or will soon fall into its grasp. In fact, one study indicates that more than half of all adults in this country between the ages of twenty-five and seventy-five have spent at least one year in poverty.

"One of the biggest myths about poverty in the United States is that a relatively small segment of the population is poor, and that this represents a more or less permanent underclass," says Irwin Garfinkel, the Mitchell I. Ginsberg Professor of Contemporary Urban Problems at the Columbia School of

By Douglas Quenqua | Illustrations by Davide Bonazzi

FICKLE FORTUNES

Social Work. "But poverty is quite dynamic. Lots of people move in and out of poverty over the course of their lives. And it doesn't take much for people at the edge to lose their footing: a reduction in work hours, an inability to find affordable day care, a family breakup, or an illness — any of these things can be disastrous."

Garfinkel knows what he's talking about. For the past eighteen months, he has been overseeing one of the most richly detailed studies of poverty ever undertaken in the United States. He and several colleagues at the School of Social Work, including professors Julien Teitler and Jane Waldfogel, and researchers Kathryn Neckerman and Christopher Wimer, have teamed up with the Robin Hood Foundation, the largest antipoverty organization in New York City, to conduct a meticulous long-term survey of 2,300 New York households across all income levels. By following people like Jessica Lopez for at least two years, the researchers hope to create a much more intimate and precise portrait of economic distress than has ever been conducted in any US city. They call the project the Poverty Tracker.

"We want to understand how people's lives evolve," says Michael Weinstein, the chief program officer at the Robin Hood Foundation, which is funding the Columbia research. "If someone is out of work, we want to know: Did they seek job training? If so,

"One of the biggest myths about poverty in the United States is that a relatively small segment of the population is poor, and that this represents a more or less permanent underclass."

- IRWIN GARFINKEL

did they learn a skill? Were they able to translate that skill into a job? Were they able to keep that job? If not, why?"

One goal of the Columbia researchers is to help government agencies and private organizations determine how best to allocate money for assistance programs in New York City. The most comprehensive information about the needs of New Yorkers and of residents of any US city, for that matter — now comes from the American Community Survey, an extension of the US Census that polls a small percentage of the population every year about their employment, income, housing, expenses, dependents, health insurance, and public benefits. Federal agencies, as well as state and local governments across the country, use the results to make decisions about everything from school-lunch programs to housing subsidies. The survey's shortcoming, say the Columbia researchers, is that it provides a mere snapshot of its respondents' lives at a single point in time.

"A snapshot is fine for determining how much money a city should set aside for emergency food aid or oil-heating subsidies over the winter," says Garfinkel. "But it's not going to tell you what services are helping people lift themselves out of poverty, or preventing them from falling into poverty in the first place. That's the level of detail we're after."

n December 2012, a team of fifteen graduate and undergraduate students from the School of Social Work fanned out across the city to conduct their first interviews as part of the Poverty Tracker. (A private research firm helped out, interviewing some participants by telephone.) They met their subjects, who had been recruited from across the five boroughs, in their homes and in the offices of local social-service agencies. They carried questionnaires covering many of the same topics addressed by the American Community Survey. But they also wanted to know: Have you missed a rent or mortgage payment lately? Have your utilities been turned off? Have you or your children gone without food? Is anyone in your family seriously ill, and if so, has he or she received medical attention? Some questions were more personal: Have you been depressed lately? Are you worried about money? How satisfied are you with your family's situation overall?

"This would give us a baseline for understanding the direction a person's life is heading in," says Christopher Wimer, who is the project director of the Poverty Tracker, overseeing its survey design and data analysis.

In the past year and a half, the Columbia researchers have surveyed their subjects every three months, sometimes in person and other times by telephone or online. They have gone to great lengths to keep people involved in the study. They've bought cell phones and calling plans for people whose service is cut off, for instance. And they've worked with local shelters to track down participants who have lost their homes since the project started.

"Retaining people in any long-term study is tricky," says Wimer. "It can be especially hard when you're studying people who are disadvantaged, which is partly why it's never been done in New York City on this scale. If you're struggling to feed your family, talking to a social scientist on the phone isn't going to be your top priority."

Not surprisingly, the work can be emotionally taxing. "You get to know people very well over the course of a study," says Claudette Bannerman '14SW, a recent graduate of the School of Social Work who now works full-time on the project. "It's difficult to hear about their struggles. On the other hand, New Yorkers can be extremely resilient. People have told me they're happy, despite their poverty, because their children are healthy and they know others are worse off than them. That kind of humility is inspiring."

The Poverty Tracker's preliminary findings, published in a report on the Robin Hood Foundation's website in April, demonstrate in starkly powerful terms that economic hardship in New York City is more widespread than government statistics would suggest. While the city's official poverty rate is 21 percent, the Columbia researchers found that 37 percent of New Yorkers, or about three million people, went through an extended period in 2012 when



money was so tight that they lost their home, had their utilities shut off, neglected to seek medical treatment for an illness, went hungry, or experienced another "severe material hardship," as the researchers define such extreme consequences.

"What's remarkable is that nearly half of these people weren't technically impoverished, because they earned enough money over the course of the year to put them over that threshold," says Wimer. "Some may be bad at managing their money. But many others got sick or were laid off from good jobs."

Even the 37 percent figure understates the number of New Yorkers who endured tough times in 2012. The researchers estimate that two million more endured what they call "moderate material hardship," which, as opposed to, say, losing one's home or having the lights shut off, might involve merely falling behind on the rent or utility bills for a couple of months. Many others were in poor health. Indeed, the researchers found that if you add together all of those who were in poverty, suffered severe material hardship, or had a serious health problem, this represented more than half of all New Yorkers.

"The picture that emerges here is of a city whose population is quite vulnerable as a whole," says Wimer. "It's a very different picture from the one you get by reading that one in five New Yorkers is poor."

The Columbia researchers expect that by the end of this year they will have enough data to begin helping public authorities, legislators, foundations, nonprofits, philanthropists, and private charities address the underlying problems that affect the city's poor. Jane Waldfogel, a Columbia professor of social work and public affairs who is a principal investigator on the project, anticipates that the Poverty Tracker's findings will be useful both in evaluating the effectiveness of existing antipoverty programs and identifying which new ones ought to be created. "Would a lot of unemployed parents rejoin the work force or be able to work more steadily if day-care programs were expanded? How much could additional investments in food programs reduce food insecurity?" she says. "We're going to provide the first solid answers to questions like these."

The Poverty Tracker is being funded at a rate of about \$800,000 per year; its organizers hope to keep it running for many years to come, with new participants being enrolled every two years.

Ultimately, the Columbia researchers hope their work will have an impact far beyond the city's borders. The misconception that a relatively small number of Americans endure serious economic hardship is tied up with other, more noxious notions, they say, such as that poor people are either hopelessly inept or content to live off public assistance. These stereotypes have long distorted our domestic policymaking, the researchers say, and have caused the United States to invest less in antipoverty programs than do many other industrialized nations.

"The research that our team has done on poverty trends in the US and in other countries makes it clear that if we invested more in antipoverty programs, we would improve many people's lives," says Waldfogel. "The problem is a lack of political will. So having accurate data — and data with a human face — is critical. We hope that our work will inform the public, and in doing so, help generate the political will."
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A Sound of

n December 2013, Kevin Uno, a postdoctoral researcher at Columbia's Lamont-Doherty Earth Observatory, received a phone call from Todd Kish at Canada's environmental protection agency. Kish told Uno that the Canadian government had confiscated two elephant tusks from an auction house in Toronto.

Uno had been waiting for a call like this. As a graduate student in geology at the University of Utah from 2005 to 2012, he had worked on a technique for radiocarbon-dating elephant tusks, hoping, he says, "to see how fast they grow, and to use them as a sort of ecological tape recorder of an elephant's life."

But tusks aren't just any animal tissue. They are made of ivory, called "white gold" in China, a precious commodity for which African elephants are being butchered to the brink of oblivion. The Wildlife Conservation Society (WCS) estimates that thirty-six thousand African elephants were killed in 2012. Savanna elephants, the world's largest land mammals, which numbered five to ten million a century ago, have fallen to four hundred thousand. Forest elephants, found in central Africa, have declined by 65 percent in the past twelve years, leaving about one hundred thousand. At this rate, the WCS warns, the forest elephant could disappear in the next decade.

It wasn't long before Uno realized his method for dating ivory could be a tool in the battle for the elephants.

The need for such a tool flowed from the porousness of the law. In 1989, amid a poaching frenzy in Africa driven by ivory demand in the US, Japan, and Europe, the world decided to act. The United Nations had implemented the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1975 to address the sustainability of the world's natural resources. Now, with elephants dying at unprecedented rates, the CITES signatories — 115 countries — voted to move the African elephant to Appendix I, where the most threatened species are listed, effectively banning international trade in African-elephant ivory harvested after 1989.

Though this standard was difficult to enforce, the ban, along with a militarized crackdown on poachers in East Africa, appeared to work: elephants began recovering. Then, in 1999, the CITES body, petitioned by the African nations of Botswana, Namibia, and Zimbabwe, allowed those governments to make one-off sales of their ivory stockpiles to Japan. Another sale was permitted in 2008 to Japan and also to China, whose roaring economy was feeding a demand for status-conferring ivory figurines. The logic was simple: African states would use the money to fund elephant conservation programs, while the influx of sixty-eight tons of cheap ivory into China would undercut the black market.

Things went differently. China, with its staterun carving factories and ivory shops, kept the price of the acquired ivory artificially high, which gave smugglers an opening to grab more of the market share. The legal ivory also provided cover for the illicit goods. Ivory became more visible and available, and demand increased. So did the price. In Africa, poaching deaths — elephant and human — soared.

"This trafficking of illegal wildlife parts is right up there with trafficking guns, humans, and drugs," Uno says of the \$19-billion-a-year The global lust for ivory threatens to silence the African elephant forever. Can a hidden remnant of the Cold War help stem the slaughter?

By Paul Hond



business. "It's a huge, huge source of money. A lot of that money goes to support militias and terrorist groups in Africa," like the Lord's Resistance Army in Uganda and Somalia's al-Shabaab. "How do you think they're buying their AK-47s? They're trading ivory for guns. It's the exact same trade network that you'd use for drugs — it's already in place — so they're the ones doing it. They're the ones who have the networks to move stuff around."

How, then, could authorities determine whether or not a tusk — one for sale at an auction house, for instance — was legal?

In July 2013, Uno and his co-authors published a paper in the *Proceedings of the National Academy of Sciences* called "Bombcurve Radiocarbon Measurement of Recent Biologic Tissues and Applications to Wildlife Forensics and Stable Isotope (Paleo)ecology." In it, Uno and his team described a technique that could determine the age of unworked ivory to within a year.

Now, in December, the Canadian government had one question for Uno: could he give a kill date for the confiscated tusks?

A supernova flash. Zeus's thunder. A stalk of pewter-colored dust climbing thousands of feet, its head bulging and billowing into a great cortical mass against a hard blue sky.

Between 1955 and 1962, in the Nevada desert, in the Pacific, in the Siberian "Valley of Death," the US and the Soviet Union conducted more than four hundred aboveground nuclear tests. Among other effects on the environment, the explosions nearly doubled the amount of radioactive carbon — the carbon isotope C-14 — in the atmosphere.

In 1963, the two superpowers signed the Limited Test Ban Treaty, agreeing not to detonate atomic bombs in the atmosphere, under water, or in outer space. As a result, the levels of atmospheric C-14 began subsiding, producing what is known as the bomb curve.

The Cold War, it turned out, had stamped a calendar in organic tissue: plants absorbed the C-14, and animals that ate the plants absorbed it in their hair and teeth and bones, and animals that ate animals that ate the plants also absorbed it. The levels of C-14 in the tissues of animals alive during this period closely match the rise and dip of the bomb curve. For decades, forensic scientists have used the bomb curve to determine the age of human remains.

"When forensic scientists want to date decomposed bodies, which are basically just bones, no soft tissue left, they have less information to work with," says Uno. "But it happens that your third molar, your wisdom tooth, forms when you're between thirteen and fifteen years old. You can bomb-curve radiocarbon-date that and say, 'This person was thirteen in 1970, and so was born in 1957.' That was one of the original applications for the method. Tusks are different in that they never stop growing, so what we're looking for with poaching is the year of the elephant's death."

A tusk is an elephant's incisor, and the crucial part for Uno is at the base, up in the skull. "The tip of the tusk is the oldest part, and the base is the youngest. The base is where the pulp cavity



is, and where new ivory is deposited every day. That's the part you want to sample." When an elephant dies, its most recently formed ivory will contain a record of the C-14 level at the time of death. "It will tell you when the elephant died," says Uno. "A case where you have a seized shipping container of raw tusks would be a really good place to use this method, because you have that pulp-cavity surface."

Kish's call was not the first that Uno got about ivory.

In 2012, state and federal agents raided two jewelry stores in Midtown Manhattan. It was the biggest ivory bust ever in New York: the shops yielded a ton of ivory, valued at \$2 million. The ivory, carved into bracelets, necklaces, and statuettes, had cost the lives of dozens of elephants. The shop owners failed to produce documents proving the ivory was legal. They pleaded guilty, surrendered their loot, and paid fines totaling \$55,000, which went to the WCS and its anti-poaching efforts in Mozambique.

Conservation officials, wondering what to do with all the ivory, contacted George Amato, who is the director of conservation genetics at the American Museum of Natural History in New York, and an adjunct professor at Columbia's Department of Ecology, Evolution, and Environmental Biology (E3B). Amato

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is also the head of a wildlife forensics program that uses a speciesidentifying method called DNA barcoding to help monitor trade in wildlife. You could give Amato a mysterious piece of bushmeat, for example, and he could tell you what animal it came from. But Amato wasn't sure what to do with a bunch of worked ivory. One of his postdocs, who knew of Uno's work, called Uno and asked him if he would look at the haul, to see if there was any forensic information he could glean from it.

Uno went down to the museum and looked through bankers' boxes full of ivory. But carved ivory is extremely difficult to date. "If you're working with a carving," says Uno, "you're floating in the tusk — you don't know where exactly in the tusk that ivory has been formed. Let's say an elephant died in 1990: if you tested the pulp cavity, the result would show the ivory to be illegal. But the tip of that tusk probably formed twenty or thirty years earlier, and if you made a trinket out of *that*, it would come out as legal. So once the tusk begins to get cut up, you lose a lot of information."

The jewelry and baubles in the bankers' boxes were too small for Uno to locate in the tusk, so he didn't do any analysis. That opportunity would come later.

"For me, it was good just to look at it," he says. "I hadn't spent a lot of time looking at carved ivory."

Behold the treasure. Behold the ages. Lion Man of Hohlenstein Stadel, wrought of a mammoth tusk and found in a German cave; Venus of Hohle Fels, all mammaries and genitals, thirty thousand years old if she's a day; behold the amulets and statuettes of Egypt, and Phidias's ivory-and-gold-plated Zeus enthroned at Olympia. O bosomed Ariadne! veiled and draped sixteen inches from wreath to foot, conjured from Byzantium's tooth, your chiseled maze of drapery foretelling the Virgin's fine pleats in the Gothic carvings of ivory's *age d'or*, when Parisian masters sculpted devotional diptychs and Virgins-with-child the size of a baby's arm,

"The base [of the tusk] is where the pulp cavity is, and where new ivory is deposited every day," says Uno. "That's the part you want to sample."

and also boxes and combs and game pieces. Behold the Japanese netsuke, small as your thumb, depicting persons, vegetables, and animal conjugality, and the larger okimono (bird catchers, fishermen), ornaments popular with Westerners in the Gilded Age; and mad Mr. Kurtz, Conrad's European ivory trader, terror of the Congo forest ("The word 'ivory' rang in the air, was whispered, was sighed. You would think they were praying to it. A taint of imbecile rapacity blew through it all, like a whiff from some corpse"); and America, once the greatest ivory market on earth, flush with gunstocks and knife handles and billiard balls and piano keys and poker chips, her appetite lately reduced, her preeminence dislodged by China, where 70 percent of today's poached ivory ends up, and where master carvers pare breathtakingly intricate idylls as delicately filigreed as white coral.

Joshua Ginsberg remembers the elephant catastrophe of the 1980s. As a field biologist cutting his teeth in East Africa, he saw firsthand an aspect of the slaughter that can't be found in a museum, or on a mantelpiece, or even in a newspaper.

"In the 1980s, when we killed off most of the elephants in Tsavo National Park in Kenya, and when we lost elephants in large swaths of East Africa, we saw real ecological change," says Ginsberg, who teaches international environmental policy at SIPA and is an adjunct professor in E3B. "We saw brush land encroaching on grassland. We saw a real loss of some species. Forest elephants not only create clearings, they also move fruits and seeds around, and process those fruits and seeds. There are some trees that are elephant-dependent, or at least their density is dependent on elephants. Elephants eat seeds, they deposit them with a nice bunch of fertilizer, and they grow. You can see seedlings coming out of elephant dung. Elephants function as ecosystem engineers — they change the nature of the ecosystem. When you lose that, you lose something in the structure of the forest or savanna."

Ginsberg adds that the loss of forest elephants in Central Africa also leads to greater intensity of lightning-sparked fires. "If elephants aren't there to eat vegetation, the habitat will become denser, and the fires will become more severe," he says. "We will get a simplification of complex ecosystems, and probably less stability in those ecosystems, which is unfortunate, because climate change is going to cause less stability anyway."

See Tuffy the Elephant. Tuffy is thirty years old. How big Tuffy is! Tuffy is ten feet tall at the shoulder and weighs 8,500 pounds. When Tuffy walks, it is like watching a slow-motion film. The broad flapping of the thin ears, like the wings of a colossal moth; the droop of the thick trunk; the lifting and lowering of a padded foot.

Tuffy is the nearest African elephant to New York. He lives in the Maryland Zoo, in Baltimore. See him stand in his enclosure of rocks and dirt, right next to the gate through which he is brought in and out of the exhibit. What is Tuffy doing? See his head sway side to side. His ears flop, his trunk dangles. The rest of him is still, except that he is urinating. He bobs his head and urinates in an incessant sprinkle. He has been swaying for more than twenty minutes. A spectator remarks that Tuffy was doing the same thing last time.

Tuffy was plucked from the wild at a young age. You can't really capture a young elephant unless you kill its mother. That's how Jumbo the Elephant was caught in 1861, near the border of present-day Sudan and Eritrea. Jumbo wasn't jumbo then, but an orphaned runt, in need of his mother's milk. Tuffy, too, was an orphan. Like Jumbo, he saw his mother die.

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Another thing about Tuffy is that he has no tusks. The zoo doesn't know what happened to them. Whatever happened, it was a long time ago.

Someone opens the gate. Time to eat! Tuffy stops swaying and on rumpled, earth-gray columns plods over to a pile of hay. Using his trunk, which has more than forty thousand muscles (can tear down a tree and pick up a penny! can make subsonic sounds heard by elephants miles away!), he grasps clumps of food and stuffs them into his mouth.

Before he came to Baltimore, Tuffy lived at an elephant sanctuary in Arkansas. Before that, according to the zoo's literature, he was "utilized in the entertainment industry."

When feeding time is over, Tuffy spends a few minutes walking around his enclosure. Then he returns to his spot by the gate and resumes swaying his head.

It's been a strange life for Tuffy. Still, it's not as bad as Misha's.

Kevin Uno needed ivory. Not just any ivory, but a fresh, unworked tusk, the kind that was being sawed off the upper jawbones of massacred elephants in Africa. He needed this ivory to test his radiocarbon-dating method. But raw tusks were hard to come by for an American scientist.

It was 2008. That year, an African elephant named Misha died in the Hogle Zoo in Utah. Uno's adviser heard about it and called the zoo. Arrangements were made for Uno's group to get Misha's tusks.

Like Tuffy, Misha had been captured as a year-old calf after her mother had been shot. This was in 1982 in South Africa, where the government had permitted the killing of more than three thousand elephants to cull a population that was overburdening the country's nature reserves. Some babies, like Misha, were allowed to be captured for utilization in the entertainment industry. Misha arrived in the United States in 1983.

Misha's life in America was spent mainly in cramped zoos and amusement parks, where she was bullied and bloodied by other animals, frazzled by noise, mistreated by handlers, artificially inseminated in a procedure involving surgical cutting (the pregnancy ended in a stillbirth; a second insemination was unsuccessful), and plagued with infections.

In 2004, Misha made international news. She was eating grass in her enclosure at Six Flags Marine World, near San Francisco,



when she swung her trunk and knocked down a trainer, Patrick Chapple, who was standing nearby. Misha then sank her tusk into the trainer's abdomen.

Chapple survived the goring, but Misha was put into isolation. The next year, she was sent to Hogle Zoo, where she spent three uneventful years before her health took a dramatic downturn. Elephants can live up to seventy years. When Misha was euthanized on September 9, 2008, she was twenty-seven.

One of Misha's tusks arrived at Uno's laboratory. Though bomb-curve radiocarbon dating had been attempted in ivory, it hadn't been fully validated.

Misha's tusk was cut down the middle, a longitudinal slice, revealing a pulp cavity into which new ivory was added daily, creating that C-14 diary, that archive of growth history. (The team also worked on the tusks of another elephant, Amina, who had died of natural causes in Kenya.)

Uno didn't need much ivory for the job. Less than a pinch. Uno took the samples, converted them to CO_2 gas, converted the gas into a graphite pellet, and fed the pellet to an advanced instrument called an accelerator mass spectrometer. The machine was capable of counting the C-14 atoms in the sample.

Misha's results came in. Using this data, and working from Misha's date of death, Uno was able to calculate the growth rate of the tusk, which he then matched to the bomb curve.

To verify the method, Uno tested elephant tail hair, monkey hair, hippo teeth, and antelope horn — samples from animals with independently known dates of death.

All these tissues recorded the same carbon signal as the atmosphere during the time they were formed. The method worked.

"The social behaviors of elephants are immensely deep and complex," says Dave Sulzer '88GSAS, a professor of neurobiology at the Columbia University Medical Center. "Their ability to communicate with us and each other is far beyond anything that we've seen in any other nonhuman animals."

While Uno was in Utah conducting his elephant investigations, Sulzer was in northern Thailand conducting his. Sulzer is a neuroscientist, but he wasn't studying the elephant brain, which is three times bigger than ours. Rather, in his guise as the avant-garde musician Dave Soldier, he was measuring metal and wood, in order to build traditional instruments large and sturdy enough to accommodate the Thai Elephant Orchestra, a loose ensemble of Asian elephants residing at the Thai Elephant Conservation Center.

According to Sulzer, elephants communicate constantly with each other using lots of caresses and at least sixty different sounds and that's just on their own natural instruments. With mallets in their trunks, they create further vibrations by striking custom-made gongs, drums, and marimba-like ranaats. Sulzer cofounded the orchestra in 2000 with the elephant conservationist Richard Lair, and discovered that it took an elephant about twenty minutes to get the hang of whacking a stick against steel. The orchestra produced a clanging, meditative sound, something like the aural counterpart of the abstract elephant painting that Lair helped introduce in the late 1990s, to bring attention to the plight of the Asian elephant — a species devastated mainly by habitat loss, and thought to number forty thousand in the shrinking wilderness of Southeast Asia.

"Elephants understand about a hundred spoken human commands," says Sulzer. "They can do things that would be unbelievable for any of our domesticated animals. For instance, you can give an instruction to an elephant to pick up all the logs in an area and pile them up crosswise. They can do that."

Though Sulzer sees a lot of relatable qualities in elephants, he's hip to the pitfalls of anthropomorphization, and conscious of

"Elephants understand about a hundred spoken human commands," says Sulzer. "They can do things that would be unbelievable for any of our domesticated animals."

words that might be construed as such. Still, he will occasionally refer to elephants as "women" and "guys," and use constructions like "If they don't enjoy playing, they're not asked back." Nor can he avoid attributing to the elephants he's met such traits as sneakiness, moodiness, compassion, and even a sense of humor.

"They'll play tricks on you," he says. "They'll play games with you. Once, I was drinking a big glass of water near this elephant, and whenever I turned around, he'd sneak his trunk in and drink some of the water. When I'd turn to him, he'd pull his trunk back and give me this look like, 'It wasn't me.' At some point, I turned to him, and he sprayed the water on me. Now, I'm going to tell you that's a sense of humor, and every human there thought it was a sense of humor, and my gut feeling is that the elephants also thought the same thing. But how do I demonstrate that? I have no idea.

"People are concerned justifiably about anthropomorphizing," Sulzer says. "But I think you need a balance. You can't dismiss an attribute simply because you haven't been smart enough to measure it."

To bomb-curve date the Toronto auction-house tusks, Kevin Uno first had to get inventive with his transportation arrangements. He couldn't just pick the tusks up in his car and bring them back. Nor could the Canadian government send them to him. International and federal law prohibited such traffic. Instead, Uno had to ask the Canadians to convert the samples to CO_2 and ship that to an accelerator mass spectrometer facility in California. (You can transport the gas across the border, but not the solid.)

For the next three months, he waited.

Elephants have been credited with a sense of humor, of compassion, of joy, of grief. Might they also possess a sense of self?

Diana Reiss, a Hunter College psychology professor who has taught at Columbia and is associated with E3B, is a leading authority on animal cognition. In 2001, Reiss and her colleagues published a mirror-test study on bottlenose dolphins, which showed that dolphins could recognize themselves, an ability previously ascribed only to humans and great apes.

"We've learned a great deal about the minds of other animals, and though we're at the beginning, we've already uncovered information about other species that shows that in many ways they are strikingly similar to us," says Reiss. "As a scientist, the more I learn about animals, the more empathy I feel for them. These

"We have to be cognizant that these are societies, with rules and roles," says Reiss. "When you start picking off individuals, you're affecting their whole society."

animals have families and complex social relationships like we do. We're not alone in these ways, and we need to appreciate others and protect them both as individuals and as populations."

In 2006, Reiss, having probed the consciousness of dolphins, led another team in turning the mirror on the elephant. It's the same experiment many pet owners have tried with their dogs and cats.

"Dogs," says Reiss, "will often look at *you* standing behind them in the mirror. You can wave, and their ears will go up, but they don't understand that the dog in the mirror is them. No matter what you do, they don't pay attention to themselves. Nor do cats. It doesn't compute. They simply don't figure it out. This may be one thing that separates certain animals from other animals in terms of cognitive capacity. Dolphins are highly acoustic, but they have good vision as well, and if you put a mirror in front of dolphins, they're fascinated by it. They figure out pretty quickly that it's *them*. And they use the mirror as a tool to view parts of their body that they normally can't see, just as we do.

"For animals that have never been exposed to a mirror, it may take them a while. It's not as if they look and go, 'Aha, it's me.' What you see are three stages. The first stage we call exploratory: they touch the mirror, look behind it, trying to figure out what this thing is. Then they'll quickly go into social behavior, as if they were looking at another of their own kind. It could be aggressive, playful, inquisitive. For the few species that seem to go on to figure it out, you see the second stage emerge, called contingency testing: highly repetitive behaviors at the mirror. They seem to be aware that something they're doing — an elephant might lift and lower its foot — makes a one-to-one correspondence in the mirror. They see that there's something connected to their behavior, they test it, and that's when the light bulb goes on and they understand: it's *me*. That's sophisticated. They're understanding that an external representation is *them*. Once that happens, they move to the third stage, which is self-directed behavior at the mirror: using the mirror to view themselves. Here we have elephants touching the insides of their mouths while looking inside of their mouths.

"It's exciting because it suggests that elephants, too, have a sense of self. It's pretty sophisticated to understand that that's you, and to be interested in using the mirror as a tool to look at yourself. These animals want to look at themselves. I find that remarkable."

Reiss speaks of a photograph that haunts her. In it, an elephant, dead, is sitting upright, and the front of its face is gone. Reiss thinks that such images ought to be published for all to see. She knows from her own work that seeing a thing is different than hearing about it. She recalls the BBC and CNN reporters who, though they'd known about her mirror-test experiments, expressed fresh astonishment at witnessing them firsthand.

Even so, the facts of the slaughter speak for themselves: hacked elephants; wandering, traumatized orphans; huddled survivors passing around the bones of their kin; poachers with automatic rifles; bloodstained tusks being quarried from a gray mountain of a head; those tusks growing smaller and smaller as the victims become younger and younger.

Numbers, too, tell a story. \$1,500: the per-pound price of ivory on the black market. 214 pounds: the weight of the largest tusk on record, in 1897. 26.7 pounds: the average weight of a tusk in 1970. 6.10 pounds: the average weight of a tusk in 1990. 96 percent: the decrease in the size of the elephant population over the past hundred years.

But for Reiss, the focus on numbers — including the big question of how many elephants are needed to have a sustainable population — tends to obscure another important number: the number one.

"I'm concerned about the individual animals being killed," she says. "Their perceptions, their suffering, the suffering of others around them, the effect of the absence of the elders on infants and on the history of the group. If matriarchs who have a memory of where to go in times of drought are killed, what happens? What happens when older males, who keep the young males reined in and teach them how to behave, are poached? The whole social structure changes. We have to be cognizant that these are societies, with rules and roles. When you start picking off individuals, you're affecting their whole society."

Reiss's photo of the faceless elephant has many authors. Though death comes at the hands of the shooters and poisoners, most observers don't place the lion's share of the blame on the physical perpetrators at the bottom of this economic food chain. Uno describes poachers as "people who are poor and will do anything to send their kids to school or put food on the table. They get almost nothing for the tusks, but it's a lot to them." Ginsberg, whose former workplace of Hwange National Park in Zimbabwe was the scene, last year, of the poisoning deaths of more than three hundred elephants whose drinking water and salt licks had been laced with cyanide, saves his contempt for the international traffickers. "People who traffic in drugs and traffic in people, traffic in ivory," he says. "These are *nasty* people."

Uno and Ginsberg both believe that the key to the crisis lies in the shops and showrooms of Beijing and Hong Kong, where customers pay good money for hand-carved Buddhas and model ships.

"In the end," says Ginsberg, "you've got to kill the market."

On March 19, Uno received the data on the Toronto tusks from the facility in California. He analyzed the data and interpreted it. The result was clear: the tusks were illegal.

"This is a real case," Uno says. "We've caught these auctioneers red-handed. If this goes to trial, I think our data will help push this case through."

Uno hopes a successful prosecution will serve notice to auction houses, which, he says, "are very much involved in this ille-



gal trading, knowingly or not." But he has no illusions about the larger fight. The bomb-curve technique "is not a silver bullet to end illegal trade in animals," he says, but "fills a critical gap in the forensic toolkit." It gives the legal system more teeth.

"A great life lost so that someone far away can have a trinket," read the grief-filled statement from Tsavo Trust, a Kenyan-based nongovernmental organization.

On May 30, in Kenya's Tsavo National Park, poachers using poisoned arrows shot and killed Satao, one of the world's largest and best-known elephants. Satao was around fifty years old, and among the last of Africa's genetically endowed "tuskers," with tusks weighing more than a hundred pounds. An estimated two dozen tuskers remain.

Kenya has a history of rampant poaching. When the paleoanthropologist Richard Leakey became head of the Kenyan Wildlife Conservation and Management Department in 1989, one of his first acts — aside from heavily arming anti-poaching units and authorizing them to shoot poachers on sight — was to persuade Kenya's president, Daniel arap Moi, to publicly burn twelve tons of elephant tusks. The gesture, meant to bring international attention to the elephant crisis, was radical: few poor countries would dream of destroying their stockpiled ivory, which would be worth even more when the CITES ban was lifted.

Twenty-five years later, with elephants under relentless attack and the ban still in effect, more countries are crushing and burning their stockpiles. This past year, the Philippines, the US, China, France, Tanzania, and Hong Kong have destroyed, among them, dozens of tons of ivory. In February, the Obama administration announced a ban on all commercial imports of African elephant ivory, including antiques, and on all domestic resale of ivory except for pieces more than a hundred years old, with the onus of proof shifting to the seller. In June, New York State passed legislation banning the sale and purchase of elephant ivory.

Meanwhile, the legal gray areas that make Uno's work so important — the ambiguities of provenance, and the newer ivory injected into the market by those mega-sales to Japan and China — have led many wildlife scientists of diverging views to meet at a sharp point of agreement: they would like to see a worldwide ban on *all* trade in ivory (with dispensations for hunters and musicians whose equipment may contain decorative or functional ivory), arguing that it's the only way to have a clear legal standard — the only way, finally, to save the elephants.

"You can't have a legal ivory market," says Uno. "It just doesn't work."

Ginsberg agrees: short of a permanent ban on ivory, which he thinks is unlikely, he is calling for a worldwide moratorium, until elephant populations recover.

"We need to give elephants a break," he says. "Let's just give them a break." ${\bf transform}$



Madame Bovary,

• aturday morning and we are racing down the steps to the 50th Street C/E train. We hustle through a half-lit corridor and come to the turnstiles. In one practiced motion, Susan tucks her book under her left arm, removes the MetroCard that marked her place on page 338, and swipes cleanly through. My own card is bent slightly along the magnetic strip and it must be swiped again, and swiped again, and as I frantically try to de-crease it, Susan tugs her navy-blue skirt down where it has ridden up and shouts that she can hear the train coming, and as the people behind me surge to my left and to my right, I swipe one more time and I pray to the MTA gods to please make it work, and then, miraculously — I am permitted through. We dash past dawdling children and dodge a guy playing a full steel drum, because the train is there and the doors are closing, but Susan lunges forward in her flip-flops and jams an elbow in between the closing panels, which protest and then thunk open again as we each squeak in just as the doors slam angrily shut and the whole thing begins to move.

The car is packed tight, but Susan expertly threads her way between the sweaty tourists and locals to an open seat. She wedges herself between an obese, snoring man and a little girl who is dribbling apple juice on herself. Everyone mutely adjusts their bags and hair and elbows to accommodate us. Susan opens her book and begins to read. She is precisely aware of her borders. Those around her must believe that she is yogic in her calm, but I can see exactly where her jaw is clenched. They think she wears navy skirts like this all the time, and the eye shadow, and the round, tortoiseshell glasses, but I know that these are all just for today. Just for show. She starts to skim the final fifty pages of her book, and I grab the bar and hold on tight.

We are late for book club. More accurately, *she* is late for book club. It is a girls-only book club, and so while she talks about Flaubert, and drinks wines specially selected from the Normandy region, and eats meltingly moldy cheeses, I will be in the next room with the husbands and boyfriends, pretending to understand the rules to darts, and drinking Bud Lights with limes, and feigning knowledge of the Yankees. I hover near the doorway most of the time so I can catch little snippets of the discussion from the kitchen. None of the other boys mind this exile. They have never read (nor could they be forced by bodily torture to endure) *Madame Bovary*, which I kept stealing from Susan at night and during her long phone calls with her mother and during trips to the bathroom. Which I finished four days ago and have been waiting to discuss. Susan does not want her opinion affected, or infected, by mine, until after book club (or preferably ever).

I am getting my earphones in and turning on some old Green Day when I notice a girl on the platform at 42nd Street. The doors open and tourists surge off as the girl squeezes on, inside, past me. An

Photographs by A. Orama

C'est Mo

Fiction by Kristopher Jansma '06SOA

Madame Bovary, C'est Moi

electric-yellow-and-black-checked dress. Brown hair split neatly into pigtails. Those leggings that everyone seems to be wearing now.

She grabs the bar directly ahead of me and pulls a book from her bag. Don DeLillo. White Noise. In hardcover, with those weird unevenly cut page edges, which I hate and Susan loves. Did she buy it used? From the Strand, maybe, or some random stoop sale. Unless maybe she had a literary parent, or older sibling. Unless maybe she stole it from the bookshelf of a friend, no, maybe a onenight stand - some guy with a bookshelf made out of wooden planks and cinderblocks. Or milk crates. Overgrown spider plants serving as bookends. Several John Irvings, that first Richard Ford, some picked-over Tom Wolfes. A very not-dead-yet, white-maleheavy bookshelf. Justifying, perhaps, the purloining of the book. Momentarily I wish that she could see my shelf - our shelf with its intentionally diverse selections. Susan's book-club classics balanced out by my NYRBs and Europa Editions. With a couple of African writers, and not just the obvious ones. She wouldn't steal a book from that shelf is all I'm saving.

There is something familiar about her. A few years younger than I am. Enough to rule out her being an old classmate or a friend's former roommate. She is reading the first chapter (my favorite part of the whole book, I want to tell her) and periodically letting go of the subway bar to roll her wrists around in little circles. They are covered in star tattoos, yellow and pink and green, and now I'm sure I've never seen her before because I am sure that I would remember these stars. My eyes keep zipping back to them. I try to stare up at the whiskey ads repeating at the top of the car. eye contact. But definitely at me. I worry that she is getting the wrong impression of my pink Ralph Lauren polo shirt and madras shorts. I want to tell her that I'm in disguise. I am going underground into a room full of frat boys and darts and bad beer! Normally I wear appropriately tight jeans and carefree, gentle-rumpled button-down shirts! The "La Bamba" is unbearable, and so I extract my iPhone and quickly shuffle the music to something — anything — else.

And the shuffle gods smile upon me. *Solo* Lennon. I discreetly angle the tiny screen so that Alex can see John and Yoko kissing in black and white. And Alex seems to smile out of the right corner of her mouth, just momentarily, before turning the page. The relief that I feel is incredible. Yuppie douches do not listen to vintage Lennon. No, this is the iPhone of a *connoisseur* — someone who, yes, has a nice phone but also collects vinyl records and hangs yellowing CBGB posters on his exposed-brick walls. In fact, I don't, but only because of all the books, and because Susan's best friend is an artist and we've gotten several prime pieces from her over the years, which take up a lot of wall space.

Alex lifts her book up to turn the page again, and this time I make a little show of noticing the cover. I smile widely, indicating that I know the book well. She smiles back. All of this we do without ever looking directly at one another.

Suddenly I wish that I had something to read — the Kenzaburō Ōe stories I left in the bathroom, or the Juana Inés de la Cruz poems that are in my other bag . . . and then it hits me that Susan has a *New Yorker* rolled up in her purse. I could lean down and ask her for it. But I don't. Because I don't want to disturb her? Or because

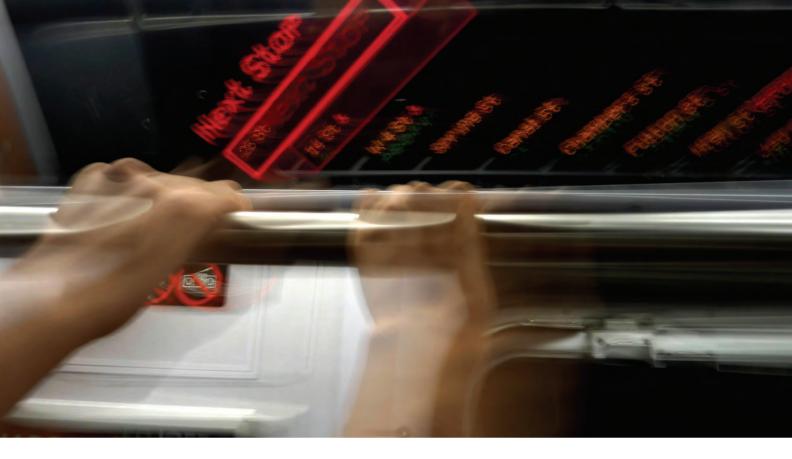
Just as I move to pull out my iPhone, she glances at me. Sidelong. No eye contact. But definitely at me.

Star-Wrist Girl is not the most beautiful girl in the car. There's a blond in a white sundress on the far edge of the bench. And there's Susan, who beats the rest by a mile. She'd want me to say that she looks just like she did the day we met, five years ago, at a friend's going-away party. But the truth is that these years have done a great service to the girl who'd been nervously digging tomato bits out of the guacamole with the edge of a chip. Now I am the nervous one and she seems steely-sure of everything. It makes me ache, the way she furiously reads the final pages now, her face firm and determined. Star-Wrist Girl — really she needs a name — maybe Donna or a Zoë? Alex? Alex reads more timidly. Jumping back a line or two; sometimes flipping ahead. She gets to the second page of the first chapter, where the narrator first mentions he is the chair of the Hitler Studies Department at the college where he works, and emits sort of a rough giggle. I smile and wish she'd notice.

The Green Day song ends, and it is followed by a techno version of "La Bamba." Why did I download this? It must be stopped. But just as I move to pull out my iPhone, she glances at me. Sidelong. No I don't want Alex to see that we are together? A sludgy guilt moves through me. What exactly am I doing here? We slide into the 34th Street station and there is some jostling, but Alex remains, thankfully, just beside me.

Madame Bovary, in the novel, allows herself to be seduced in a carriage — an affair that drives her to suicide and which later got Flaubert into tons of trouble with obscenity trials. Adultery never seems to end well in fiction. Nabokov called it "a most conventional way to rise above the conventional." But it isn't like I really want to grab this "Alex" and kiss her. Not like I think we're going to rush off the train together. No. Honestly, I have zero desire to actually speak to her. All I want — and this, I realize, is terrible, but all I want is for her to *think that I am interesting*.

The train brakes sharply coming into 23rd Street, and this sends Alex thudding into me. Without making eye contact, I mouth a soundless apology. She wordlessly accepts. We straighten up again. I wonder what stop she will get off at. Is she 14th Street bound, like us? Or is she a Brooklynite? Perhaps just returning home after



a night on the Upper West Side with the cinderblock-bookshelf guy? They met last night, each sneaking into that Isabelle Huppert retrospective at Film Forum. After, they had pancakes at the Hudson Diner. After, some not very great sex. Fingers still tacky with syrup, bellies still leaden with pancakes. This morning she grabbed the book from his shelf as she tiptoed to the door. Something for the long ride home. Something to keep her from having to decide whether or not she will answer his texts in two days or three. She thinks right now that she won't, but she knows that, based on past experience, she has a 50 percent chance of changing her mind.

John Lennon stops and I frantically skip over a series of others, embarrassed as I feel her eyes darting over to my screen. Belle and Sebastian? Too obvious. Deftones? Too Goth. The *Grey's Anatomy* soundtrack? (She giggles.) Modest Mouse? I can't remember if they are cool or not anymore. I think I see her eyes rolling. Finally, I settle on, yes! A Nirvana demo track. I sense mute approval from Alex as she turns her book to skim the back cover — perhaps wondering where it is going. Where is this going?

We are approaching 14th Street and I hope Alex will get off with us. Maybe she lives with three other girls in a badly lit apartment where the stove burners don't work and the toilets are constantly clogging. They don't cook, but she eats a lot of raw vegetables. No. She is a raging meat eater. She watches a lot of television but feels generally bad about it. Once upon a time she painted with oils, but they got expensive. Her roommate's bulldog puppy is currently chewing on her other pair of Converses.

The train slows down as we come into 14th Street, and I see Susan racing through her last page because we have to get off now. The Bud Light awaits me. Susan gets to the final line and slams the book shut triumphantly. The little clap makes Alex look down. She begins swiveling her wrists again. Suddenly I wonder if maybe I've had her all wrong. She's temping as a data processor, down in the Financial District. She's been called in on the weekend to tap numbers into an Excel spreadsheet. She's dressed up from brunch with her mother. Alex makes no motion to put her book away, and I realize that she is not getting off. I realize that I will never know — not where she's getting off, not where she came from. Not if she likes the book and not if her wrists are all right. Not even her name. "Alex" feels wrong, suddenly. Suddenly she seems much more Katherine, or Casey.

Susan gets up and begins to edge her way over to the door. Without thinking, I hook my arm around her and kiss her forehead. She twists away because she thinks she is a sweaty mess, but my mind is on Alex/not-Alex. She can see me out of the corner of her eye and I want, horribly, to break her heart before she breaks mine. As Susan and I slide away, I wonder why. This is the end of the seduction in our modern-day carriage. As the doors open, I am already beginning to imagine her telling her roommates about this guy that she spied on in the train. About his surprising taste in music. About how he seemed to know what she was reading. About his girlfriend, who had been reading *Madame Bovary* right there, the whole time. **D**

Kristopher Jansma's debut novel, The Unchangeable Spots of Leopards, received an honorable mention in the 2014 PEN/ Hemingway Awards. His work has been published in the New York Times, the Believer, and the Millions.

NEWS

Gillian Lester named dean of Columbia Law School

Gillian Lester, a legal scholar who is currently the acting dean of UC Berkeley's law school, has been named the next dean of Columbia Law School, effective January 1, 2015.

Lester succeeds David Schizer, who stepped down in July after ten years, which



is the law school's term limit for the position. Lester's appointment followed a nationwide search; until she takes over, law professor Robert Scott will be serving as interim dean.

"I'm honored and excited to take on this leadership role," Lester says. "Columbia Law School has a tremendously distinguished history and yet never rests on its laurels. I can't wait to start working with the school's distinguished faculty, talented students, and accomplished alumni."

A native Canadian who holds degrees from Stanford Law School and the University of Toronto Faculty of Law, Lester is an authority on employment law whose research has focused on distributive justice and the welfare state, workplace intellectual property, paid family leave, and the design of social-insurance programs. She has published several books and is a coauthor of the popular casebook *Employment Law: Cases and Materials*.

Lester takes over Columbia Law School as it comes to the end of a prosperous decade under Schizer, a tax-law expert

who was only thirty-five years old when he became dean in 2004. The school has increased the size of its faculty nearly 25 percent since then, thanks largely to the success of a \$350 million fundraising campaign, enabling the school to sharply reduce its student-to-teacher ratio and to pursue a broad range of curricular innovations. In recent years, the school has created new centers and programs in international arbitration, climate-change law, constitutional governance, national-security law, public research and leadership, global legal transformation, sexuality and gender law, and business law and policy, among others. It has also increased financial aid and internship opportunities, especially for students interested in government and publicinterest jobs.

"The school has had fabulous leadership under David Schizer," Lester says. "My job is to bring it to even higher levels of excellence."

Lester says she believes the school is positioned to chart a new path for the field of legal education. The legal academy in the US has come under fire in recent years

New policies to combat sexual violence on campus

The University has announced a series of steps to help prevent sexual violence on campus and to make it easier for survivors to report such assaults. The moves were made during what may come to be seen as a watershed year in the way the country deals with rape at colleges and universities.

Some of the initiatives emerged from student criticisms and suggestions.

Survivors, at Columbia and around the US, had complained that reporting processes were unclear and humiliating, that penalties for those found guilty of sexual misconduct were too light, and that they feared encountering their aggressors on campus. Students at Columbia said that the University was not forthcoming in releasing information on the number of sexual assaults that had occurred on campus.

In a series of e-mails sent to the Columbia community beginning in January, and in public appearances, President Lee C. Bollinger emphasized the University's longstanding commitment to increasing awareness of sexual misconduct, to supporting survivors, and to holding accountable students who violate University policies. He also stated that the University, while being careful to protect students' privacy, would release aggregate data on assaults starting with the 2013–14 academic year.

Among the other actions Bollinger announced are enhanced mandatory training for staff and for incoming students; the expansion of the staff and hours of the Office of Sexual Violence Response; the opening of a second location for the Rape Crisis Center, in Lerner Hall (in addition to a Barnard College location); and the creation of the position of executive vice president for student affairs, whose responsibilities will include combating sexual violence. The new

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from law firms and other businesses that say law schools ought to be spending less time teaching legal theory and more time providing their students practical skills such as negotiating, arbitrating, litigating, and writing briefs. The call for change has been amplified by an increasingly competitive job market for attorneys, which, economists say, is partly the result of the Internet having made some aspects of legal work less labor-intensive.

Lester points out that Columbia Law School, which is perennially ranked among the top five law schools in the nation, already has a reputation for balancing academic course work with hands-on training; the school has consistently been ranked as one of the best law schools, and often the very best, for job placement nationally.

"A lot of other law schools are struggling to place students in good jobs," Lester says. "Columbia Law School is clearly not struggling in this regard, which means that we have a responsibility to provide leadership. We need to continue demonstrating bold and innovative ways to meet the needs of our profession and the changing economy."

One aspect of the Columbia Law School curriculum that is working particularly well, and which may be worth experimenting with further, Lester says, is its interdisciplinary character. She says the law school's numerous partnerships with Columbia Business School — which include a JD/MBA program and a broad range of research and teaching collaborations supported by the recently established Richard Paul Richman Center for Business, Law, and Public Policy — exemplify how the school can adapt and improve its curriculum by drawing upon the intellectual resources of the larger University.

"Imagine you're a business lawyer entering the job market," she says. "Wouldn't you want top-notch training in corporate finance, accounting, and negotiation? Columbia Law School provides that kind of interdisciplinary training for careers in the public and nonprofit sectors as well, not just in business law. But perhaps we should do even more." Lester says that Columbia is also ideally suited for training international lawyers, given its location in New York City and its research and study-abroad collaborations with institutions in China, Japan, South Korea, Brazil, Israel, Britain, the Netherlands, France, Germany, and several other countries.

"Our students have lots of opportunities to think across legal jurisdictions and across legal cultures," she says. "International law is going to be a major area of growth for our profession in the next few decades, and I'm determined to see Columbia produce the most cosmopolitan, versatile lawyers."

Says President Lee C. Bollinger: "Professor Lester brings accomplished scholarship, admired teaching and first-hand academic leadership experience at a great peer institution to her new role at Columbia. I believe this is a great appointment for the law school, and promises over the coming decade to help the school flourish at a time of both challenge and opportunity in the field of legal education."

>> Visit news.columbia.edu/oncampus/3428.

executive vice president, wrote Bollinger in a statement, will "help ensure that our campus culture does not tolerate sexual assault and that our adjudicatory process is responsive, sensitive, efficient, and fair." A search for the new executive vice president is underway.

A website, "Sexual Respect," provides information on Columbia's resources on sexual misconduct at titleix.columbia.edu.

The University held a town-hall discussion in March for students to ask administrators about Columbia's policies and resources. Students also held demonstrations during the year. Colleges and universities in the US are in a challenging position with regard to sexual violence because federal law requires them to investigate accusations of misconduct. The obligation is part of Title IX, usually associated with preventing gender-based discrimination. During the past academic year, the issue — and occasional confusion about the law — has drawn comment and calls for change from President Barack Obama '83CC, Vice President Joseph Biden, members of the US Senate, and the US Department of Education's Office for Civil Rights (OCR). The OCR is currently investigating sixty-six colleges and universities for their handling of sexual assaults. (As of July 15, Columbia is not among them.) Students at several institutions — reportedly including twenty-three at Columbia and Barnard — have filed federal complaints that their schools did not adequately respond to their reports of having been assaulted.

"Columbia is rightly known as the place of strong and deeply held core academic and community values," wrote Bollinger. "We have to deal with the issues of sexual assault and related misconduct consistent with those values."

Putting the "we" in sweep

The Lions baseball team won its second straight Ivy League Championship by sweeping Dartmouth in a best-of-three-games title series this spring. The series began and ended with a doubleheader played in front of a packed crowd at Columbia's Satow Stadium on May 10. In the first game, Lions ace David Speer threw eight innings, striking out seven, and David Vandercook and Robb Paller each homered to give the Light Blue a 6–2 victory. In the second, Lions starter Kevin Roy held the Big Green to just three hits over six innings, and the Lions blasted another pair of homers, this time by Vandercook and Gus Craig, en route to a 4–1 victory.

"A total team effort," said Lions coach Brett Boretti after the six-hour battle, which gave the Columbia baseball team its third Ancient Eight title since 2008. "Up and down the lineup — it hasn't been one or two guys."

Indeed, a key to the Lions' success in recent years, wrote Tom Pedulla in a *New York Times* feature about Columbia's baseball program on May 27, is Boretti's commitment to recruiting ballplayers with a team-first mentality. He and his fellow coaches regularly ask upperclassmen for their impressions of potential recruits' personalities, and only those deemed humble enough are offered spots on the team. The result, say Lions players, is a remarkably supportive clubhouse environment.

"The type of team we have is 'we' centered," senior catcher Mike Fischer told the *Times*. "If a guy goes 0 for 4 and we win, he's the happiest guy in the clubhouse. You don't get that a lot."

That's not to say the 2014 Lions (29–20, 15–5 Ivy) lacked stars. David Speer, a lefty who posted seven wins and a 1.86 ERA, was



The Lions baseball team repeated as Ivy League champs by beating Dartmouth on May 10.

named the Ivy League Pitcher of the Year in May; the next month, he was drafted by the Cleveland Indians. Will Savage, a freshman who batted .320 and stole fourteen bases, was named the Ivy League Rookie of the Year. Other standouts included Kevin Roy and fellow sophomore pitcher George Thanopoulos, a hardthrowing right-hander with a 2.60 ERA, and sophomore outfielder Robb Paller, who led the team with 35 RBI.

But every Lion is expected to exhibit moral character on par with his athleticism.

"We try to go above and beyond to find really good, unselfish people who fit in," Boretti told the *Times*. "We really feel the type of individual we're recruiting is the most important thing."

The Lions' winning chemistry got them into the NCAA Regional Tournament for the second year in a row this spring. Unfortunately, they were bumped out after two one-run losses: the first to Texas Tech, 3–2, and the second to Bethune-Cookman, 6–5.



Nadia Eke won the triple jump at the Ivy League outdoor track-and-field championships with a leap of 12.92 meters.

A quick six

Six of Columbia's track-and-field athletes won Ivy League titles at the 2014 Outdoor Heptagonal Championships at Yale on May 11. Claiming individual titles were junior Nadia Eke in the triple jump, senior Marvellous Iheukwumere in the 200-meter dash, and senior Harry McFann in the 800 meters. The men's 4×800-meter relay team won its fourth Ivy League title in five seasons, with freshman runner Rob Napolitano, senior John Gregorek, senior Brendon Fish, and McFann eking out a narrow victory. McFann, in the anchor position, ran alongside Brown's Henry Tufnell for the last 100 meters before overtaking him on the line, winning by just three-tenths of a second.

The following week, a total of ten Lions were named to the All–Ivy League track-and-field squad. They included, in addition to the six champs, senior Trina Bills, junior Waverly Neer, freshman Gardenia Centanaro, and junior Daniel Everett.

>> For more highlights from Columbia's spring sports season, visit gocolumbialions.com.

Bravo company

Ruby Robinson, a Columbia Engineering senior from Denver, Colorado, got a surprise at her school's Class Day graduation ceremony in May. Her father, Army Reserve Captain Keith Robinson, who is serving in Afghanistan and wasn't expected to be able to attend, was waiting to embrace her, just offstage, after she shook hands with President Lee C. Bollinger and engineering dean Mary C. Boyce. Captain Robinson had been granted last-minute leave and arrived shortly before the ceremony.

"Congratulations, young lady," said Captain Robinson, a twenty-five-year veteran of the Army, kissing his daughter on the forehead in front of hundreds of cheering engineering classmates and their families and friends on the South Lawn.

"After I saw him, I couldn't stop crying," the twenty-two-year-old computer-science major said later. "I was relieved that he was OK and happy that he could be there. It was an amazing rush of emotions." >> For full coverage of the University's Commencement, including video footage, visit columbia.edu/cu/news/commencement2014.



Ruby Robinson received an unexpected guest at the engineering school's Class Day on May 19.

Engineering upgrades

Columbia Engineering is undertaking a series of major renovations to the Seeley W. Mudd Building, its home in the northeast corner of the Morningside campus, to improve student life and support a renaissance in interdisciplinary research now happening at the school.

The building's campus-level student commons, the Carleton Lounge, is being remodeled and enlarged by nearly 50 percent. This work should be done in 2015. Also under construction is a "maker space," a facility that combines elements of machine shops, wood shops, and design studios. Columbia's maker space, on the twelfth floor of Mudd, will officially open in September; it is intended primarily for students working on independent projects. It is equipped with 3-D printers, laser cutters, woodcutting tools, sewing machines, an electronics workbench, and computeraided design (CAD) software.

A redesigned and expanded student lounge and café, depicted in this rendering, are among the improvements being made to the engineering school's Seeley W. Mudd Building.



Perhaps the most important capital project underway at Mudd is the transformation of its engineering library into research office and collaboration space for the University's Institute for Data Sciences and Engineering. The old library, which occupied a large section of Mudd's fourth floor, was shuttered this past spring; the library facilities were moved to the new Science and Engineering Library in the Northwest Corner Building, which opened in 2011. The Institute for Data Sciences, established in 2012, supports collaborations between data scientists and researchers in fields as varied as journalism, history, public health, urban planning, and cybersecurity. Eighteen professors affiliated with the institute, along with some ninety graduate students, will eventually be situated in the new space, which will open in 2015.

"The institute, with its interdisciplinary focus, in many ways represents the future of the school," says engineering dean Mary C. Boyce. "This is a remarkable opportunity to strengthen a research enterprise that benefits the entire University."

In Inwood, a new destination for waterfowl and neighbors alike

Sheila Breslaw grew up in Inwood, the northernmost neighborhood in Manhattan, in the 1950s, and played there within sight of the tidal marsh along the Harlem River. But she rarely ventured down to the shore — not with its overgrown weeds, old tires, and other debris.

Now, on a spring day, she perches on a bench at the muddy inlet as songbirds warble in the trees.

"This is nice, sitting close to the water," says Breslaw, sixty-seven. "The spot is used a lot more now than when I was a kid."

The new public park, known as Muscota Marsh, opened this past winter on the western edge of the Baker Athletics Complex, the University's main outdoor sports compound. Columbia created the park at the same time it built the Campbell Sports Center, a five-story, aluminum-and-glass training facility that opened last year at the corner of Broadway and 218th Street.

Muscota Marsh sits on an acre of land at the northeast tip of Inwood Hill Park and thus extends public access to the Harlem River waterfront by a couple of hundred feet. Although small, the new park is remarkable for encompassing a small inlet whose brackish water is a natural habitat for wading birds, aquatic life forms, and wild grasses that have largely disappeared from Manhattan's shoreline. One goal of the park is to lure back some of the native wildlife.

"Muscota is not a big place, but it's quite a diverse place," says Joseph Mannino, who is Columbia's vice president for capital-project management. "It's really become a destination."

The park was designed by James Corner Field Operations, the landscape-architecture firm that created Manhattan's High Line aerial greenway and is transforming Staten Island's Fresh Kills Landfill into an enormous park. The firm won a 2012 design award from the New York City Public Design Commission for its work on Muscota Marsh.

"This new park increases access to the Harlem River waterfront, restores and extends the area's native marshland adjacent to Inwood Hill Park, and creates an opportunity for increased recreational and educational activities for the community," says Philip Abramson, a spokesman for the New York City Parks Department, which worked closely with Columbia on the project. (The University maintains the park and provides security for it.)

Originally known as Boathouse Marsh for the Columbia crew facilities located beside it, the area has been renamed Muscota, which means "place in the reeds" in the language of the Lenape, the Native Americans who once lived along its shores.

Muscota's designers, in addition to expanding the waterfront's existing tidal marsh, built a new freshwater wetland of cascading pools by installing concrete weirs packed with sand. They planted bulrushes, cardinal flowers, and other native grasses and wildflowers. These plants, together with the sand, filter and cleanse storm-water runoff from nearby streets before it enters the Harlem River.

The project exemplifies a trend in many US cities to build so-called green infrastructure that restores natural areas in part to absorb storm water. "There's a growing







Muscota Marsh, a public park that Columbia has created on the Harlem River in Inwood, is pictured here looking east, toward the University's Baker Athletics Complex, with its Wien Stadium barely visible through the trees. On the opposite page, clockwise from left, visitors stroll down a boardwalk that traverses scenic wetlands; a local middle-school student plants seedlings with Columbia ecologist Matthew Palmer; and the park is seen from its main entrance, near the intersection of Indian Road and 218th Street.

recognition that nature is with us in the city," says Matthew Palmer, a lecturer in Columbia's Department of Ecology, Evolution, and Environmental Biology. Muscota and other small urban ecosystems, he says, "provide a pretty good bang for the buck" in healing scarred landscapes.

More than once, nature intervened to delay the project. In 2011, Hurricane Irene eroded a chunk of the inlet and forced designers to rework plans. Then, in October 2012, with 80 percent of construction complete, Hurricane Sandy hit. A six-foot surge of water washed away seedlings, dislodged paving stones, and shorted out underground electrical wiring. The storm set back the park's opening by several months, to January 2014.

Wildlife is already making itself at home. Canada-goose tracks crisscross the mud flats at low tide. Cormorants, snowy egrets, ducks, seagulls, great blue herons, and leopard frogs feast on an aquatic smorgasbord of insects, ribbed mussels, dragonflies, crabs, and small fish. "One thing we have learned over the last thirty years is that you can, effectively, play God — you can make a salt marsh," says Adrian Benepe '81JRN, a senior vice president of the Trust for Public Land, who worked on the project when he was the New York City parks commissioner. He calls Muscota "a terrific opportunity" to restore a little piece of Manhattan waterfront that since the Dutch first settled there in 1624 has been "re-engineered for commerce" and lost 90 percent of its original wetlands.

Muscota is attracting lots of people, too.

Visitors descend from street level along a steep, tree-shaded gravel path and down a boomerang-shaped wooden walkway that hugs the salt marsh. Benches line a lighted, wheelchair-accessible observation deck that leads to a floating dock from which people can launch canoes and kayaks.

It's the same dock used by the University's crew team. Indeed, the park looks out over the famous "C rock," with its painted blue Columbia varsity "C." Visible also are the soaring Henry Hudson Bridge and the New Jersey Palisades.

Palmer, the urban ecologist, has already taken sixth graders from nearby Intermediate School 52 on field trips to Muscota Marsh to study the environment.

"They think of a park as a place to visit, with playing fields and nice vistas," he says, but not about "how plants and animals in these parks are living their own lives."

He plans to enlist the students and adult "citizen scientists" to visit regularly and keep scientific records of the changing plant and wildlife scene over time.

In the meantime, neighborhood resident Ross Williams is here for the fun.

"When the tide's in, we see fish, the birds come in — geese, ducks, gulls," says the forty-three-year-old arts instructor as he watches his three-year-old daughter Laika and a friend play on the observation deck. "It's great to have a new place to come to."

— Andrea Stone '81JRN

Columbia Libraries acquire archives of "artist book" publisher Granary

Of all the mind-bending, boundary-busting trends to come out of the conceptual-art movement of the 1960s, one of the more enduring and yet lesser known is the "artist book," which, loosely defined, is a book so unusual in appearance and design it is regarded as an object of art. Some artist books don't really function as books at all — their pages may be encrusted with jewels, lacquered together in immovable clumps, or hollowed out to make images appear in relief — and so might better be described as sculptures that play off our expectations of what books are supposed to look like and how they are supposed to work. Even those artist books that can be flipped through and read in a conventional manner aren't meant to be experienced as mere containers of information.

"The paper, the typeface, the binding, the printing, how the words and pictures are arrayed on the page, and how the book feels in your hands — all of these elements get pushed to the foreground in artist books," says Karla Nielsen, a curator at Columbia's Rare Book and Manuscript Library (RBML).

A few months ago, the RBML acquired the archive of one of the most important artist-book publishers operating today: Granary Books, a small New York City–based press that, under the guidance of its longtime director and lone editor Steve Clay, has produced some 125 artist books over the past three decades. Granary's list of authors reads like a who's who of the genre. Susan Bee, Johanna Drucker, Emily McVarish, George Schneeman, Buzz Spector, Cecilia Vicuña, and Jonathan Williams are among the dozens of book artists to release work through Granary.

Published in limited editions of as few as twenty-five or fifty copies, the artist books that Granary puts out aren't found in bookshops; most of them are sold directly to museums, libraries, and private art collectors, typically for a thousand dollars or more apiece. This allows Granary and its affiliated artists to invest great effort and expense in producing them. The painter Susan Bee, for instance, hand-painted all the artwork in each of forty copies of Talespin, a 1995 Granary title that presents her darkly humorous scenes of sex and romance beneath snippets of traditional nursery rhymes. Similarly, the sculptor Buzz Spector, in creating A Passage, from 1994, meticulously tore every page in its forty-eight copies so that they start off as flaky stubs and gradually get wider; the effect is that a short essay by Spector about the limitations of visual perception and memory, which was printed identically on every page before Spector ripped them, is fully readable only at the end of the wedge-shaped volume.





Curator Karla Nielsen displays several artist books from the Columbia Rare Book and Manuscript Library's new Granary Books collection: at left and at center are *Talespin*, by Susan Bee; at right is *The Dickinson Composites*, by Jen Bervin; on the opposite page is *A Passage*, by Buzz Spector.

"If you're working with a painter, why not treat the book as a collection of original paintings?" says director Clay, sixty-three, who still runs the press out of his SoHo loft. "If you're working with a sculptor, why not explore the book's sculptural properties?"

The Granary archive, will be accessible to researchers this fall, consists of nearly one hundred boxes of sketches, galleys, manuscripts, and correspondence from the production of all the company's titles, which also include a few volumes of contemporary poetry and books about bookmaking. Of particular interest, Nielsen says, are letters and e-mails exchanged between Clay, book artists, and craftspeople involved in each work. "One of the revelations here is the very active role that Clay often plays in helping artists imagine what the book medium is capable of," she says. "He's at the fulcrum of a collaborative process that involves paper suppliers, printers, binders, typographers, and other artisans involved in realizing an artist's vision. How their contributions are brought together has a direct bearing on the artistic result."

On a recent afternoon, Nielsen showed a reporter some of the Granary artist books at the RBML. (The library now owns one copy of each.) They are, without exception, beautiful. Some are printed on luxuriant, heavy-gauge paper and hand-bound between covers of fine cloth. These tend to reveal their surprises slowly; viewed upon a shelf, they resemble books published by any boutique press. Others are more outwardly radical-looking. *The Dickinson Composites*, by Jen Bervin, from 2010, consists of a rectangular container, about the size and shape of an LP box set, with six cotton quilts nestled loosely inside. The quilts, which are the size of letter paper and removable, are embroidered with red-silk dashes and crosses arranged in seemingly haphazard ways. In fact, each quilt is a facsimile of one of Emily Dickinson's handwritten poetry manuscripts, except enlarged and with all the words removed. What remains are the poet's peculiar punctuation marks

— dashes of varying lengths and plus signs — whose intended meaning scholars have long debated and which are omitted from most printed versions of her poems.

"Choosing to circumvent what seemed like an intractable editorial situation, I tried to make something as forceful, abstract, and generously beautiful as Dickinson's work is to me," Bervin once wrote.

But is it a book?

"It's a book in the sense that it collects a series of discrete pieces of information and makes them cohesive, transportable, and preservable," says Nielsen, using a broad definition of the term that historians of bookmaking also apply to ancient scrolls and to other devices for carrying large amounts of information, such as the concertina-like paper-folding systems and inscribed fans that were once common in the Far East.

Now that the form of book we're most familiar with, the codex, has hit the end of its nearly two-thousand-year reign as the best information-sharing technology around, it makes sense that visual artists today are finding new inspiration in it. For what is a more potent symbol of Western knowledge and culture? How could its demise not be suggestive of our own?

But artist books, according to Nielsen, offer more than a lament. By deconstructing and reimagining the book form, she says, they may provide a window to its future.

"Mainstream publishers are realizing that now that readers have the option of reading digital text, they are less likely to buy printed books unless those books have some value as an object, aesthetic or functional," Nielsen says. "These Granary publications focus our attention because they are beautiful, but also because they ask us to think about the codex as a format. We read a poem differently across a page spread than we do across a scrolling Web page."

-David J. Craig

NEWSMAKERS

On the Beat

Dean Baquet, who attended Columbia between 1974 and 1978, was named executive editor of the *New York Times* in May, succeeding Jill Abramson. Baquet, who had



Dean Baquet

been managing editor of the paper since 2011, is the first African-American to serve as executive editor, the highest-ranking newsroom position. He won the Pulitzer Prize for investigative reporting in 1988 ... Two Columbians won Pulitzer Prizes this April. David N. Philipps '02JRN, a reporter at the Colorado Springs *Gazette*, won the national-reporting prize for his work chronicling the mistreatment of wounded veterans. Vijay Seshadri '88SOA won the poetry award for his collection *3 Sections*.

Young Energy

Radiator Labs, a startup collaboration between Marshall Cox '13SEAS and electrical-engineering professor John Kymissis, won one of *Popular Science* magazine's 2014 Invention Awards for an energyefficient heating system. The product functions like a thermostat for steam radiators, which consumers control through an Internet app . . . Allison Lewko, a professor of computer science, was named to *Forbes* magazine's "30 Under 30" list in the science and health-care category. Her research focuses on encryption algorithms and new ways to keep data secure online.

Venice, Anyone?

The State Department's Bureau of Educational and Cultural Affairs has selected **Joan Jonas '65SOA** to represent the United States at the 2015 Venice Biennale. Originally trained as a sculptor, Jonas began using performance and video art in the 1970s, and is widely regarded as a pioneer in those media. Jonas, a professor of visual art at the Massachusetts Institute of Technology, will create a site-specific installation for the show, which runs from May 9 through November 22, 2015. She is the second consecutive Columbian to represent America in Venice; School of the Arts professor Sarah Sze earned the honor in 2013.

Publishing Firsts

Jennifer Crewe '79SOA was appointed president and director of Columbia University Press by provost John Coatsworth, becoming the first woman director of an Ivy League university press. Crewe has been at the press for twenty-eight years, and has served as



Jennifer Crewe '79SOA

its interim director for the last nine months . . . Jimmy So '11JRN will be the first editor of *Columbia Global Reports*, a new University publication directed by Nicholas Lemann, a professor of journalism and dean emeritus of the journalism school. *Columbia Global Reports* will put out four to six book-length editions a year focusing on underreported global issues. So spent the last three years at the *Daily Beast* as a culture and books editor.

Direct Appeal

Darko Tresnjak '98SOA won the 2014 Tony Award for best direction of a musical.



Darko Tresnjak '98SOA

His production, A Gentleman's Guide to Love and Murder, won three other Tonys, including best musical. Tresnjak is the second consecutive School of the Arts alum to win the best-direction award — Diane Paulus '97SOA won last year for Pippin ... Samantha Buck, a film student in the School of the Arts, won a Peabody Award for her documentary Best Kept Secret, which focuses on the special-needs department at a Newark high school. Buck wrote and directed the film, while Daniella Kahane Levy '14SOA was an executive producer and Nara Garber '99SOA was the director of photography.

EXPLORATIONS

Wise blood

Columbia researchers led by Elizabeth M. C. Hillman have achieved a major breakthrough in understanding how blood flow is regulated in the brain — a discovery that they say could open new avenues of inquiry into how the brain develops, succumbs to disease, and deteriorates in old age.

Their findings, published in the *Journal* of the American Heart Association in June, show that vascular endothelial cells, which form the inner lining of blood vessels, transmit signals throughout the brain's circulatory infrastructure, telling vessels to dilate whenever a burst of neuronal activity requires the delivery of fresh blood to a certain area of the brain. Scientists already knew that endothelial cells regulate blood flow in other parts of the body, but until now they doubted that the same mechanism was operating in the brain; many scientists

suspected that star-shaped brain cells called astrocytes told vessels when to dilate.

"While our study cannot rule out the possibility that astrocytes contribute to the regulation of blood flow in the brain in some way, it certainly demonstrates that the vascular endothelium plays a critical role in the process," says Hillman, who is an associate professor of biomedical engineering and of radiology.

Hillman and her students, who specialize in building microscopes that can peer into the living brain, made their discovery using a special dye that, when exposed to blue light, disrupts endothelial cells' ability to send signals. Once endothelial cells were damaged in the living rat brain, the vessels no longer dilated in response to neuronal activity.

The researchers soon plan to investigate whether vascular problems in the brain



Elizabeth M. C. Hillman

may contribute to the onset of childhood developmental disorders or conditions such as Alzheimer's disease. Says Hillman: "Our latest finding gives us a new way of thinking about brain disease — that some conditions assumed to be caused by faulty neurons could actually be problems with faulty blood vessels."

Underwater, another carbon problem

Some fifty-six million years ago, a massive pulse of carbon dioxide entered the earth's atmosphere and sent global temperatures soaring. In the oceans, many organisms went extinct.

Scientists have long suspected that ocean acidification played a part in the crisis, as the oceans absorbed huge amounts of carbon dioxide, thus changing the water chemistry. Now, for the first time, they have quantified the extent of ocean acidification in that ancient period of global warming, the Paleocene-Eocene Thermal Maximum (PETM), and the news is not good: the oceans are on track to acidify at least as much today as they did then, only now at a much faster rate.

Scientists say that coral reefs, such as this one in the Red Sea, are threatened by ocean acidification.



A team of researchers that includes Bärbel Hönisch, a Columbia paleoceanographer, recently performed chemical analyses of deepsea sediments and concluded that the oceans' acidity doubled during the PETM over the course of several thousand years. In that time, the fossil record indicates, up to half of the tiny shelled creatures that live in mud on the sea floor, called benthic foraminifera, died out, possibly along with species further up the food chain.

Hönisch and her colleagues say their discovery suggests that human-caused climate change could have an unprecedented effect on marine life. The earth's oceans are already 25 percent more acidic than they were 150 years ago, and past research has shown that this is causing the protective shells and plates of many bottom-dwelling organisms to dissolve. By the end of this century, the acidity of ocean water is expected to be at least twice what it was at the start of the industrial age.

"Some forms of ocean life will probably die out, while others will adapt," says Hönisch, whose paper appeared in the May issue of the journal *Paleoceanography*. "We may certainly lose species that we care about, such as oysters, planktic snails, and coral reefs — all of which have already been hit hard."

REVIEWS



A Lagos street scene, photographed by Teju Cole, the author of Every Day Is for the Thief.

Stealing Home // By Lauren Savage

Every Day Is for the Thief By Teju Cole (Random House, 163 pages, \$23)

"This should be a time of joy. You know?" an elderly man mumbles while waiting at the Nigerian consulate in New York. "Going home should be a thing of joy."

Seated nearby, the nameless narrator of Teju Cole's novella *Every Day Is for the Thief* is anything but joyful. Fifteen years after he left Nigeria, he is preparing to return there for the first time, to visit family and friends and to rediscover this place he knew so well as a child. But in the crowded consulate, the long wait and "unofficial" fees seem a portent of the trip to come. Our narrator is going home, but will he recognize it?

And so we follow this young man as he wanders the streets of Lagos, much as the narrator of Cole's *Open City*, which won the 2012 PEN/Hemingway Award, wanders the streets of

New York. Through his eyes, even the most mundane outings, such as a midday trip to the market or a bus ride around town, become an opportunity to absorb the "energies of Lagos life — creative, malevolent, ambiguous."

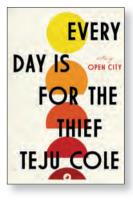
He quickly finds that much of the vitality he remembered and longed for over the years has been replaced by depravity. Demands for bribes taint every encounter — "fifty naira for the man who helps you back out from a parking spot, two hundred naira for the police officer who stops you for no good reason in the dead of night" — and the city feels less and less like home. "Money, dished out in quantities fitting the context, is a social lubricant here," he notes. "It eases passage even as it maintains hierarchies."

It's an epidemic of greed, and its demands are backed up by a threat of violence. Sadly, "no one else seems to worry," as our wanderer does, "that the money demanded by someone whose finger hovers over the trigger of an AK-47 is less a tip than a ransom." Eventually, he understands that the possibility of danger is as much a part of the culture as the muezzin's daily calls to prayer. This harsh reality is never more apparent than when an elevenyear-old boy is caught stealing in the market. As punishment, the boy is burned alive by "necklacing," a torturous form of execution in which a gasoline-filled tire is placed around the victim's body and then ignited. "The fire catches with a loud gust, and the crowd gasps and inches back. The boy dances furiously but, hemmed down by the tire, quickly goes prone, and still." For a moment, the crowd is awestruck. But terror is soon replaced by resignation, and traffic "reconstitutes around the charred pile" even as "the air smells of rubber, meat, and exhaust."

It's tempting to read the narrator's daily adventures as a kind of travelogue, supplemented by Cole's black-and-white photographs of Lagos, which lend it a poignant authenticity. But *Every Day Is for the Thief* is as much an exploration of self as one of place. "Other things, less visible, have changed," the narrator reflects. "I have taken into myself some of the assumptions of life in a Western democracy — certain ideas about legality, for instance, certain expectations of due process." His indignation at the city's declining social order is therefore complicated by privilege.

Our narrator, whom we learn is studying psychology in New York, recognizes that worrying about corruption is a luxury that many people can't afford. In this and many other ways, he has "returned a stranger."

There is an undeniable resemblance between Cole, the American-born writer who was raised in Nigeria, and his anonymous narrator. Cole, too, returned to Lagos after many years away and, not surprisingly, documented his travels,



leaving us to wonder whether his book (originally published in Nigeria in 2007) is fact, fiction, or both. Cole '03GSAS, who studied philosophy at Columbia, deliberately leaves us in the dark.

What the story lacks in continuity — it is at times hard to follow the short, tenuously connected chapters — it more than makes up for in rich detail.

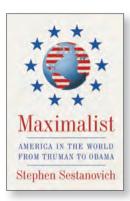
Ultimately, Lagos is as complicated as it is captivating. As Cole's photographs reveal, a subtle beauty exists in this place, one that encourages the narrator even during his darkest moments: "Each time I am sure that, in returning to Lagos, I have inadvertently wandered into a region of hell, something else emerges to give me hope. A reader, an orchestra, the friendship of some powerful swimmers against the tide."

Big Sticks // By Tod Lindberg

Maximalist: America in the World from Truman to Obama By Stephen Sestanovich (Knopf, 368 pages, \$28.95)

When Lyndon Johnson assumed the presidency in 1963 after the assassination of John F. Kennedy, his top priority was the large-scale program of domestic-policy reform that he would call the Great Society. As his term progressed, however, he found his attention and that of his advisers increasingly commanded by the war in Vietnam. In Stephen Sestanovich's telling in *Maximalist: America in the World from Truman to Obama*, while Johnson was deeply skeptical about the utility of increased US involvement, his advisers largely were not: they unanimously favored escalation, differing only on the degree. Thus, the leader of the free world ended up feeling trapped in a policy he didn't really believe in, one that would ultimately consume his presidency. The intimate relationship between presidents and their closest foreign-policy advisers is Sestanovich's subject in *Maximalist*. This is not a conventional history, nor a diplomatic history, but an extended interpretive essay. The questions Sestanovich asks are straightforward and revealing: What did these presidents want to achieve in office with regard to national security and foreign policy? To what extent did events and external circumstances constrain them? How did their closest advisers influence them? And finally, were they successful, in achieving their objectives and in doing well by the country they led?

Sestanovich has spent his career alternating between scholarship and policymaking, a dual perspective that serves him admirably here. A professor at Columbia's School of International and Public Affairs and a senior fellow for Russian and Eurasian studies at the Council on Foreign Relations, he has also served in the administrations of presidents of both parties — on Ronald Reagan's National Secu-



rity Council staff and as Bill Clinton's ambassador at large to the states newly independent from the Soviet Union. He is accordingly well positioned to evaluate policymaking at the highest level from a nonpartisan perspective.

Sestanovich's title, *Maximalist*, captures half — but only half — of his thesis. What he detects over seventy years is an oscillation between presidents who have been "maximalist" in their approach to world affairs and those who have presided over periods of retrenchment f 'more' and the school of 'loss '''

what he calls "the school of 'more' and the school of 'less.""

Inevitably, the closer the book comes to the present, the more the politics of the moment threaten to encroach. Evaluating Truman and Eisenhower is one thing; doing so with George W. Bush and Barack Obama, when partisan passions are running so hot, is a significantly taller order. Yet Sestanovich delivers an account that a reader sympathetic to both the forty-third and forty-fourth presidents, if there is such a reader, will find judicious.

Into the "more" category fall Harry S. Truman, responding to the expansionist aims of the Soviet Union in Europe and Asia despite his natural inclination toward tightfistedness; John F. Kennedy, especially in his confrontation with Soviet premier Nikita Khrushchev over nuclear missiles in Cuba; Lyndon Johnson, reluctantly ratcheting up the American commitment to the Vietnam War; Ronald Reagan, with his commitment to a US military buildup that the Soviet Union would bankrupt itself trying to match; Bill Clinton, a "hybrid" case who began his presidency skeptical of America's global role but progressed to a view of the United States as the world's "indispensable nation"; and George W. Bush after 9/11, leading the country into wars in Afghanistan and Iraq and orchestrating a global war on terror.

The presidents of "less" were Dwight Eisenhower, who spent eight frustrating years trying to get a grip on the vast "military– industrial complex," as he would call it in a parting warning; Richard Nixon and his successor, Gerald Ford, who, through Henry Kissinger's diplomacy, sought to craft an international environment safe for the much-diminished role of the United States; Jimmy Carter, who pursued "détente without Kissinger" and became paralyzed when Iran's new revolutionary government took Americans hostage in the US embassy in Tehran; George H. W. Bush, another hybrid, who continued Ronald Reagan's maximalism through the post–Cold War unification of Germany and the Gulf War, but ended his first and only term trying to de-emphasize global affairs in favor of domestic priorities; and now Barack Obama, who has sought to reduce the commitment of US resources abroad in favor of "nationbuilding at home."

That Obama is a "retrenchment" president is something that many of his advisers would no doubt deny, as indeed other presidents and their advisers might likewise resist Sestanovich's oversimplified classifications. Those engaged in retrenchment tend to claim that they are seeking as big a role as is practical for the United States, given external constraints, limited resources, and uncertain public support; in the early Obama administration, "smart power" became a slogan for doing more with less. And even retrenchers, Sestanovich notes, worry about the effectiveness of "half-measures," as well as the willingness of allies to do more as the United States does less.

Maximalist policymakers, meanwhile, often defend their approach by pointing to someone advocating a position even more aggressive than their own. Here one thinks of Reagan in the 1980s. As he began to pursue diplomacy with the Soviet Union of Mikhail Gorbachev, with whom the staunchly conservative British prime minister Margaret Thatcher had declared the West could "do business," many conservatives complained that Reagan was betraying his values.

It's not hard to find examples of American maximalism causing the country harm. The wars in Vietnam and Iraq are Exhibits A and B. Yet that is not the whole story, nor is it easy to conclude that the United States (and the international order) would be better off if the school of "more" somehow disappeared. Sestanovich demonstrates both elements of his conclusion that "maximalism has been an essential ingredient of American success as well as of failure." He continues: "Could perhaps just as much, or even more, have been achieved with a less ambitious, less confrontational strategy? . . . A careful look at American policy since the Second World War suggests an answer that many will find awkward: the United States achieved a great deal precisely by being uncompromising and confrontational," as Truman was in 1948 when he broke a Soviet blockade by airlifting supplies to Berlin, and as George H. W. Bush was in 1991 when he ejected Saddam Hussein from Kuwait. Both momentous decisions, and many others Sestanovich reviews here, were matters of substantial controversy even among the closest advisers to the presidents making them.

Sestanovich could have made this a better book by giving it to an incoming Columbia freshman and asking her to read it and mark where more background information would be helpful. As it stands, though, *Maximalist* offers a reminder that a nation as powerful as the United States will likely perpetuate its cycle of maximalism and retrenchment in presidential administrations to come. "We are not wrong to consider American diplomacy in the second half of the twentieth century a gigantic success story," Sestanovich writes, "but it usually didn't feel that way at the time."

Tod Lindberg is a research fellow at the Hoover Institution, at Stanford, where he focuses on American politics.

Bros. Arts // By Michael B. Shavelson

New York Transformed: The Architecture of Cross & Cross By Peter Pennoyer and Anne Walker (Monacelli Press, 240 pages, \$60)

When the patrician brothers John W. and Eliot Cross established their architectural firm in 1907, Manhattan was, if not a blank slate, then a slate with a lot of blanks. The opening of the IRT subway and the creation of Park Avenue, along with the limitless wealth pouring into the city, meant that entirely new neighborhoods were



waiting to be designed and built. As Peter Pennoyer '80CC, '84GSAPP and Anne Walker '00GSAPP write in the fourth of their series of excellent architecture monographs (with first-rate presentday photographs by Jonathan Wallen), "Cross & Cross was incredibly well positioned to take advantage of the various opportunities the era afforded it." John, who handled the creative side, studied at Yale, Columbia (which

had little to offer in architecture at the time), and the École des Beaux-Arts in Paris; Eliot, the more business-minded of the two, studied at Harvard. Their earliest commissions were for Colonial Revival townhouses and clubs; soon they expanded to residential hotels, apartment buildings, and country homes. (Cross & Cross designed the expanded Church of Notre Dame, just east of Columbia on Morningside Drive.) Eliot's knack for property development broadened the partnership's reach to such projects as Sutton Place, which they supervised but did not design. In the late

1920s, the firm's emphasis shifted to commercial buildings, and it is these banks, stores, and office towers — Lee Higginson Bank, Tiffany's, City Bank–Farmers Trust Company — that are Cross & Cross's most distinctive contribution to New York's cityscape.

Cross & Cross had no signature style, but was "talented at designing anything from an elegant Georgian townhouse to a stripped modern skyscraper." The art-deco RCA Victor Building at 570 Lexington Avenue (not the one at Rockefeller Center) captured "the exhilaration and excitement of radio communication in the modern age." Below, the RCA Victor Building's pink marble and aluminum lobby.



Eyes Wide Shut // By Jennie Yabroff

Sleep Donation: A Novella

By Karen Russell (Atavist Books, e-book only, \$3.99)

When was your last full night of deep, unbroken sleep? If you're lucky, your answer to this question, which comes near the beginning of Karen Russell's novella *Sleep Donation*, will be a prompt "last night." It's more likely, though, considering that the Centers for Disease Control have declared insufficient sleep a health epidemic, that your answer is not last night, not even last week. It's likely that you're so sleep-deprived, in fact, that you can barely remember your own address, let alone the last time you slept enough to wake up feeling rested and refreshed. Which is why, for most of us, *Sleep Donation* will read like a horror story.

In *Sleep Donation*, Russell '06SOA imagines a world in which the insomnia epidemic has turned fatal. It's the near future, and thousands of Americans have permanently lost the ability to sleep. The landscape is dotted with Night Worlds, carnival-like encampments where the sleepless spend their restless nights. Insomniacs stare from moonlit windows with "pink-spoked eyeballs." Emergency rooms

BOOKTALK

Yes She Can



THE SCIENCE AND ART OF SELF-ASSURANCE—WHAT WOMEN SHOULD KNOW KATTY KAY & CLAIRE SHIPMAN

The book: The Confidence Code (HarperBusiness) The authors: Katty Kay and Claire Shipman '86CC, '94SIPA, University Trustee

Columbia Magazine: In your new book, you present evidence that confidence is inherited and significantly more intrinsic to women than men. How much of confidence do you think is genetic and how much is learned?

Claire Shipman: We were very surprised about the origins of confidence. We had both assumed that it was probably something nurtured in childhood. But we found that there is a biological basis for it. The general estimate is that a trait like confidence is probably between 25 and 50 percent inherited. There's not one particular confidence gene that you either have or you don't. It's a cocktail of genes, which, combined with testosterone levels, can form a base confidence level.

CM: The remainder, then, is something that can be coached or learned as an adult?

CS: Absolutely. Even if confidence is as much as 50 percent inherited, that means it's still 50 percent volitional. Once we knew that, we looked at data on brain plasticity and found a number of studies showing that humans have the ability to rewire our brains even at pretty advanced ages. We found that when people are able to really make a concerted effort to behave differently, eventually it will be reflected in brain activity. We think that confidence is something that can be acquired. But it's not about changing your mindset. It's not the kind of thing where if you just keep telling yourself that you're confident, then suddenly you will be. It's about changing your habits, and then eventually your mindset will change around those habits.

CM: You interviewed a number of highly accomplished women and found that many

of them still expressed a significant degree of self-doubt. Was there a universal set of habits that helped them to overcome this and succeed?

CS: Yes, we picked a set of women we thought were bound to be confident and were surprised in each case. We didn't expect, for example, that International Monetary Fund director Christine Lagarde would confess the need to over-prepare for every meeting. But the habits that set them apart are the same ones we encourage lessconfident women to practice. They all had a willingness to take risks, and to act without over-analyzing a situation. They were able to make decisions without wavering. And they also had generally all mastered one or several particular skills. It doesn't have to look like what we all think of as confidence — the stereotypical bravado. What we see on Mad Men is not necessarily the way female confidence will look.

CM: You and your co-author, Katty Kay, are both prominent television reporters. Are there special challenges to being and staving confident as women in the media? **CS:** We've become much more visible as producers have come to understand the the way we cover stories, the conclusions that we reach, our analyses. But in fields like politics and economics, bylines are still overwhelmingly male. On television, especially, there's a premium on skills that take a lot of confidence. For example, I had a gut feeling that when I was on political panels, I was speaking less than men. I went back and measured, and indeed I was, by about 30 percent. I know that I have to get in there and interrupt people and talk, but I still have an inner mechanism that tells me to step back.

CM: Women have made major advances in the workplace over the last few decades. Do you think younger generations of women are more confident?

CS: We assumed that would be the case, but found that it wasn't. As a part of our research, we collaborated with psychologists to create a confidence assessment test (www.theconfidencecode.com). Our hope is to create a database that breaks down how confident people are not only by gender, but by age and geography. What we found about age mirrored the responses that we got from interviews: women are now excelling at school and in the workplace in ways that my generation didn't. But they still have the same anxieties, especially around perfectionism and fear of taking risks. We have this generation of women who are so competent but don't know how to let it go when situations don't go as planned.

CM: You were at Columbia College when it first went co-ed. Do you think you had to fight particularly hard to stand out as a woman?

CS: This will sound ridiculous, but as a transfer student who grew up in Ohio, I didn't know that Columbia *wasn't* co-ed until I got there. Like many women, I've always felt very comfortable in an academic environment, where there are guidelines, and expectations are clear. Columbia was no different in that regard. I was able from the beginning to get my work done and achieve.

- Rebecca Shapiro

turn away the chronically sleep-deprived, sending them home "to twist in exile on their mattresses." The only treatment is a sleep donation, an infusion of sleep harvested from the dreams of a healthy person. But demand far outstrips supply. Soon, the scientists predict, "sleep will go extinct. And eventually, unless we can find some way to synthesize it, so will we."

It is easy to get so taken by Russell's spooky-accurate description of what lack of sleep can do to a body, and a country, that *Sleep Donation* starts to feel like speculative journalism. There's far more to this slim book, though. Trish, the narrator, lost her sister to insomnia and now works for a sleep center called Slumber Corps, cold-calling potential sleep donors. Her special gift is reliving her sister's death with fresh, raw grief each time, "evergreen . . . a pure shock, the freshest outrage." The performance is superbly effective at eliciting donations, but at what cost?

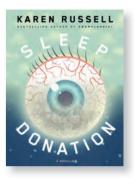
Though Russell meticulously describes the intricacies of the epidemic and the protocol for donating sleep, she stops short of detailing what, exactly, is being taken from a donor when he or she lies down on the "catch-cot" for a "draw." She tells us just enough that we know there's something unmistakably unsavory about the process, which feels like a more fundamental invasion of privacy than giving blood or even donating an organ. There is the sense of an ethical breach — otherwise, why would Trish have to turn on the waterworks to recruit donors? Taking someone's dreams feels dirty, like spying on someone in the shower, even if they'll never know you looked.

As in Russell's previous books, *Swamplandia!* and *St. Lucy's Home for Girls Raised by Wolves*, everything feels a bit off, suggesting that humanity has fallen out of sync with the planet's natural rhythms. In *Sleep Donation*, "time itself will soon become an anachronism." Even the fleshy white flowers outside a donor's house are freakish in their abundance, while the trees seem "to have too many limbs, mutating away from the rooftops in a silent, wild freedom." The sense of impending annihilation pulses throughout the book; insomniacs describe the final throes of their condition as their Last Day, evoking religious cults and doomsday prophecies.

At the same time, Russell leavens the apocalyptic with the familiar. The homeyness of the details — a donor's "brown sedan with faded turquoise doors," a tired new father "with his house-musk of baby powder and Old Spice" who looks, when he burps his baby, like "a gentle, enormous beaver" — keeps the story grounded in reality.

A family dresses their daughter in frilly dresses for her sleep donations, and you don't think, Wait a minute, exactly how is the machine supposed to be capturing the little girl's dreams? You think, Of course the parents put her in her Sunday best for this important event, despite the fact that she will snooze right through it.

Storytelling is at the heart of *Sleep Donation*: the story Trish tells potential donors about her sister's death; the story



Trish's bosses tell her to convince her to keep doing her job; the story she tells herself about them, to quell her doubts. There are the stories insomniacs tell one another to pass the sleepless hours at the Night Worlds. In many ways, the entire novella functions as a sort of twisted bedtime story, something children might tell each other to scare themselves into staying awake. It seems more than coincidental that *Sleep Donation*, is the first title published by Atavist Books, is being released exclusively for e-readers and phones. The rise of insomnia has been linked to the proliferation of electronic devices, and as you lie in bed reading *Sleep Donation*, your phone casting a sterile little cone of light in an otherwise darkened bedroom, you can't help feeling that you're pushing your luck. You really should turn off the phone and get some sleep, while you still can.

Jennie Yabroff '06SOA is a writer and editor in New York City. Her work has appeared in Newsweek, the New York Times, and Salon.

Letter | Sent // By Paul Hond

No Way There From Here By Laura Cantrell (Thrift Shop Recordings)

Darling, I know it's been a long time, but the wait is over. Enclosed please find Laura Cantrell's fifth studio album, *No Way There From Here*. Once you find it, open it and put it on.

This is not some ploy to win you back. We're way past that. But I know you've been waiting, as I have, for more Laura, like waiting for the roses to bloom again, and also the acoustic and twelve-string guitars, banjos and fiddles, the bright peal of a chatty piano, and a voice as close and familiar as the tree in your front yard. Cantrell's voice has never sounded clearer, prettier, or wiser than it does in these twelve tracks — modest, decorous, intelligent, buoyantly melodic, and Southern: plain in the best sense of the word.

Did you know she recorded the album in Nashville? And that she wrote or co-wrote all but one of the songs? That's why I'd call it her most personal album. After all, she grew up in Nashville, which struck me at first as a marvelous coincidence, though I suppose my logic was inverted. Anyway, Cantrell lives in New York and is very



much at home on this record. The musicians she's assembled are among Music City's finest: with clarity and reserve, they offer empathic support for Cantrell and her frequent collaborator, guitarist Mark Spencer.

But the main event here is the songwriting. Cantrell '89CC has long been a student of songcraft and an interpreter

of others' material, a regular country-music almanac who, in her college days as a DJ on WKCR, revived and hosted the *Tennessee Border* radio show. How glorious, now, to get a full basket of her own expertly crafted three-minute pop inventions, twilled with a radio-and-blue-jeans innocence that we didn't know was innocence until we lost it to MTV, the Internet, and a dozen bad decisions. Cantrell is a poet of squandered Edens, of pasts out of reach. The title track states the truth we'd rather forget: "No bridge across the ocean / no path up through the mountains / or trip back through the years" — no way there from here.

Cantrell's is a distinctly pre-digital world. People don't e-mail or text. They write postcards and send letters and wait for letters that never come. They sing along to the kitchen radio, they yearn, they dream, they suffer, they survive, cared for by their ever tactful creator. In "Letter She Sent," a gal named Mary "came home with smoke in her hair / and her stockings on crooked / but she didn't care." That's as risqué as it gets, by the way, unless you count the girlish, longing storyteller in "Driving Down Your Street," whose fantasy progresses from the street to the front door to the landing to being "barefoot 'cross your floor" - and now it occurs to me, by the military ruffles of the snare drum, and the line "there's a chain around your neck / and my heart's caught up on that chain," that the "you" she's singing to might be off to war - or lost to it. Point is, lovers in Cantrell's songs barely make it to first base: they hold hands, they kick off their shoes and lie down in the green, green grass. (Remember those days, dear?) Cantrell respects not just our intelligence but also our imaginations.

Another epistolary gal, Donna, went to the store and "spent all she had and a few pennies more." Dollars would sound vulgar. It's pennies. And women listen to bands in smoky bars, wear nylons, and are named Mary, and when their letters go unanswered, they drink. Or shop. Maybe they're "just working out who they are," as Cantrell sings in the album's jangling opener, "All the Girls Are Complicated." It's a world, too, of garden gates, highways, coloring-book weather: gray skies, starry skies, twilight skies, January days that feel like June. Oranges in the winter that "taste like sunshine." Cantrell doesn't risk sentimentality so much as redeem its noble essences. Irony doesn't even bother getting out of bed, though its eyes are open. Cantrell's control extends to her cleverness. She doesn't spoil a good thing.

Still, her effects can be deceptive: few singers summon as much emotion without emoting. She plays it straight, relying on the unfiltered quality of her voice, rather than any histrionics or technical virtuosity, to do the job. She'll marry melancholic lyrics to good-time strumming, or enunciate simple pleasures over a lonesome, pedalsteel sigh. She'll lull you into rivers that run a little deeper than you'd thought, then snare you in a net of melodic beauty. Her engagement with the past, musically and thematically, produces an undeniable nostalgia, but with Cantrell it feels like the vital present, which gives her songs the thrift-shop virtue of sounding as good now as they would have forty years ago — or will forty years hence. I'm not talking about timelessness; it's more like the stopping of time, the crystallization of a moment, a memory, that we can enter and leave.

All the songs on No Way There From Here offer the customary Cantrell delights. There's the gorgeous one-off chorus of "Barely Said a Thing," which evokes the body of the Cherokee River, otherwise called the Tennessee River (the same river, perhaps, that's depicted pastorally on the album cover — a vision of paradise floodlit by something like the "big yellow moon in my window pane" that reassures the solitary chronicler of "Starry Skies"); the humming, bittersweet meditation on letting go in "Someday Sparrow"; the desolate soliloquy-to-an-ex in "Washday Blues," with its post-breakup account of bruised coping, punctuated by the singer's insinuating, intimate refrain of "you know what I mean?"

You might find it interesting, as I did, that Cantrell's toughest, most defiant statement of after-the-split, I've-changed, won't-lookback resilience turns out to be the record's one cover, "Beg or Borrow Days," written by the Brooklyn musician Jennifer O'Connor. Cantrell, as ever, makes another's composition entirely her own — in this case, a festive hoedown — then follows it with "When It Comes to You," a stark, shuffling confession of helpless love that includes the line "I'm a beggar and I fail every test." The juxtaposition of the two songs is jarring, and utterly true: one's armor can so easily slip.

But if there's one tune that nearly breaks me, the one that puts a finger to the old welt and a thumb to the faded photos in the back of the closet, it's "Can't Wait," an airy, toe-tapping, tightly strung embroidery of sweetest anticipation, in which the narrator sings of "pourin' out my heart to these four walls" as she waits for the return of her hard-working love. *When you come home, darlin'*, *I will fill your plate. I can't wait, I can't wait, I can't wait.* You can decide for yourself if, at the end, the wait is rewarded. But given the silver thread winding through the album (and through much of Cantrell's work) of swollen-hearted lovers waiting for things that never come, there is room to wonder.

I hope you get this letter, darling. I look forward to your reply.

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A World War I parade on campus.

Trees

A hundred years ago, Alfred Joyce Kilmer 1908CC published *Trees and Other Poems*, whose title poem begins with the famous couplet *I think that I shall never see / A poem lovely as a tree*. The same year, many miles away in Sarajevo, a Bosnian Serb shot Archduke Franz Ferdinand, heir to the Austro-Hungarian throne.

The Great War that sprang from the assassin's bullet that summer had consequences for Kilmer and hundreds of other Columbians. Among the Columbia war dead, Kilmer is remembered best; for the battlefield death of a young poet, even a lesser poet, savors of poetry. (The former New York mayor John Purroy Mitchel 1899CC rates less fame, though that may be in part because he perished in an aerial training mishap in Louisiana.) But a perusal of the Columbia University Roll of Honor website, which pays tribute to Columbians who fell in America's wars, opens our eyes to the immeasurable sacrifice of the student and alumni community.

There are 204 names listed under World War I. Some died in combat, others in training accidents. Many died of disease. The list suggests a deep forest of unheralded stories. We have, at a glance, the Vedder brothers, Harmon 1918CC and James 1919CC, who died within five weeks of each other at ages twenty and twenty-one respectively, and are buried at the Somme American Cemetery in France; Henry Rosenwald Guiterman 1919CC, whose grandmother, in 1921, donated in Guiterman's honor the house at 534 West 114th Street for the Pi Lambda Phi fraternity (the house is now used for the Kappa Alpha Theta sorority); Rexford Shilliday 1919CC, whose bunkmate wrote that when he found Shilliday a half mile from the airfield over French lines, dead in the wreckage of his "machine" sunk nose-first in the turf, "there was a smile on the face." And while few remember Carlos Dámaso Siegert Wuppermann 1907CC, who died in 1919 while serving in the occupation army in Germany, everyone remembers his youngest brother, Frank Morgan, who played the Wizard of Oz.

Joyce Kilmer fought with the renowned and largely Irish "Fighting 69th" regiment from Manhattan. On July 30, 1918, near the Marne River in France, Kilmer accompanied future CIA progenitor Major William "Wild Bill" Donovan 1905CC, 1908LAW into battle. There, a bullet from a German machine gun struck the poet's brain, killing him at age thirty-one.

Kilmer was not just the most famous Columbian to die in the war, but arguably the most famous American. There are Kilmer memorials throughout the United States, including the 3,800-acre Joyce Kilmer Memorial Forest in North Carolina, dedicated in 1936 at the behest of the Veterans of Foreign Wars.

But the arboreally minded Kilmer had other trees in mind in 1918. On March 7 of that year, in the woods of Rouge Bouquet, a German artillery shell landed on the roof of a trench that concealed members of the Fighting 69th. Nineteen men were buried alive. In the following days, Kilmer wrote "Rouge Bouquet" in memory of his comrades:

And up to Heaven's doorway floats, From the wood called Rouge Bouquet, A delicate cloud of buglenotes That softly say: "Farewell! Farewell!...."

Learn more about Columbia's fallen veterans.

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