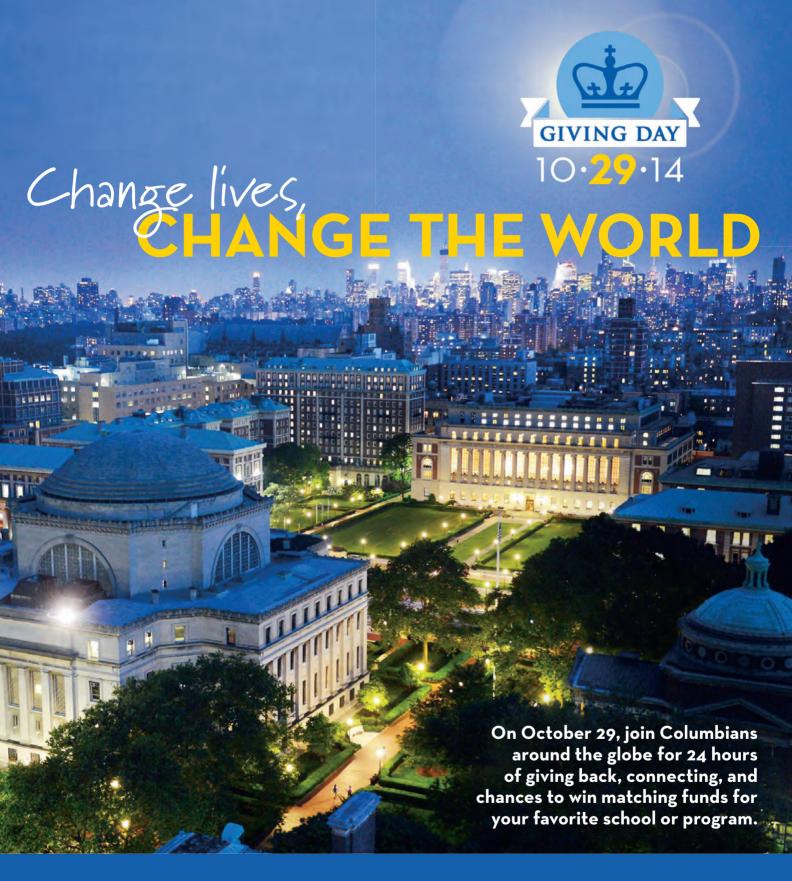
COLUMBIA

MAGAZINE





Changing Lives That Change The World

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Emily Kate is a Columbia College senior who has worked in wineries in the United States and Australia. She earned her certifications with honors from the Wine and Spirit Education Trust, through the International Wine Center in New York, and is the proprietor of thewinehistorian.com. >> Page 10



Tim Page '79CC is a professor of journalism and music at the University of Southern California. He won the Pulitzer Prize for criticism in 1997 for his writing about music for the Washington Post, and he is the author or editor of more than twenty books. >> Page 22



James Shapiro '77CC is the Larry Miller Professor of English and Comparative Literature at Columbia. He is a governor of the Folger Shakespeare Library and serves on the board of the Royal Shakespeare Company. In 2011, he was inducted into the American Academy of Arts and Sciences. >> Page 60



David Sulzer is a professor of psychiatry, neurology, and pharmacology at Columbia University Medical Center. He studies memory, learning, and behavior, with special attention to the brain mechanisms that underlie Parkinson's disease, schizophrenia, autism, and drug addiction. >> Page 55

COLUMB

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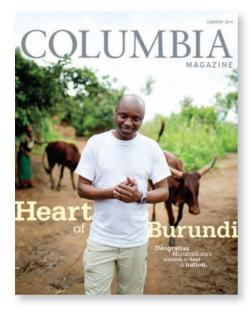
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letters

IT TAKES A VILLAGE

As a board member of the Fistula Foundation, I was already planning to travel to the Great Lakes region of Africa to visit projects in the Democratic Republic of Congo, Burundi, and Rwanda when I read the Summer 2014 *Columbia Magazine* cover story about Deogratias Niyizonkiza and the Village Health Works clinic that he founded.

Since I would be in the neighborhood of his village of Kigutu, only some three hours away by car, I wrote to Deo and was generously invited to visit, enjoy a dinner of beans and rice, and spend a night there. I was met at the Bujumbura International Airport by Dr. Romeo Niyomukiza and driven with a full military honor guard (two soldiers with AK-47s in the back of our pickup truck) to Kigutu.

Village Health Works is a grand project that fully lives up to its billing. I would like the Columbia community to know that the medical care is top-notch, the site gorgeous, the programs in agronomy, music, dance, and community health all well done and very popular with the local community. Deo's project has gone from dream to reality in an astonishingly short time. It was an honor to be able to see what he has accomplished.

Lawrence A. William '62CC, '66PS Los Altos Hills, CA Stacey Kors's cover article "The Road to Kigutu," about Deogratias Niyizonkiza's Village Health Works clinic in Burundi, is inspirational in so many ways. I was particularly moved by the story of Cécille, a local woman who got villagers together to build a mountainside road to the clinic, a project that reunited Tutsis and Hutus, who had been locked in post-genocidal antipathy and shame.

The Tutsi-Hutu ethnic rivalry in Rwanda and Burundi is profound, being both historical and biological. This came home to me forty years ago on a site visit to Burundi. Walking into a bar in the capital, Bujumbura, I was surprised to find men quaffing not beer but milk from large beakers. I finally realized that they were demonstrating their Tutsi (ruling) heritage: the taller Tutsis have lived alongside the shorter Hutus for so long that size no longer differentiates them, but the Tutsis' history as herders (and therefore milk drinkers) provides them with a tolerance for milk that Hutus (historically farmers) generally lack. So what I was witnessing was a particularly intolerant form of conspicuous consumption!

Building a road for the benefit of all mountain patients of whatever heritage was a superb way of resolving ages-old ethnic con-

flicts and all-too-fresh internecine bloodletting. Where words fail, or are constrained by cultural inhibitions, working side by side can be a literal road to resolution.

Nicholas Cunningham Professor Emeritus College of Physicians and Surgeons Springfield Center, NY

What a story — "The Road to Kigutu" shows exactly what one committed person can do in this world. As a parent of a Columbia grad, I read the magazine too, and this issue is especially interesting. Come on, people, we can raise the money for Deo's next project! Columbia people may be a small segment of society, but I believe they are a mighty one that can recognize a hero to get behind. Let's do it!

Elaine Fleck Sedona, AZ

Thank you for publishing the article about the heartwarming work Deogratias Niyizonkiza is pursuing in the wake of the horrible Burundian genocide. Hopefully, the publicity will attract needed funds and serve as a reminder of how quickly ethnic hatred and violence can erupt.

Cassandra B. O'Neal '92CC Seattle, WA

INSTITUTIONAL ROOTS

In the article "Fickle Fortunes" (Summer 2014), Douglas Quenqua describes a survey on poverty put out by the Columbia School of Social Work and the Robin Hood Foundation. As a social worker and community organizer in New York City for more than twenty-nine years, I support a process that tries to understand the roots of poverty and that recognizes how people can cycle in and out of it. However, the article does not discuss poverty's institutional causes. I can only hope the study looks at banking practices, health-care and housing policies, safety-net programs, and institutional racism. Without this broader understanding, I fear we will end up blaming the victim for poverty caused by institutions.

> Margaret Hughes '87SW Brooklyn, NY

Many Columbia researchers involved in the project do study the institutional causes of poverty. Their work can be found at cupop.columbia.edu. — Eds.

HAVE TUX, WILL TRAVEL

Phoebe Magee's excellent College Walk story about the SS *United States* ("Dock Star," Summer 2014) reminded me of my stylish trip on that steamship. I was a Foreign Service officer returning to my post in Europe, and I traveled first class. The State Department, in forwarding my ticket, advised me to be sure to bring a tux, because formal attire was customary for the dinner the ship's captain gave for first-class passengers.

Yale Richmond '57GSAS Washington, DC

AN HONOR TO SERVE

I was so glad to see the story on Army Reserve Captain Keith Robinson, who surprised his daughter Ruby Robinson '14SEAS by returning from Afghanistan to watch her graduate ("Bravo company," News, Summer 2014). I was bartending a lunch shift at a local restaurant during Commencement, and Captain Robinson came in uniform to my bar for a meal. He was the most honorable and memo-

rable guest I have ever had at the restaurant. He called me over and told me he wanted to show me something. Now, when most bar guests do this, it's because they want to show me something they just got published, their latest Instagram post, or ten photos of their dog — but he very quietly showed me the picture of him hugging his daughter that appears in the magazine. He told me all about how excited he was to surprise his daughter, and how her success is the thing he is most proud of. I thanked him for his service, but in hindsight, he doesn't just serve our country, he represents it. These are the kinds of stories, and people, we need to see more often.

Heather Erny '16TC New York, NY

CU AT THE PARK!

It was with great nostalgia that I read Andrea Stone's piece about Inwood's new Muscota Marsh park ("In Inwood, a new destination for waterfowl and neighbors alike," News, Summer 2014). I lived at the corner of Indian Road and 218th Street for most of my childhood and teen years. I was able to watch football games at Baker Field from the roof of my apartment building. I recall the scaffolding as they painted the Columbia "C" on the rock across the river, and our excitement when the Columbia crew would come to the boathouse and we would watch them bring out the boats. It was wonderful growing up across from Inwood Hill Park, roller skating, sledding, and playing ball. It seems that my mother's admonishments to stay away from the marsh shoreline are no longer valid, as Inwood's residents and visitors now have a wonderful park and ecological area. I hope to come and visit.

> Gail Altman-Orenstein '64PS Sheffield, MA

LUXURY ITEM

I am sorry that the novelist Teju Cole and the reviewer Lauren Savage both apparently subscribe to the latest progressive clichés. The narrator's "indignation at the city's declining social order is therefore complicated by privilege," Savage writes. He "recognizes that worrying about corruption is a luxury that many people can't afford." The poor as well as the privileged are angered and oppressed by official corruption and harassment. Don't Cole and Savage remember that the Arab Spring was set off by the suicide of a poor Tunisian street vendor who couldn't take his mistreatment by officials anymore?

Carol Crystle '64GSAS, '71TC Chicago, IL

NO-CONFIDENCE VOTE

The ideas expressed in the Summer 2014 Booktalk, about Katty Kay and University Trustee Claire Shipman's book *The Confidence Code*, strike me as dangerously anti-intellectual. Nowhere is "confidence" defined, and if you go to the website mentioned, it is extrapolated by looking at aspects of life such as whether someone likes to play chess.

If "confidence is genetic and significantly more intrinsic to women than men," where is the provision in this schema for the overriding influence of culture? Or age? Or even, for goodness' sake, right-handedness and left-handedness, when confidence is interpreted in terms of chess?

Maxine Morrin '87TC Sunnyside, NY

WAR STORIES

Your article about Columbia's First World War veterans (Finals, Summer 2014) was of interest to me because my father, Major General Melvin L. Krulewitch '16CC, '18LAW, was a sergeant in France in 1918, where he was both wounded and gassed. He was one of eleven survivors out of his company of two hundred that fought at Belleau Wood and Château-Thierry. He remembered well the day he returned, marching up Fifth Avenue and seeing General Pershing reviewing the troops on horseback.

When he arrived at the destination of the parade, 110th Street and Fifth Avenue, he walked home to his parents' apartment at 106th Street and Madison Avenue.

Peter Krulewitch '62CC New York, NY Thank you for your article on the Columbians who fell while serving their country in the First World War, and especially Joyce Kilmer, who served in New York's 69th Infantry (federalized as the 165th). It put me in mind of my own, much more modest service with the 69th while I was a graduate student in history in the 1980s. When we drilled on Lexington Avenue, we were true weekend warriors, and the Defense Department was moving the infantry regiments out of Manhattan, After all, who would attack Manhattan? On 9/11, the 69th was the only regiment left and was immediately deployed to guard the bridges, subway, and other infrastructure. Later, the 69th deployed to Iraq. I am proud to be both a Columbian and a Fighting Irishman.

> Jonathan P. Roth '91GSAS Burlingame, CA

FIT TO PRINT

I never read the Letters section of *Columbia Magazine*, but I made an exception for the Summer 2014 edition. The brave editors should be commended for absorbing and printing a lot of criticism from the readers against the authors.

Thomas Romeo '66PS Greenwich, RI

PERPETUAL UNION

Almost 150 years after the end of the Civil War, there are still people who refuse to accept the outcome, who regard Abraham Lincoln as a despot, and who believe that the Confederate states were within their rights to secede. Unfortunately, a letter from one of those people, Arthur E. Lavis, was published in the Summer 2014 issue.

"Where in the Constitution," Lavis asks, "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 . . .? Don't we normally call people like that despots?"

There's a reason the Constitution doesn't say a word about secession: it considers the Union to be perpetual. In ratifying the Constitution, the thirteen original colonies gave up Key to Abbreviations: Each of the following school-affiliation abbreviations refers to the respective school's current name; for example, GSAS — for Graduate School of Arts and Sciences — is used for alumni of the Graduate Faculties, which became GSAS in 1979. The only code not associated with a particular school is HON, which designates that person the recipient of an honorary degree from the University.

CODE	SCHOOL
CODE	SCHOOL Remark Callery
ВС	Barnard College
BUS	Graduate School of Business
CC	Columbia College
DM	College of Dental Medicine
GS	School of General Studies
GSAPP	Graduate School of Architecture, Planning, and Preservation
GSAS	Graduate School of Arts and Sciences
JRN	Graduate School of Journalism
JTS	Jewish Theological Seminary
KC	King's College
LAW	School of Law
LS	School of Library Service
NRS	School of Nursing
OPT	School of Optometry
PH	Mailman School of Public Health
PHRM	School of Pharmaceutical Sciences
PS	College of Physicians and Surgeons
SCE	School of Continuing Education
SEAS	Fu Foundation School of Engineering and Applied Science
SIPA	School of International and Public Affairs
SOA	School of the Arts
SW	School of Social Work
TC	Teachers College

their claims to independent nationhood and could not unilaterally revert to their prior status; they were now part of a new, sovereign nation. Indeed, the predecessor to the Constitution was called the Articles of Confederation and Perpetual Union, and the Constitution's famous opening words echo that phrase: "We the People of the United States, in Order to form a more perfect Union . . ." The Founders considered the Union to be perpetual, as did most Americans — until the conflict over slavery caused many Southerners to change their tune and look for a way out.

Union Theological Seminary

Stan Augarten '77GSAS Paris, France

PAPAL SCHISM

UTS

Luanne Zurlo's letter to the editor (Summer 2014) could not have been better timed, as yesterday I finished reading *Absolute Monarchs*, a very well-written history of the entire papacy by the well-respected historian John Julius Norwich. Lord Norwich writes with specificity on the way Pope Pius XII

remained silent time after time when a vigorous word would have made a significant difference in the plight of the Jews under Hitler. He quotes the pope as referring to Judaism as a cult, and gives repeated evidence of the pope's anti-Semitism. He also notes that the pope considered communism to be a greater threat to the papacy and himself personally than Nazi Germany was to the world, so he declined to raise a finger against the deportation of Roman Jews, lest in doing so it somehow might encourage a communist takeover of Rome. Norwich notes that for the entire period after the war, "not one word of apology or regret, not a single requiem or Mass of Remembrance was held for the 1,989 Jewish deportees from Rome who had met their deaths at Auschwitz alone." Later, in describing the twilight of the pope's life, he notes, "The old anti-Semitism was still in evidence: to his dying day he was to refuse recognition to the State of Israel."

> Andrew Alpern '64GSAPP New York, NY

PRIMARY SOURCES



WAVE HILL MAGNOLIAS by Jackie Battenfield, who teaches at the School of the Arts. A collection of her paintings will be exhibited at Wave Hill House in the Bronx through May 2015.

COURTESY OF THE ARTIST AND KENISE BARNES FINE ART

Darwin, Evolved

From Darwin's On the Origin of Species: A Modern Rendition (Indiana University Press), a new "translation" of the classic text in contemporary English by Daniel Duzdevich '09CC, '13GSAS, a PhD candidate in the Department of Biological Sciences.

Natural selection produces nothing in one species for the exclusive good or injury of another species. It can produce parts or organs that are very useful or even indispensable, or very harmful to another species, but only if they are useful to the owner. If a region is densely inhabited, then natural selection acts chiefly through the competition of inhabitants with one another; it consequently produces perfection — strength in the struggle for existence according to the standards of that region. This is why inhabitants of a small region generally yield to inhabitants of a larger region, where there are more individuals, greater diversification, more severe competition — and as a result, a higher standard of perfection. Natural selection does not necessarily produce absolute perfection, which, as far as can be judged, does not even exist.

By Gail Sheehy '70JRN, from her 2014 memoir Daring, about her career as a New Journalist and best-selling author.

Gloria Steinem was the sister everyone would have loved to have. She had started out as a receptionist [at Help] in 1960. Every man who entered that magazine office gaped at the longstemmed beauty.

It was Gloria who was first to answer [Clay Felker's] plea for help in raising money to start New York. At an endless series of lunches, she "tap-danced for rich people," as she called it, which meant being witty and charming. Clay wanted Gloria to write a story for the maiden issue. She came up with the idea of writing about Ho Chi Minh's travels in New York and other parts of the United States as a young man. Oddly enough, she said, the Vietnamese leader had been an ally of Roosevelt's and helped to rescue downed American fliers in the jungles of Vietnam during World War II. Clay liked the offbeat idea. Gloria tried desperately to contact the president of Vietnam, but Western Union operators couldn't grasp the spelling of a name with all those consonants. When Gloria showed up late clutching her story, she found Clay flailing to pull together the issue.

"What have you got for me?" he moaned.

"Ho Chi Minh in New York."

He grabbed the manuscript and without a glance handed it off to a messenger to take to the printer.

"But, Clay, you haven't read a word. You might hate it," Gloria protested.

"How could I hate it?" he said. "It's here."

Afterwords

By the late popular philosopher Will Durant 1917GSAS, from Fallen Leaves: Last Words on Life, Love, War, and God, which was discovered in manuscript thirty-two years after Durant's 1981 death and published in 2014.

In the end we must steel ourselves against utopias and be content, as Aristotle recommended, with a slightly better state. We must not expect the world to improve much faster than ourselves. Perhaps, if we can broaden our borders with intelligent study, impartial histories, modest travel, and honest thought — if we can become conscious of the needs and views and hopes of other peoples, and sensitive to the diverse values and beauties of diverse cultures and lands, we shall not so readily plunge into competitive homicide, but shall find room in our hearts for a wider understanding and an almost universal sympathy. We shall find in all nations qualities and accomplishments from which we may learn and refresh ourselves, and by which we may enrich our inheritance and our posterity. Some day, let us hope, it will be permitted us to love our country without betraying mankind.

I Am Also a Black Man

From remarks by Eric Holder '73CC, '76LAW at St. Louis Community College-Florissant Valley, in Ferguson, Missouri, on August 20. Holder, the first African-American to serve as US attorney general, announced his resignation on September 25.

The eyes of the nation and the world are watching Ferguson right now. The world is watching because the issues raised by the shooting of Michael Brown predate this incident. This is something that has a history to it, and the history simmers beneath the surface in more communities than just Ferguson. We have seen a great deal of progress over the years. But we also see problems, and these problems stem from mistrust and mutual suspicion . . . I understand that mistrust. I am the attorney general of the United States. But I am also a black man . . . I think about a time in Georgetown — a nice neighborhood of Washington — when I'm running to a movie at about eight o'clock at night. I'm running with my cousin. A police car comes driving up and flashes his lights, yelling, "Where you going? Hold it!" I say, "Whoa! I'm going to a movie." Now my cousin starts mouthing off. I'm like, "This is not where we want to go. Keep quiet." I'm angry and upset. We negotiate the whole thing and we walk to our movie. At the time that

he stopped me, I wasn't a kid. I was a federal prosecutor. I worked at the United States Department of Justice. So I've confronted this myself.

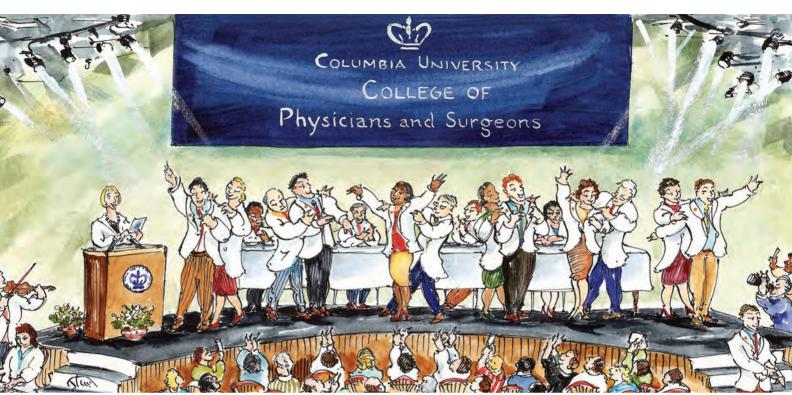
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POSEIDON, THE SEA GOD and BATTLE WITH CICONES by Romare Bearden. Columbia professor Robert O'Meally curated a traveling exhibit for the Smithsonian Institution called Romare Bearden: A Black Odyssey, which concludes its two-year tour at Columbia's Wallach Art Gallery, where it will be on view Nov. 15-Dec. 13, 2014, and Jan. 21-Mar. 14, 2015. Learn about the yearlong companion series of campus events at www.magazine.columbia.edu/bearden.



MARK STEELE

Cloak Room

ust after 4:30 on a pleasant August afternoon, 160 young men and women — many of them smiling, a fair number of them solemn — filed into the Physicians and Surgeons Alumni Auditorium on West 168th Street. The hall was packed to standing room and filled with the classical strains of piano and violin, played by members of the P&S Musicians' Guild. The audience buzzed, struck by the signal aspect of the procession: each marcher bore, across his or her forearm, a white laboratory coat.

After an invocation from University chaplain Jewelnel Davis and speeches from faculty members, the coat carriers were called to the podium by name in groups of six. They handed their coats to half a dozen "cloakers," all physicians, who then helped them slip on the garments. When all had been enrobed and resumed their seats, Lisa Mellman '91PS, the senior associate

dean for student affairs at P&S, bade them stand again as she introduced them en masse to the crowd of relatives and friends: "I present to you the Class of 2018."

The applause was considerable.

It was the University's twenty-second white-coat ceremony, celebrating the initiation of a new class of future physicians. Established at P&S in 1993, the tradition has since spread to 96 percent of the accredited medical schools in the US as well as to schools in more than a dozen other countries.

For many of the initiates, the rite of passage was a revelation. "I had no idea it was that big a deal until I got here," said Fatimah Alkhunaizi at the reception afterward. She had arrived at P&S after a childhood spent in Indianapolis, high school in Saudi Arabia, and college at Johns Hopkins. "I was crying on the stage. I'm still a little teary." Alissa Rogol, a Princeton graduate who first learned about the ceremony from her childhood best friend, insisted that she had not tried on her white coat in advance of the proceedings: "That would have been seven years' bad luck."

White coats have been synonymous with MDs for about a century. Their popularity took off after a 1910 report by Abraham Flexner revolutionized the profession by urging clinical training and laboratory experience. As physicians became more closely aligned with scientists, they adopted their uniform. At first, their coats were generally beige. But white, with its associations with purity and health, soon became the norm.

The white-coat ceremony was devised by Arnold P. Gold, a Columbia professor of clinical neurology and clinical pediatrics. When he formed his namesake foundation in 1988, he did so in large part to improve the doctor-patient relationship. Now, seated in a wheelchair at the speakers' table, he told the assembled that back when he was a medical student, his dean gave him only one requirement — to wear a white coat. That sartorial directive became shorthand for a philosophy.

"As you are cloaked in your first white coat, and make a psychological contract about the kind of doctor you want to become, we hope you will notice a gift from our foundation — a pin bearing our logo — on which the words 'Humanism in Medicine' are inscribed," he told the students. "We encourage you to wear this pin as a daily reminder of today's ceremony and of the awesome pledge you are about to make."

The event has always included a keynote address; in 1997 the *New Yorker* contributor Jerome Groopman '72CC, '76PS did the honors (he was in the audience this time around to see his daughter Emily get

her white coat). This year, the nod went to associate professor of neurology Olajide Williams '04PH. And for the first time, thanks to Sheldon Feldman, an associate professor of clinical surgery, the lecture was endowed. It is now named for Feldman's sister, Fern Feldman Anolick, who died of breast cancer at thirty-seven in 1979, leaving three children.

"She had the best doctors, technically speaking," Feldman said from the dais. "But they weren't necessarily the best human beings, and some of their words are still hurtful." Later, Feldman recalled that when Fern began to develop symptoms, he took his family to the hospital where he had been a resident, so Fern could be diagnosed by one of his mentors. His parents asked for a prognosis. "He literally said to them, 'If I were your daughter, I would jump out the window."

Feldman paused. "Had he just hugged my mother and said, 'We're going to do what we can,' it would have been kind and reassuring. But he didn't. Even when we can't cure patients, we can still be healers with compassion."

The white-coat ceremony concluded with Mellman administering the Hippocratic oath, imploring her charges to exercise their art "in uprightness and honor," and solely for the benefit of their patients. Robert Kelly, president of New York–Presbyterian Hospital, offered some closing remarks.

"Those white coats that you put on just now felt a little clunky," Kelly said. "They felt a little big. But you will grow into them in the next four years."

— Thomas Vinciguerra '85CC, '86JRN, '90GSAS

Driving Lessons

ot long after you turn off the Maine Turnpike onto Route 3 East, which terminates by Acadia National Park and Bar Harbor, cell-phone coverage gets spotty and satellite-radio reception begins to fade. A couple of years ago I was driving that road with "Tangled Up in Blue" coming in off and on, when the passenger next to me asked, "Is this Bob Dylan?" I told him it was. "I thought so," he said. "It sounds terrible." Lucky for him, the satellite reception, as if on command, then died altogether. Lucky for me, that passenger was Kenneth N. Waltz.

Waltz '54GSAS, who passed away last year, was one of the most important international political theorists of the twentieth century. Anybody with even a fleeting interest in international affairs must grapple with Waltz's legacy, beginning with the book that sprang from his Columbia doctoral thesis: *Man, the State, and War*. His arguments have become a cornerstone of the study and the practice of international affairs.

In his influential thesis, Waltz laid out what history's greatest thinkers have identified as the three broad causes of war: human behavior, the internal structure of states, and international political anarchy. More than half a century later, Waltz's work endures because of its scope — in it, Waltz covers Augustine, Spinoza, Niebuhr, Morgenthau, Kant, Rousseau - and its particular emphasis on the absence of a global sovereign as a determining influence in world politics. Today, in the Middle East, Ukraine, and beyond, military force is employed, because, as Waltz wrote, "there exists no consistent, reliable process of reconciling the conflicts of interest that inevitably arise among similar units in a condition of anarchy." In later works, especially Theory of International Politics (1979), and as a professor at Columbia, Swarthmore, Brandeis, and the University of California at Berkeley, Waltz established his reputation as the founder of what became known as the "neorealist" school of international political thought.

I first met Waltz in January 2006 when I enrolled in his PhD political-theory seminar during the final semester of my master's candidacy at SIPA. I grew up on the Massachusetts shore north of Boston, and as a boy I frequently vacationed in Maine with my family. Given my New England roots, Ingrid Gerstmann, the business manager of Columbia's Saltzman Institute of War and Peace Studies, asked me in the spring of 2006 if I would be willing to drive Waltz and his wife, Helen, to their home on Maine's Penobscot Bay, and then stay with them for a few days.

All told, I made about fourteen trips with Waltz. Perhaps the thing I recall most vividly about our drives was the sense of relief we all shared when we pulled up to the house. This feeling was rooted not in stress but rather a collective sense of deliverance, of having finally arrived at a place of resplendent beauty, a beauty made more apparent after

the engine went silent, leaving only the lapping of the tide and the scent of salt air that swept in through the opening car doors.

A journey roughly nine hours and 458 miles away from Manhattan left plenty of room for conversation. We talked about Waltz's beloved Detroit Tigers and my beloved Boston Red Sox, and also thermonuclear intercontinental ballistic missiles and the perplexing inability of so many people to appreciate their profoundly stabilizing effects on world politics. Sometimes we just shook our heads and laughed.

Born in 1924, Waltz was blessed with a stunning memory that allowed him to recount his experience of twentieth-century America's defining moments, struggles, and personalities: growing up during the Great Depression; dating interracially at the height of Jim Crow; observing the dawn of nuclear policy in the thinking of Bernard Brodie; marking the lessons of Robert McNamara, Henry Kissinger, Vietnam, and Watergate; and assessing the impact of NSC-68 — a planning document that militarized the US policy of containment toward the Soviet Union — on the US military-industrial complex.

However much these conversations influenced my own thinking on baseball or international politics, our trips together frequently exposed a critical gap between us: music. While most people raise their eyebrows over Waltz's thoughts on nuclear weapons, the craziest thing he ever said to me was, "Who is Buddy Holly?" Given his reputation as a towering intellectual and devotee of classical music, I let this slide.

The stories that stuck with me most were those of Waltz's days in the United States Army in the South Pacific during the Second World War. Waltz's memories of the war were often tinged with exasperation at the magnitude of the destruction, the horror of the whole enterprise, and even a sense of wonder that the world managed to survive it. He was frank about the fear he and his fellow soldiers felt at the time, that they might have to take part in the invasion of the home islands of Japan. Then, one August day in 1945, as Waltz was riding in a troop ship, whispers began to circulate. Something happened in Japan. A bomb, a large bomb. The war is going to end.

In early May 2013, Waltz and I got together to plan yet another trip north. It turned out to be the last time I saw him. On May 12, 2013, having contracted pneumonia, Waltz passed away.

What I will always carry with me about Waltz is his disdain for warfare. Despite all that he understood about the tragic anarchic roots of conflict, Ken Waltz recognized how little good war does in the world. One need only glance at the headlines, or flip through the pages of some leading foreignpolicy journals, to see just how difficult a lesson this is for the world to learn.

— Dan Oleks '06SIPA

Grapes of Goth

mily Kate swirls a glass of red wine and deeply breathes in its fragrance. A small silver cluster of grapes hangs on a chain from her neck, flashing in the sun that is pouring through the atrium's towering wall of windows. Kate, who is a falconer and archer as well as an enologist, has just walked past some medieval tapestries, and is talking about the importance of their depictions of winemaking scenes. "Much of what we know about vintage in the early Middle Ages is confirmed by these tapestries," she says. "The main material for storage in the medieval wine industry was wood, as opposed to clay, and has since been destroyed, unlike the terra-cotta artifacts in the Ancient wing."

The more you hang around Kate, the more you get the sense of a kind of Gothic woman stuck in the modern world.

Kate, a Columbia senior majoring in medieval history, has been coming to the Metropolitan Museum of Art this summer for a Columbia class called Impressionism in New York. But today, sitting in the museum's Petrie Court Café, she has her own agenda. "I tell my college friends if they forget what to do in the middle of a tasting, just sing the kids' song 'Head, Shoulders, Knees, and Toes' and remember to go down your face the same way: eyes, nose, mouth," Kate says. She lists aroma characteristics — fruit, spices, and oak and stops on the word jamminess. "This just means jam, as in cooked fruit. When a grape is grown in an area that's too hot for that variety, it just tastes jammy!"

This morning, Kate stood in the Bothmer Gallery, among the Athenian vases and amphorae from circa 400 BC, monitoring Twitter for reactions to an article she'd written for the online magazine Grape Collective. Most people in the gallery were simply passing through, on their way to view mummies or the moderns. But hearing Kate's enthusiasm as she spoke about these blackand-rust-colored vessels made even casual wanderers come closer and listen.

"There were four different kinds of kraters used for mixing water and wine — they were rarely consumed separately," Kate said, gesturing toward the large vases behind the protective glass. "And most of the wine was terrible. Probably only the very rich would have wine that could be sipped without water." The water quality in the ancient cities was poor, and the wine acted as an antiseptic. "Everyone from babies to old people



drank wine all day long, just because it was the only thing available to drink."

Although this practice would never get the surgeon general's recommendation, it turns out the wine proclivities of the ancient Romans and Greeks were not so different from ours. For example, they liked to drink chilled rosé in the summer, though the chilling took some extra effort. Kate explained that in the winter the Romans would dig ditches deep in caves outside the city and pack them with snow and hay. When summer arrived, they would return to the caves and chip away at the ice blocks that had formed, shuttling the shavings down to the city for a steep price so people could cool their drinks. "The result was something like a wine slushy," Kate said. "Kind of like those Italian ices on the streets of New York City."

This is Kate's forte — linking our modern world with antiquity, using wine as a bridge. Back at the café, she thunks some musty library books onto the bar next to the cheese plate. "I love Butler Library — I can't go anywhere without my books." She pages through illustrations of hieroglyphs, which she recently used to decode information from Egyptian wine jars found in King Tut's tomb. "The ancient wine labels put

our modern ones to shame," she says, noting that often the jars would include the style of wine, type of grape, year, winemaker, king's reign, vineyard, and more. Kate, who works part-time in an Upper West Side wine shop, calls today's labels "confusing," and bemoans the lack of standardization in the contemporary wine world. The vessels from Tut's time offer historians a gold mine of data, including a star system to rank quality, and also a general sense of what the wine might have tasted like. Not so in today's typical wine shop, which is full of bottles with pretty art and few consistent details that allow you to compare one bottle with another. "You basically just have a bunch of bottles and no idea what's in them," Kate says.

Kate aims to go into cellar management — a kind of personal curatorial service for wine collectors — though her true love is winemaking. She first stumbled into a vineyard on a tour of the Italian countryside with her mother while taking some travel time off from Columbia. They stayed a few weeks in a pension with its own vineyard, where Kate experimented, mashing different grapes together and learning the process from the family. After that, she took wine-

making internships at vineyards in Australia and Long Island. "I was basically a farmer in a black cotton dress and big boots, since you get splashed all day," Kate says.

More recently, Kate has been engaged in what might be called wine activism. When a magnitude 6.0 earthquake struck the wine country of Napa Valley in late August, rupturing tanks and destroying barrels and bottles holding thousands of gallons of maturing wine, Kate sprang into action in a decidedly contemporary way.

"The cleanup and relief efforts needed to be organized quickly," she says. "Social media is especially important in the wine industry because it allows for this global group to connect instantaneously." From morning till midnight the day of the earthquake, she was busy on social media reposting images of the destruction from the winemakers' Facebook pages and encouraging those in the area to volunteer at the cleanup. She also instructed wineries in how to create their own crowdfunding accounts. "By the next day," she says, "many online support systems had been put into place, including a forum to match willing and qualified industry volunteers with wineries in need."

It's a long way from the Middle Ages. Back then, in the fall, wine drinkers would spill the remainder of their wine out in the streets in anticipation of the new vintage. "In contrast to today and antiquity," Kate says, "there was no such thing as aging wine, as it would readily spoil due to the medieval adoption of the wooden cask, which wasn't airtight like the ancient amphora."

As she completes her studies, Kate continues to sell wine and advise customers at Gotham Wines & Liquors, honing her tasting skills so she can one day spend solitary hours curating collections in dark caves and cellars. Which in some ways isn't so different from passing her days in Butler.

"This past year has been somewhat monastic," she says, giving her Malbec one last swirl. "But studying history is studying people. It is a type of companionship."

- Kelly McMasters '05SOA





Just south of Houston Street and west of Sixth Avenue, there's a three-block-long lane called Charlton Street. You may not have heard of it — as far as famous New York City streets go, it doesn't exactly rank at the top. In fact, in 2011, it was deemed so inconsequential that it was stricken from the subway map.

But it was here in 1776, on what was then a country estate, that George Washington made his Revolutionary War headquarters. It was to this land that Aaron Burr returned for breakfast after slaving Columbia College trustee Alexander Hamilton in 1804 (planned as Burr Street, it was re-christened after the duel in memory of Columbia trustee John Charlton). It was developed for the modern age by real-estate mogul John Jacob Astor, and later taken over by Tammany Hall bosses. And as New York became a center of industry in the mid-1800s, it was there, in a small loft on the corner of Varick Street, that a German immigrant named Henry Steinway founded what would become the most famous piano manufacturer in the world.

That is to say: it may be a small street, but Charlton is in many ways a microcosm of New York's history and economic development. It is undeniable that we're in another moment of shape shifting today, as New York expands its economy to make room for a robust "Silicon Alley." According to the New York Times, venture-capital investment in New York City totaled \$3 billion in 2013 alone. And Charlton Street — and Columbia — is in on the action.

This past July, on the corner of Charlton and Varick, Columbia president Lee C. Bollinger, New York City comptroller Scott Stringer, and the deans from Columbia College, Columbia Engineering, SIPA,

and the business school cut the ribbon for the Columbia Startup Lab, a 5,100-square-foot co-working space for recent-alumni entrepreneurs.

"It's a place where people can go to work on their projects in a protective environment," says Richard Witten '75CC, the former vice chairman of Columbia's Board of Trustees and the founder of Columbia Entrepreneurship, a new initiative out of Bollinger's office that supports student and alumni ventures.

The lab provides heavily subsidized yearlong leases for forty-five of those ventures (involving seventy-one alums total), which take up the ground floor of a building of communal workspaces designed by the startup WeWork. Its creation was a response, in part, to the changing job market and the interests of students and alums.

Columbia is no stranger to innovation; its alumni include John Stevens 1768KC, who pioneered the steam-engine locomotive; Edwin Armstrong 1913SEAS, the inventor of FM radio; and more recently Ben Horowitz '88CC, who together with Mark Andreessen has reinvented how venture capitalists nurture nascent startups. But the current trend of universities preparing students specifically for entrepreneurship is unprecedented. Whereas Columbians a generation ago largely invested their ideas in careers at existing companies, today many are coming to the University looking to go out on their own. Undergraduates entering Columbia can apply to live in incubator dorms. Many schools now offer courses on raising capital and drafting business plans. And CORE, the Columbia Organization of Rising Entrepreneurs, has become the largest nonpartisan, secular student organization on campus.

"In today's economy, inventors must also be entrepreneurs if their ideas are to become practical innovations in the marketplace," says Mary Boyce, the dean of the engineering school. "So, in training tomorrow's leaders, we believe entrepreneurship education and support are essential. With the Startup Lab, Columbia innovators now have a powerful home base for their businesses."

It is tempting to wonder if the next Facebook or PayPal will emerge from Charlton Street, but the lab takes a much broader view of entrepreneurship. It isn't just about building the next viral Web phenomenon or even about generating the biggest profit; it's about seeing a need in society and addressing it.

"Entrepreneurship is about solving problems," says Witten. "The solution can be a process, an invention, an algorithm, a thing that you can hold, a policy program. The important part is that there's been a translation, a practical application of a big idea. Something has happened that has turned a problem into an action. That goes right to the heart of the mission of a great research university. What are we here for if not that?"

The lab is the biggest and most visible initiative to date from Columbia Entrepreneurship, which is what Witten calls a "convening resource" for entrepreneurship efforts at the University. Witten says people across campus were certainly thinking about entrepreneurship before the organization's formation, but their efforts were "largely ad hoc, not tethered to the University." Columbia



"Entrepreneurship is about solving problems," says Witten. "The solution can be a process, an invention, an algorithm, a thing that you can hold, a policy program."

Entrepreneurship provides office hours and mentorship for student and alumni ventures, brokers collaborations between existing organizations, and advocates on behalf of Columbia to the city and state development corporations, among other projects.

A major part of Columbia Entrepreneurship's agenda has been bringing relevant programming to campus. Last April, it hosted #StartupColumbia, the first installment of what it plans to make an annual conference, which drew speakers like Geoffrey Canada, the founder of the Harlem Children's Zone, and Shazi Visram '99CC, '04BUS, the founder of the organic-food company Happy Family. The conference culminated in a \$50,000 business-plan competition. This fall, the group hosted a keynote address by technology entrepreneur and PayPal cofounder Peter Thiel.

At the lab, too, programming is integral.

"The working space is only part of it," says Chris McGarry, who is the Office of Alumni and Development's director for entrepreneurship. "We're bringing in workshops on branding, on raising capital, on legal structures. Well-established Columbia alumni experts are sharing their experience through workshops and office hours on a weekly basis. If you need help with search-engine optimization, strategic hiring, or introductions to key contacts, our alumni are lending a hand."

Not surprisingly, spaces for the inaugural year were at a premium. Columbia Entrepreneurship, along with representatives from the schools, received close to 150 applications for the seventy-one

spots. At last count, twenty-four of the forty-five teams had secured funding, and fifteen of those raised in excess of \$100,000. Five of the teams were profitable.

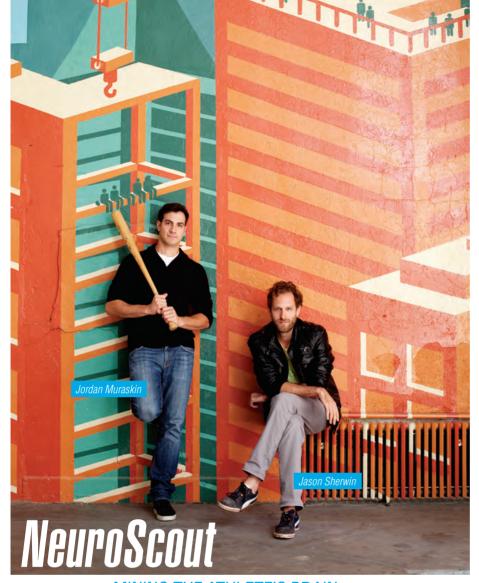
"We were looking for teams with passion and commitment, but also some kind of traction," says David Lerner, an adjunct professor at the business school and the director of Columbia Entrepreneurship. "Half of the businesses have funding, which means that somebody already believed in their idea and wrote a check."

Spending a day at the lab, it's easy to see why.

The space is movie-set perfect. A garage door opens from the street onto a lobby of café tables, plush couches, and pinball machines. On one summer-morning visit, a team that has developed a tool to help "denim-heads" find the perfect pants is stationed at a table with its wares: several pairs of perfectly distressed, hipster-friendly jeans. Inside, the rest of the teams are stationed at long communal tables, MacBook back to MacBook back. Superman-style phone booths line one wall for private calls, and around the corner is a kitchen flowing with free coffee and beer.

Phones buzz constantly, and teams scurry in and out of the corner conference rooms like hamsters on caffeine pills. Casual conversations over the microwave at lunch turn into serious debates about pitch strategy and coding languages. As the morning wears on, the whiteboard-lined walls fill with formulas and marketing plans.

"It's a special place," says Lerner. "Just wait until you meet the teams."



MINING THE ATHLETE'S BRAIN

The Columbia philosopher Jacques Barzun '27CC, '32GSAS famously wrote that "whoever wants to know the heart of America had better learn baseball." If that's true, Jordan Muraskin '14SEAS and Jason Sherwin are certainly doing their part. Their company, Neuroscout, looks at the national pastime through a new lens: the players' brain cells.

"Athletes make hundreds of split-second decisions in every game. Until now, there's been no way to measure how they do it," says Muraskin.

Take pitching as an example. The typical pitch in a professional or collegiate game crosses home plate just six hundred milliseconds after leaving the pitcher's hand. In that time, the batter has to recognize what kind of pitch he's facing, decide whether to swing, and make contact.

"What we've learned is that athletes have different neural signals than people who don't play sports. At Neuroscout we're able to measure those signals, decode them, and give a value that can inform player development, player scouting, and performance enhancement," he says.

They're doing so using electroencephalography, or EEG, technology which, through a safe, radiation-free metal conductor that sits on the scalp, can measure the electrical pulses that make the brain work. Using either a simulated or a live pitch, Neuroscout can pinpoint the exact millisecond when a player recognizes a pitch and when he decides to swing.

"There's a lot of talk in scouting about a player's eye," says Muraskin, "but it's all based on post-game stats. We're trying to get at why those stats exist." Muraskin and Sherwin think that their technology will be useful in sports training programs — once a player knows that he can recognize a curveball from forty feet away, he will be better able to adapt his swing to that timing. Similarly, this data might help a pitcher understand if he's signaling too early the kind of pitch he's about to throw. Muraskin hopes that eventually they'll be able to expand their company to the consumer market so that players will be able to get their neural profiles as early as Little League.

Though Muraskin has always been an athlete, baseball was the last thing on his mind when he entered a PhD program in biomedical engineering. Muraskin, who also holds a BS from Columbia Engineering, was focusing on Alzheimer's and aging research. At Paul Sajda's Laboratory for Intelligent Imaging and Neural Computing, he met Sherwin, who was spending a postdoctoral year working with musicians, studying how their brains differed from those of non-musicians. One particular experiment, which tracked how trained musicians reacted to changes in pieces that they had learned, resonated with Muraskin, who wondered if they could use similar techniques to think about athletic responses.

"There was no 'aha' moment. As we talked further about our research, we could just see this being the next step," he says.

"It feels like a homecoming for me," says Sherwin, who played baseball in high school. "I was always trying to think of ways to up my mental game."

Neuroscout is currently raising capital and working to expand their database of players. They'll be working this fall with the Columbia football team, as well as some "fall ball" affiliates of Major League Baseball. Eventually, though, they see even broader implications for this kind of analysis, including for military and law enforcement, education and child development, and even human-resources departments.

"Who knows?" says Muraskin. "Plenty of companies are already doing psych analyses and profiling. Can neuro-profiling be that far behind?"

Sailo LAUNCHING A THOUSAND SHIPS

It's early on a Wednesday morning, and Delphine Braas '14BUS and Adrian Gradinaru '14BUS are catalog-ready in matching nautical navy T-shirts, clutching WeWork coffee mugs, and eager to talk about their boat-rental company, Sailo.

"It's like Airbnb for boats," says Braas.
"With a little bit of Uber thrown in," says Gradinaru.

"And Yelp . . .," adds Braas.

"So, it's kind of like the best of every start up . . . "

"But for boats!"

Indeed. It started, Gradinaru says, when he went on an enviable trip with his Columbia Business School cohort: a week sailing between the Greek Islands.

"It was something I'll never forget," he says. "The views, the time with my friends. It made me really want to keep sailing."

But when he returned to New York, Gradinaru realized that it wasn't so simple. He didn't have a boat, for one thing. And there wasn't an easy way to rent one — it involved contacting individual marinas, which generally didn't do a brisk rental

business. Even if he were able to find one, he wasn't experienced enough to take a boat out on his own.

Through his research, though, Gradinaru learned that there was no shortage of vessels out there; more than fifteen million privately owned boats — both powerboats and sailboats — were sitting at marinas, and were only used roughly 5 percent of the time. Boat owners were unlikely to rent their expensive equipment to a novice sailor, but recruiting a stable of Coast Guard–licensed captains solved that problem, and made it possible for potential customers to use the service regardless of experience.

Gradinaru had the technical skills to begin developing the idea into a website; before coming to Columbia, he had earned a master's in engineering from Stanford and spent a decade at tech startups in Silicon Valley. A Columbia Business School course on launching new ventures helped him to structure his business plan, and he didn't have to look far to fill in the rest of his team.

"I think we first met at a cocktail party for European students," said Gradinaru, a Romanian national, of Braas, who is from Belgium. A veteran of the hospitality industry, Braas was president of the Columbia Entrepreneurs Organization.

"After working at Nestlé and other big companies, I came to Columbia knowing that I wanted to work at a startup, but I didn't have a concept of my own," she says. "I interned at several before Adrian approached me with his idea."

The two clicked, and Braas took over marketing and customer acquisition. They were joined by a third partner in January, who worked full-time while Braas and Gradinaru finished their degrees. By August, they were beta-testing the site, which matches boat owners, customers, and captains through what Braas calls a three-sided platform. Boat owners and captains will advertise their services through the site, and as on the popular vacation-rental site Airbnb, they are also responsible for setting the price. Customers can then browse through the offerings and find a good fit for their needs, guided by a Yelp-style user-review feature.

"Boating has the reputation for being an elitist activity," says Braas, who expects that a typical outing would cost between \$100 and \$150 per person per day. "We don't think it has to be. These are prices that some people would pay for a nice meal, or going out after work."

Sailo is currently based only in the New York area, but as the company grows, Gradinaru and Braas hope to move south for the winter to popular boating destinations like Florida and the Caribbean. For now, they're putting in eighteen-hour days at the Startup Lab, recruiting clients at boat shows and other events, and securing investors.

"It doesn't even feel like a job," says Gradinaru. "Everyone here is trying to build something, and they believe in it completely. I've got no complaints."

Well, except for one thing.

"Given that I started this company to make it easier for me to go sailing," he says, "I haven't had time to go out on the water."



Nearly two years after Hurricane Sandy pummeled New York, many of the thousands that the storm displaced are still homeless, seeking benefits, and otherwise feeling the effects of the region's deadliest and costliest storm.

Tyler Radford '12SIPA thinks he can help.

When the storm hit, Radford was a newly minted master of public administration volunteering for the American Red Cross. He was disillusioned by the logistical nightmare of disaster relief: though there was a tremendous outpouring of support — more than \$575 million in donations for Sandy alone — Radford found that it wasn't easy to get the money into the right hands.

"Navigating the web of assistance from FEMA, insurance companies, relief agencies, and private donors was daunting," he says. "Survivors were relying on word of mouth to find programs that they might be eligible for. At the same time, the agencies were all trying to reinvent the wheel. It was frustrating for everybody."

In response, he and two of his fellow aid workers developed RecoveryHub. Currently the Columbia Startup Lab's only nonprofit venture, it is an online platform that connects donors, relief agencies, and survivors after a natural disaster.

"Remarkably, RecoveryHub is the first and only site to bring these groups together," says Radford. "We wanted to empower both sides with the tools and information needed for a faster and better recovery."

In addition to aggregating resources and information, RecoveryHub will eventually have an innovative wish-list feature, which Radford hopes will lead to a more efficient use of resources. Through the site, organizations will post lists of specific things they need and projects they hope to fund. Donors can then browse these lists and decide exactly what they want to support.

"So, instead of just clicking the donate button and giving \$10 or \$20 to a big organization, donors now have the option to choose projects, locations, and organizations that resonate with their own interests and beliefs," Radford says.

Radford plans to launch the site in New York in the next few months, focused on the Hurricane Sandy survivors still in need of assistance. The national site, which won't be tied to any specific relief effort but equipped to handle whatever might happen in the future, will launch in 2015.

In the meantime, whenever Radford can get out of the lab, he's spending his leisure time in a place that someone in his line of work might not find relaxing; the outdoors.

"I've been working in disaster relief



Shareswell

REINVENTING THE WEDDING REGISTRY

When Emily Washkowitz '14BUS and her fiancé got engaged, they were thrilled to have so many family members and friends wishing them well. Unfortunately, they were all doing so in the same way: by giving the couple toaster ovens. In the months leading up to their summer wedding, the couple received six, when they hadn't even wanted one.

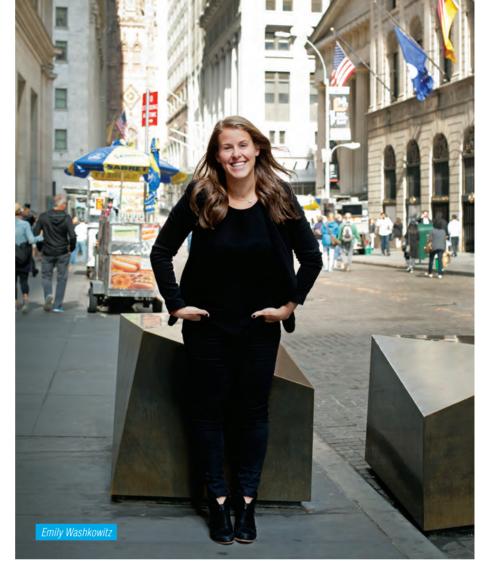
"Let's be honest," she says. "It's 2014. We were already living together. We already had a way to make toast. What we really wanted was to save for the future."

Washkowitz felt sheepish asking guests for cash, though, and she wasn't alone. When she found only a trashcan and a spoon left on a friend's registry, the friend admitted that she also didn't really need any more household items. She had only registered for them so that she could return them, and use the cash for a nest egg.

"I figured that there had to be a better way of meeting the needs of modern couples," says Washkowitz.

In April, she launched Shareswell, a website for giving and receiving stock. In its initial incarnation, users would create a registry for their special event (wedding, baby shower), listing different stocks that interested them. Friends and family could then choose which stocks and how many shares to give, with the option of adding a cash gift that a recipient could apply toward a more expensive stock. In August, Washkowitz added a feature that allows gifters to use the site without a registry; she says that she expects more customers to use the site that way as wedding season dies down and the holiday season begins.

Shareswell isn't a broker-dealer, so recipients need to have a brokerage account to



facilitate the stock trades, but the site aims to make that process as simple as possible. There's a list of approved brokers so that new investors can open an account and integrate it into their registry in one step.

"We wanted to provide a user-friendly entrance into the world of investment," she says. "People are easily intimidated by anything financial. This platform makes it simple."

Washkowitz knows this firsthand; though she was a student at Columbia Business School when she started Shareswell, she does not have a financial background.

An art-history major, Washkowitz made the rounds interviewing at galleries and museums when she graduated from Harvard in 2008, and then took a leap of faith, signing on to work at a fashion startup called StyleCaster. She grew from marketing associate to director of client services over her four years there, and learned

what it took to start a business. But Wash-kowitz also felt there were gaps in her education that made it hard to succeed in the startup world.

"I was on the phone with one of our investors, and it just hit me that I was faking it. I didn't know enough about the financial side," she says. "That's when I decided to go to business school."

Still Shareswell's only employee, Wash-kowitz is now focused on hiring, fundraising, and making the first round of improvements to the site. There's still plenty to polish, but she says that she and her husband are proof enough of early success. They closed all their traditional registries when the site went live and directed guests to Shareswell. By their June wedding, they were managing a healthy financial portfolio, including shares of companies like Apple, Twitter, Nike, and Chipotle.

BoardRounds

UPGRADING FMFRGFNCY CARF FOR THE MOBIL F AGE

According to the Centers for Disease Control and Prevention, there are close to 130 million emergency-room visits in America every year. For many people, these visits are the only time they will see a physician.

As a medical student at Cornell, Benjamin Jack '07SEAS became fascinated with the revolving door of emergency medicine, and specifically with what he perceived as the significant problem that ERs had following up with patients and ensuring that they took the next step in their care.

"When patients get discharged from the ER, they leave with a piece of paper that tells them what to do next," he says. "Eighty percent of them don't understand the instructions and don't get the care that they need."

He found that patients who didn't take control of their post-discharge care became a strain on hospitals and insurance companies. The less vigilantly a patient continued his care after leaving the hospital, the more likely he was to quickly get sick and start the cycle again.

It seemed that only human intervention would help, but the caseloads of ER doctors are far too heavy for them to follow up individually with each of their patients. Jack wondered what would happen if a third party got involved.

Jack teamed up with Aditya Mukerjee '12CC, who had a degree in computer science and a few years of startup experience under his belt. As Jack finished his last year of medical school (he graduated in May), he and Mukerjee developed the idea for BoardRounds, a cloud-based service that identifies and arranges post-discharge care for emergency-room patients. Doctors using BoardRounds will be able to enter a patient's information and follow-up instructions into their system. From there, BoardRounds will contact the patient and handle the logistics of the next steps.

"Let's say a patient is diagnosed with asthma and instructed to see a pulmonologist. BoardRounds would be able to make the appointment, arrange for transportation to the appointment, and send reminders about the appointment," Jack says.

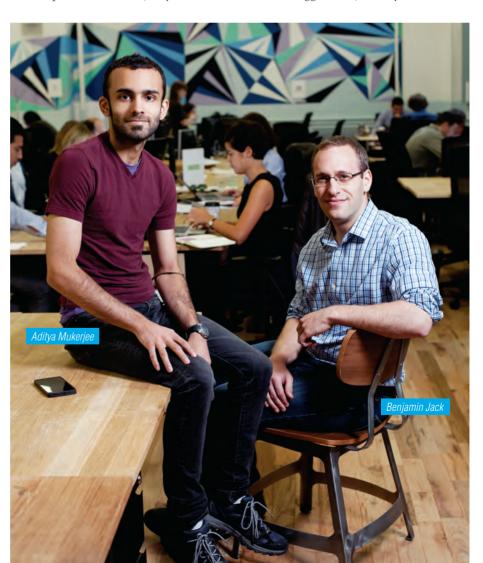
The service doesn't stop with the actual medical care. BoardRounds also works with insurance companies to provide interventions for patients, and provides detailed analytics to hospitals and providers about patients' post-discharge behaviors, such as appointment completion rates.

"We wanted to make sure that we were always looking at the bigger picture. The analytics piece helps our providers see that as well," Jack says.

With their software mostly complete, Jack and Mukerjee are focused on raising money and forming partnerships with hospitals and medical providers. To date, they have raised more than \$300,000 in seed capital, with backing coming from the Dorm Room Fund — a student-run venture firm that invests in student-run companies — among others. The system is already in place at a major New York City hospital and a dialysis-care center, with new partnerships imminent.

Jack didn't start his medical training intending to go into business, but he is unusually qualified to do so; before starting at Cornell, he studied applied math at Columbia and worked for two years in finance. Though he hasn't ruled out practicing medicine at some point, he says that this feels like the best use of his skills right now.

"I went to medical school to save lives. That's our mission at BoardRounds, too, but on a bigger scale," he says.





Sarah Robinson '13BUS doesn't have any children yet.

"My husband and I got two consecutive MBAs," she says. "Those have kind of been our babies so far."

But when the time comes for her to start thinking about it, it's safe to say that no one will be more prepared.

Robinson is the founder of Preconceive, a website that helps women navigate fertility treatments. The site, now in beta-testing, will compile medically vetted original content on fertility, provide community groups for people to share information and emotional support, and employ a network of trained professionals to answer questions on a variety of subjects.

"It started at a dinner party full of professional women. Everyone seemed to have questions about babies, and about conception. Some of us were struggling to conceive, and some of us knew we wanted children but weren't ready to start trying for a long time," says Robinson.

Robinson's friends were lucky; one of their fellow dinner-party guests was an ob-gyn, who quickly became the group's go-to resource.

"Sadly, not everyone has such a convenient friend," she says. "There's a world of information out there, but without someone knowledgeable and trusted, it can be really hard to navigate."

Robinson began to research fertility websites, and found that there was no reliable, centralized site that helped women dealing with these issues. More importantly, while they offered information, none of the online resources connected users with people that could actually help with problems. "We're going to have a stable of experts on hand to answer individual questions," Robinson says, "from licensed psychologists to help navigate the emotional side to professionals who can advise on how to fast-track insurance reimbursements."

As a Columbia Business School student, Robinson had no experience working in health care — she spent most of her early career in fashion relations at MAC Cosmetics. She was interested in getting involved in a business in its early stages, though, and knew that she wanted to focus on something more relevant to the next stage of her life.

"Fashion felt right for my twenties, but these are the things that my peers are talking about now, and that soon I'll be thinking about," she says.

Robinson got involved with the business school's Eugene Lang Entrepreneurship Center, and when she graduated last year was

given a desk in their co-working space, which has since been absorbed into the Charlton Street lab. Her year there cul-

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minated with a strategy competition, which Robinson won. She's now using her prize — strategy sessions with a consulting firm — as well as the resources of the new lab to do a soft launch of her site, with an anticipated full launch planned for the winter.

"The atmosphere in the lab is a little different from Paris fashion week," she says. "The dress code is way more comfortable."





Streams Echoes

The long musical journey of Chou Wen-chung

By Tim Page

hou Wen-chung vividly recalls the first time he felt the transformative power of music. It was the 1920s. He was a boy in Qingdao, which was not yet the gigantic metropolitan area of 8.5 million people that it is today, though it was already one of China's busiest cities.

"I must have been about four years old," says Chou '54GSAS, who turned ninety-one this past June. "I had just begun to be aware of things, walking around freely, on my own, in our big garden. I heard sounds coming from the small house where the servants were — they'd left the door open and I was awfully little and they didn't seem to mind that I came in. There they were, a handful of people, male and female, laughing and drinking a very cheap form of alcohol called kaoliang. They were playing instruments and singing, and I saw that they were happy and relaxed. I understood right away that these sounds were something through which you could express your happiness."

It was the sort of epiphany that can lead to a life in music. After his family moved to Shanghai in 1937, Chou, then fourteen, was walking by an international newsstand and saw a headline announcing the death of Maurice Ravel.

The news shocked him: it had never occurred to him that a composer could be *living*.

"I thought composers were a gift from nature and that music was written by dead people, because every composer I had heard of, Chinese or Western, was dead," Chou says. "And I thought, 'Could I become a composer? How wonderful!' After that, I was fascinated, and this is how I dared, with my kind father's permission, to begin studying composition a few years later."

Chou came to the United States in 1946 as a young refugee from the Second World War and the succeeding battles for power in China. He was awarded a graduate fellowship to study architecture at Yale (he had taken a degree in the subject back home at Chongqing University) but dropped out before the semester was finished and came to New York to study music at Columbia in 1952. "I knew at that point," he says, "that I would either be a composer or have a very unhappy life."

Chou is a gentle, courtly man who exudes warm interest and kindness. His music, which ranges from settings of early Chinese poetry to masterly string quartets and a haunting cello concerto, combines Western modernism with Eastern styles and sonic textures in a manner that is personal, organic, and beguiling.

The postwar period was remarkable at Columbia. Chou took his master's degree with the composer Otto Luening

Streams and Echoes

at just the time when Luening '81HON and his colleague Vladimir Ussachevsky were engaged in a collaboration that would lead to the birth, in 1958, of the Columbia-Princeton Electronic Music Center, the first such institution in the United States. The center began as a means of experimenting with sound on recording tape, and later ventured into the development of computer music and written music for synthesizers.

Chou came to know some of the most interesting cultural figures of the day. His first finished composition, *Landscapes*, an orchestral setting of three Chinese songs, received its premiere with the San Francisco Symphony in 1953 under the direction of Leopold Stokowski. His several residencies at the upstate New York arts colony Yaddo led to a collaboration with the poet Ted Hughes based on *The Tibetan Book of the Dead* and to a lifelong friendship with the novelist Dawn Powell.

But he formed his most significant professional relationship with the modernist composer Edgard Varèse, who described his own music as "organized sound" and defined "noise" simply as any sound one didn't like. Whether Varèse was writing for solo flute (*Density 21.5*) or for a percussion orchestra with bass drums, chimes, piano, glockenspiel, anvils, sleigh bells, and high and low sirens (*Ionisation*), the influence he exerted on such varied admirers as Pierre Boulez, Milton Babbitt, Frank Zappa, and John Zorn was enormous.

Chou met Varèse in 1949 and became his student and assistant as the older composer was creating his last works, such as *Déserts* (1954), for wind instruments, percussion, piano, and magnetic tape, and *Poème Électronique*, an eight-minute work for tape alone that was commissioned for the Brussels World's Fair of 1958. Scholars who seek out Varèse's manuscript of *Déserts* will find Chou's meticulous, unmistakable handwriting.

Chou returned to Columbia in 1964 to teach composition, which he continued to do for twenty-seven years, succeeding Luening as principal instructor in musical composition in 1969. He implemented the college's music curriculum and was in charge of academic affairs at the newly created School of the Arts.

After Varèse died, in 1965, Chou completed the master's last piece, *Nocturnal*, for soprano, male chorus, and orchestra (it would be performed for the first time in 1968), and began to edit scores dating back to 1918. As Varèse's most celebrated pupil, Chou has remained a busy proselytizer for his master's work, and he has lived for the past four decades in the same Sullivan Street house in Greenwich Village that Varèse bought in 1925.

In October, a "Composer Portraits" concert at Columbia's Miller Theatre paid homage to Chou. The program was devoted mostly to his later music — the *Ode to Eternal Pine* (2009), the String Quartet no. 2 (2003), and *Echoes from the Gorge* (1989) — and was played entirely by the Brentano String Quartet, the New York New Music Ensemble, and the Talujon percussion quartet, the groups for which it was written.

"He's just an amazing figure, and he has had a huge influence on so many musicians," says Melissa Smey, who is the executive director of the Miller Theatre and the Arts Initiative at Columbia. "I met him when I was an undergraduate flute player at the University of Connecticut, and I found his work *Cursive* for flute and piano. His lovely spirit comes through in his music, and then you meet him in person and all your preconceptions are validated."

The Miller Theatre, known for its contemporary-music programming — and which, in its earlier incarnation as McMillin Theater, was where many of the first American performances of early electronic music received their premieres — has been presenting six to eight Composer Portraits every year. "We knew a couple of years back that Chou's ninetieth birthday was coming up in 2013, but sometimes it takes a little while to put things together," Smey says. "But then I started talking to Fred Lerdahl and it all came together."

Lerdahl, the Fritz Reiner Professor of Musical Composition at Columbia, has known Chou since the mid-1970s. "The world I've lived in is due to his efforts," Lerdahl says. "I worked with him at Columbia in 1979 as a junior professor, I went away and then came back, and now his professorship is my professorship.

"Throughout it all, he's been a wonderful colleague — very kind, polite, and gracious. Varèse recognized his great idealism and great musicality immediately and, like Varèse, there was nothing superficial about him, and he always wanted to do things his own way. So they understood each other. In my opinion, he is writing the best music of his career right now, in his nineties!

"I'm glad the Miller programmed a percussion piece — he's always been so very specific with students on how and where to hit the gong," Lerdahl continues. "His string quartets are among

In Chinese music, Chou says, "you don't start with melody and counterpoint and find what you will find. Instead, you have to think of the whole piece — right away! — including density and color and stress, and then do your best to bring it to life."

his best pieces — I would have liked to have programmed them both, but it would have been an enormous concert, and we wanted to present the *Ode to Eternal Pine*, which is so pretty and poetic."

It would be reductive to suggest that Chou writes "Chinese music," but there is no escaping the influence his native land has had on his work. Lerdahl says that Chou felt a "moral duty to help renew China" after the excesses of Mao Zedong and the Cultural Revolution. As such, he has visited China several times, and he arranged to bring a number of Chinese-born composers to study at Columbia, among them Bright Sheng '93SOA, Chen Yi '93SOA,





Tan Dun '93SOA, Chinary Ung '74SOA, and Zhou Long '93GSAS, who won the Pulitzer Prize for music in 2011 for his opera *Madame White Snake*. His wife, Chen Yi, was one of three finalists in 2006. Bright Sheng has been a Pulitzer finalist twice, in 1989 and 1991.

Chou had been looking forward to visiting China again this year, but he became sick a few days before he was scheduled to leave. "I was last there about three years ago, and I was so looking forward to going back," Chou says. "I wanted to go to Shanghai and hear a new piece of mine, as well as participate on the editorial committee for the most important music journal in China. But I have a heart condition now, and so I asked five specialists whether I should go and they all voted it down. It was a deep disappointment."

He brightens when the discussion turns to a new work that he is finishing for performance next year in San Francisco. "I'm still struggling between naming it in Chinese or English," he says. "But the main point is that the producer wants it and wants me there, so I hope I'll be well enough to attend."

By way of describing the piece, and the difference between Western and Eastern music, Chou invokes one of his great interests: calligraphy.

"It is part of the soul of the Chinese people," he says. "And it's very different from Western languages, which are derived from Greek and Latin and fundamentally built on an alphabet. In China, the written language" — built on ideograms — "was developed earlier. Long before the Romans, we invented paper and the use of ink. You would write with the ink and a stick as your brush. It's a free sort of writing where you decide whether to make a point or a brushstroke, or whether you want the finished work to be light or dark. You can be very fussy — but it has nothing to do with an alphabet.

"What I mean is that this is a *total process* for the composer. In Western music, you might start with a melody, and by and by you will have two or three or four melodies together, which turns into counterpoint, or, if you look at them all vertically, into harmony. Step by step you build the piece that way." But in Chinese music, Chou says, "you don't start with melody and counterpoint and find what you will find. Instead, you have to think of the whole piece — right away! — including density and color and stress, and then do your best to bring it to life. It's a huge and fundamental difference between the thinking in China and in the West."

Long before "world music" became a popular genre, Chou was creating his own distinct hybrid of sound. Yet for all his innovations, and for all the boundaries he has crossed, he considers himself a "deeply rooted" composer.

"Suppose you are driving and you get lost," he says. "In that case, you shouldn't just look forward and keep driving to find out where you should go. Instead, you should think about where you

came from and how you came to be here, and there you will find the answer. I've spent a lifetime involved with education, and

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sometimes I'm disappointed by my colleagues who all want to see what will be 'next' — the next trend, the next technology.

"I'm not saying that the future is unimportant — not at all! But after two world wars and countless other conflicts, we need to learn from our pasts and carry that information with us as well. Our faith in the future is nothing unless we know the past."

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THE PROFESSOR'S LAST STAND

COLUMBIA
HISTORIAN
ERIC FONER
IS GIVING HIS
LECTURES TO
THE PUBLIC
— AND TO
POSTERITY.

BY DAVID J. CRAIG

ost academics were critics of the Iraq War. There's no question about that. Most saw it as a needless war, a war brought about by blundering politicians, a war clothed in the language of freedom but completely crass and reprehensible in every way. And now there's a whole spate of books that view the Civil War through this lens."

Eric Foner '63CC, '69GSAS looks up, his soft eyes peering over the top of his tinted glasses at the nearly 250 undergraduates crammed into an auditorium of the International Affairs Building on a rainy Wednesday afternoon. The seventy-one-year-old Columbia professor, widely regarded as the most important Civil War historian of his generation, is nearing the end of one of his favorite lectures for the final time. A dozen or so graduate students, alumni, and local retirees are standing at the back of the auditorium; many chose to audit the course upon learning that Foner will soon retire.

"What do we make of this?" he asks.

For the past hour, Foner, speaking in a folksy tone with a hint of a Long Island accent, has been discussing how historical interpretations of the Civil War have evolved over the past 150 years. He has focused specifically on moments when historians have challenged the idea that the Civil War was morally justified and necessary because it led to the emancipa-

tion of four million slaves. These challenges were particularly pronounced in the 1930s and '40s, he says, when many historians, shocked by the apparent pointlessness of World War I, projected their disgust back onto the Civil War, seeing not a principled fight over slavery but merely a clash between industrial and agrarian economic interests.

"World War I discredited the idea of linking war with high, noble rhetoric," says Foner. "Historians came to feel that explaining war in large abstract terms tended to dignify it."

Similarly, the work of many young Civil War historians today gives the impression that greed, hatred, and vengeance were the main drivers of the conflict, and that if only cooler heads had prevailed, politicians might have resolved their differences at the negotiation table. This strikes Foner as naive. Few seasoned scholars, he says, believe that Southerners would have given up their slaves anytime soon without a fight.

"I think if you're going to say the war was unnecessary, you have to have an alternative scenario that would have led to abolition," he says. "And I have never seen it. I have never once seen a plausible scenario for the peaceable end of slavery."

He looks down at his notes, and paraphrases W. E. B. Du Bois: "War is murder, force, and anarchy. Yet sometimes it produces good."

PHOTOGRAPHY BY ASHOK SINHA

THE PROFESSOR'S LAST STAND

Another pause. "Somehow we have to find a historical stance that can take into account all these things."

The moment is quintessential Foner. Reading history, his lecture would suggest, requires us to look at the past from all angles, yet to not lose sight of clear moral truths. To test our assumptions without sliding into relativism or intellectual gamesmanship.

It's a moment soon to be relived thousands of times over, on computer screens around the world.

CALL IN THE CAVALRY

"Like any theatrical production, a lecture is not forever. You perform, and it's gone. At some point I realized that I wanted to preserve a little bit of this."

That's how Foner describes his decision to turn his Civil War lectures into an online course that is now available to anyone with an Internet connection, for free, on the distance-learning site edX. After thirty years at Columbia, Foner decided a couple of years ago that he would wind down his teaching and retire in 2016. And as he prepared to teach his signature course for the final time last spring, he realized that he wasn't ready to consign his lectures to history.

"Teaching is actually what I spend more time on than writing," says Foner, the author or editor of twenty-four books, including The Fiery Trial: Abraham Lincoln and American Slavery, which won the 2011 Pulitzer Prize for history. "When you do it well, I think you can reach people in a very direct and powerful way."



Columbia videographers shot hours of footage of Foner working on the Morningside campus for inclusion in his massive open online course.

In the summer of 2013, Foner approached a team of Columbia multimedia specialists about the prospect of documenting his lectures. His request was simple: record them and post them online for anyone to watch. The specialists, based at the Columbia Center for New Media Teaching and Learning (CCNMTL), had a more ambitious idea. They had recently begun working with a handful of Columbia professors to create the University's first massive open online courses, or MOOCs, which are free Web-based courses that enroll enormous numbers of people, sometimes tens of thousands or more. MOOCs had become popular rather suddenly the year before and represented a radical experiment in higher education. Whereas online courses offered by colleges and universities previously had enrolled no more than a few hundred students at a time, thus allowing students to have personal contact with their instructors, albeit over e-mail or videoconference, MOOCs were too big for that: students in a MOOC could expect to communicate with an instructor only in chatrooms open to thousands of people and to be evaluated by computerized multiple-choice tests. Few colleges give academic credit for taking MOOCs. The upside is that huge numbers of students get access to a top-notch professor, typically from an elite university, who leads them on a semester-long intellectual journey that in many ways mirrors the experience of taking a traditional college course.

"If you can't afford college, or if you're simply curious what it's like to enter an Ivy League classroom, now you can do it," says Maurice Matiz, the director of CCNMTL. "There is a profound democratizing effect here."

To Foner, the prospect of getting involved in a high-tech teaching experiment in the twilight of his career held no small amount of irony. Although a dynamic teacher — engaging, sharp-tongued, and at times wickedly funny — he's not technologically savvy. His idea of a multimedia presentation is taking a newspaper article out of his jacket pocket, uncrumpling it, and reading it aloud.

"It's almost absurd that I'd be doing this," says Foner. "I'm not on Facebook or Twitter. I still write with piles of paper around me. I'm one of the few professors at Columbia who doesn't let students use laptops in class. I think they're distracting. They can take notes by hand like it's always been done."

And yet a MOOC, Foner realized, suited his situation perfectly. Because it would be largely automated, he could oversee its operation in just a couple of hours a week until he retired; thereafter, someone else could take over the responsibility of moderating the course's discussion-board and chatroom conversations, enabling his virtual self to teach on forever.

"This could eventually reach far more people than have ever read my books," he says. "How could you say no to that?"

LET'S ROLL

Following a couple of brainstorming sessions last fall, Foner and his new CCNMTL colleagues agreed on the basic form his MOOC would take: it would rely on video footage of Foner's

LECTURES ON YOUR LAPTOP

THREE YEARS AGO, nobody outside a small circle of distance-learning experts had ever heard of MOOCs.

Since then, these "massive open online courses" have shaken up the world of higher education, removing barriers to access and provoking intense debate about the promise and limitations of distance learning.

An estimated fifteen million people globally have enrolled in one of these free video-based Internet courses, which are, as their name suggests, massive in size and open to anybody, regardless of his or her academic background. Most MOOCs are produced by elite universities as a way to showcase their best teachers and are hosted by outside Web companies that agree to share any revenue they generate—such as by selling certificates to students who complete them. But few MOOCs have generated enough money for universities to even recoup the cost of making them, in part because they have low completion rates and because the value of the certificates is unclear.

"The main reason you create MOOCs is to enable faculty to share knowledge with people who might have no other way of accessing it," says David Madigan, the University's executive vice president and

dean of the Faculty of Arts and Sciences. "That's front and center. It's part of our service mission. But there are side benefits. We've found that some people who take our MOOCs end up enrolling in Columbia degree programs, for instance. There's also the fact that whenever you experiment with new methods of teaching, you stimulate creative thinking and introspection among the faculty about how they might improve the learning experiences of all of our students — whether on campus or online."

About a dozen Columbia professors have made MOOCs so far. In addition to historian Eric Foner, they include economist Jeffrey Sachs, physicist Brian Greene, virologist Vincent Racaniello, and computer scientist Michael Collins. Most of these MOOCs have been produced in-house by the University at a cost of anywhere from \$10,000 to \$150,000 apiece. (A few MOOCs starring Greene have been produced and paid for by his own World Science Festival.) The courses have provided free instruction to some 650,000 people around the world, with less than 5 percent of them finishing a course — a completion rate that may sound deflating but is in line with industry trends.

"Naturally, since MOOCs are free, a lot of people will try out a course and then opt out if they decide it's not for them," says Maurice Matiz, the director of the Columbia Center for New Media Teaching and Learning, which produces the University's MOOCs.

According to Madigan, the University is likely to continue producing a "moderate number" of MOOCs each semester for the foreseeable future. This is among the recommendations soon to be issued by a faculty task force on online education that Columbia convened last year and that Madigan chairs; the task force is now preparing a full report to be released this fall.

"Some universities are producing tons of these courses, and others none at all," he says. "Columbia is treading a middle ground. We want to be selective, developing MOOCs for faculty who are at the very top of their fields and also exceptional teachers. That's the sweet spot, when you're offering the world something that's totally unique."

Learn more about Columbia's MOOCs and other online programs at online.columbia.edu

actual lectures (some MOOCs are made in a recording studio, with a professor speaking directly into a camera), edited into roughly ten-minute segments, with supplemental video clips, multimedia features, and quizzes dispersed among them. While any member of the public could access the content at any time, people who enroll in the course would be encouraged to watch the lectures and do the assigned readings at a designated pace — over a ten-week period — so they could discuss what they were learning together.

"We can't possibly grade thousands of papers, right? OK, so that's a drawback — the lack of writing. But in other ways, we want to give people an experience that is as grueling as they want it to be," says Tim Shenk '07CC, a history PhD candidate who is Foner's head teaching assistant and who would work closely with the CCNMTL team in developing the course's online version. "One key to that is creating a sense of community online so that

people feel that they are part of a collective experience, and so that they can challenge, question, provoke, and support one another."

This past January, a team of producers from CCNMTL got started on the hard work. They lugged cameras, tripods, lights, and microphones to Foner's class every Monday and Wednesday afternoon, recording his lectures in high-definition video. They filmed weekly discussion sessions in which small groups of students debated the week's readings with Foner and his teaching assistants around a conference table. And they shadowed the professor on trips to local archives, filming him as he examined Civil War–era artifacts.

"The closest thing I'd ever done to this was help curate a museum exhibition," says Foner. "As a historian, I'm not used to working collaboratively. When I'm writing books or preparing lectures, I organize the information any damn way I want. It was interesting to learn a new medium."

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Still, Foner approached the work with some trepidation. He had questions about the way his MOOC could be used, questions that echoed a larger debate playing out across the world of higher education. Many educators foresaw a time when colleges and universities would issue credits to students for taking MOOCs, even those produced at other institutions. Some of the more messianic proponents of distance learning thought this would bring muchneeded efficiency to higher education, allowing colleges to trim their teaching budgets and thus rein in spiraling tuition costs, all while giving a broader swath of students access to the very best teachers. Skeptics feared these online courses would provide a watered-down education, with students at cash-strapped public institutions denied the face-to-face time they needed with human instructors, whose numbers would be decimated. Foner, like many professors creating MOOCs, recoiled at the idea that his effort could put fellow academics out of work.

"I'm old-fashioned enough to think that the only way to get a serious education is to be in a room with other human beings," says Foner, who has been honored for his skills in the classroom many times, including in 2006, when he received Columbia's



Participants in Eric Foner's MOOC will see video footage of the historian examining Civil War-era artifacts at Columbia's Rare Book and Manuscript Library, such as this book of photographs from the Sydney Howard Gay Papers and, at right, items from the Abraham Lincoln portraits and memorabilia collection.

Presidential Award for Outstanding Teaching. "I can't imagine the future of higher education is watching a computer screen. That can't possibly replace a real professor. At least I hope not."

STRAIGHT TO THE PEOPLE

The Civil War course that Foner teaches has long been a favorite of Columbia students. Foner's mentor, James Shenton '54GSAS, taught it before he did. One of Columbia's most beloved teachers, Shenton became more widely known in the 1960s when he presented "The Rise of the American Nation," a seventy-six-hour lecture series, in installments on public television. Shenton's star turn didn't raise many eyebrows among his colleagues, Foner says, because Columbia historians have traditionally encouraged one another to share their scholarship with the general public.

"At some institutions, you'd be looked down upon for speaking directly to the masses," says Foner, who is the DeWitt Clinton Professor of History, a position that was held before him by Richard Hofstadter '42GSAS, another great public intellectual. "It's the opposite here — making your scholarship accessible to people is seen as part of your job."

That Foner enjoys this part of his job, and that he is uniquely gifted at it, is evident every time he stands in front of an audience. He does so frequently, not just in the classroom but also before

"AT SOME INSTITUTIONS, YOU'D BE LOOKED DOWN UPON FOR SPEAKING DIRECTLY TO THE MASSES. IT'S THE OPPOSITE HERE - MAKING YOUR SCHOLARSHIP ACCESSIBLE TO PEOPLE IS SEEN AS PART OF YOUR JOB."

- ERIC FONER

small-town historical societies, public-school assemblies, alumni groups, and gatherings at Civil War battlefields and memorials across the country. Speaking in simple and colorful language that is entirely free of "academic gobbledygook," as he calls it, Foner will effortlessly weave together strands of scholarship about nineteenth-century US politics, economics, demographics, racial dynamics, and international relations to help people make sense of the most complex issues of the era: How did Americans understand the concept of freedom back then? How did they apply the concept to black people, women, and members of various immigrant groups? Were Southerners and Northerners really that different in this regard? How did their regional economies influence their views? And how might the course of history been altered had the US government allowed the Southern states to secede?

"One of the things Professor Foner is always doing is relating history to the present day," says Anna Martelle Miroff, a College senior who took the course last spring. "He shows you that history is alive, and that its interpretation is an ongoing project that can reveal as much about the historians producing the scholarship as the subjects they're writing about."

The owners of edX, a nonprofit MOOC platform that Harvard and MIT operate jointly, saw the potential immediately. Soon after receiving a call from Columbia officials last fall about hosting Foner's course, a deal was being negotiated.

GUARANTEED GIVEAWAY

By the time Foner and Columbia joined forces with edX last winter, the University had already produced eight MOOCs on topics as various as virology, economics, finance and banking, naturallanguage processing, and electrical and computer engineering. All were hosted by Coursera, a for-profit company that had been launched by two Stanford professors in early 2012. Coursera quickly became the world's largest MOOC provider, hosting hundreds of courses created by academics from dozens of institutions. The company's visibility gave a handful of Columbia faculty access to more students than they'd ever had in their careers; in 2013 alone, over four hundred thousand people enrolled in Columbia courses on Coursera.

"You can get information out to so, so many people," says Columbia microbiologist Vincent Racaniello, whose MOOC on virology last year drew an audience of more than forty thousand people. "In my case, I'm teaching people all over the world about vaccinations, infectious diseases, outbreaks like Ebola. I think virology is a subject that everybody should know about. And a lot of people don't have access to good science instruction where they live."

Foner opted against working with Coursera in favor of edX, which was a few months younger than its chief competitor and considerably smaller. He thought edX, being a nonprofit consortium, would be less likely to take steps that might jeopardize faculty jobs at brick-and-mortar institutions. Neither company had yet figured out how to sustain itself financially. They were experimenting with the same basic strategies: selling certificates to students who successfully completed courses and licensing colleges the ability to issue credits to those who earned them. But edX was positioning itself as the more service-minded of the two, offering fewer but more academically rigorous courses and conducting serious research on its users' experiences, analyzing how people take in and retain information, depending on how it is presented.

"I don't want to be involved in making anybody rich," says Foner, who received assurances from edX executives that no college or university would be permitted to issue credits for taking his course. "If another teacher wants to use it as a supplement to their lesson plans, that's fine. Anyone can do that by visiting the site. But nobody's going to commercialize this in any way."

That's not to say that Foner or anybody else can perfectly predict the ripple effects of his MOOC. Might working adults enroll in his MOOC instead of, say, taking a history course at a community college?



"I suppose so; this is a disruptive technology, right?" he says. "But it's hard to imagine how many people that will apply to. And maybe someone who takes this course will become so interested in history that they'll subsequently enroll in college."

FABLES OF THE RECONSTRUCTION

In talking to Foner, it is clear that he wrestled with the decision to create a MOOC. But it is also clear that he, like any passionate teacher, believes that people really need to know what he knows about his subject. The Civil War, Foner has often said, is the most important episode in American history, the cauldron out of which our modern nation, with its strong federal government, modern economy, and seemingly intractable cultural divide between North and South, was born. The era still fascinates us, he says, in part because we haven't yet worked through a lot of resentments formed during the war and during the turbulent Reconstruction period that followed. Americans have a hard time seeing eye to eye on many social and political issues, he says, because of misconceptions that persist about the era.

What misconceptions?

"Like that slavery wasn't the real cause of the war," he says. "That the real issue was states' rights or disagreements over trade

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policy. This sidelining of slavery as the war's main cause keeps us from fully confronting this ugly part of our nation's history."

But the single biggest misconception about the era, and the one whose influence on public life today is most pernicious, Foner says, is the notion that white Southerners were mistreated in the decades following the war. US historians up until the mid-twentieth century, he says, perpetuated the idea that the North had exploited the postwar South economically, had granted former slaves in the South too many civic rights too quickly, and had generally micromanaged the region's affairs in a way that gave white Southerners reason to feel embittered for generations to come. This view, Foner says, has since come to be seen as inaccurate and deeply racist — the result of white historians' attempts to intellectually legitimize Jim Crow. Yet the notion persists that Dixie was victimized.

"I think there is a wider gap between historians' understanding and popular understandings today vis-à-vis Reconstruction than any other period in American history," Foner says, "One of the footholds of modern conservatism is this whole idea that white Americans have a right to feel aggrieved about their lot. We

saw that in the white backlash against the civil-rights gains of the 1960s, and we still see it in some arguments against affirmative action. It dates back to that old historical work. I feel an obligation to correct some of that bad old history, and to get good, upto-date history out to as many people as will listen."

SPIRIT OF COMPROMISE

A summer storm threatens as Foner takes a seat in a windowless conference room on the fifth floor of Butler Hall. It is a few weeks before his digital course will go live on edX, and "the MOOCers," as he affectionately calls his CCNMTL colleagues, are discussing the details of its format.

Stephanie Ogden, a digital-media specialist, is demonstrating how students will be able to navigate within Foner's lecture videos by scrolling through an accompanying transcript.

"I can jump down to here," she says, clicking on a word next to the screen, "and the video will follow."

"Oh, that's pretty cool," Foner says.

"We can speed it up as well," she says, setting the video to run at 1.5x speed, giving Foner's voice a slightly high-pitched tone.



"That's very popular in the MOOC world. People like to go a little faster," says Michael Cennamo, an educational technologist.

"People tell me I speak too fast to begin with," cracks Foner, a native New Yorker. "When I taught in the South, they begged me to speak slower."

A recurring point of debate between Foner and the MOOCers has been how frequently his lectures ought to break for poll questions, quizzes, and other interactive features. Such features are thought to help online students feel engaged; Foner worries that they will simply be distracting. In fact, Foner had initially suggested that his lectures run as uninterrupted seventy-five-minute video clips.

"I was quickly informed that's not how things work," he says. "Apparently people's attention span online is rather short. Nobody wants to sit there for an hour and fifteen minutes."

The current plan, Cennamo explains, is to embed two pop-up questions within each ten-minute lecture video.

"To see if you're paying attention," chimes in Tim Shenk, the history PhD student working on the project.

"Right," says Cennamo, who adds that edX can later analyze students' responses to these multiple-choice questions for insights about how they are learning.

"Wait a minute. Two per clip? Fourteen per lecture? That seems like a heck of a lot," Foner says. "It would be as if in the middle of a book chapter you're suddenly throwing questions at the reader. It interrupts the narrative. So two seems like a lot."

No problem, says Cennamo. One question will do.

"I'm impressed with this group," Foner says later. "So I've been happy to go along with what they think will work — within reason."

CIVIL DISCOURSE

The first part of Foner's three-part edX course went live on September 17. Entitled "A House Divided: The Road to Civil War, 1850–1861," it is running for ten weeks; it will be followed by "A New Birth of Freedom: The Civil War, 1861-1865," which will launch on December 1, and "The Unfinished Revolution: Reconstruction and After, 1865-1890," on February 25, 2015.

More than six thousand people from 136 countries enrolled in "A House Divided" as of its launch date. Three-quarters of them live in North America; many others are from Europe, Asia, and South and Central America. Only 17 percent described themselves as students in an introductory poll. Nearly a third identified as highschool teachers, college instructors, or professional historians. The vast majority described themselves simply as "history enthusiasts."

"It looks like a lot of people taking the course are doing so for self-enrichment, which makes sense, given the subject matter," says Shenk. "Learning about the Civil War might make you a better citizen, but it probably won't get you a new job."

Judging by online discussion taking place on the course's site the first week, those who signed up share a love of learning and little else. Among them is a ninety-year-old Texan who's

earned several degrees in retirement; a thirteen-year-old British homeschooler; a woman from Nigeria who is a US-history buff; a New York City high-school teacher who is taking the course with several of his students; someone from Switzerland looking for answers to specific questions ("Frustrated I don't understand why Northerners cared so much about slavery when they certainly didn't consider African Americans to be their equals"); and

AN EIGHTY-FOUR-YEAR-OLD MAN FROM TORONTO WARNS HIS PEERS HOW SLOWLY HE'LL BE TYPING: "ONLY USING MY RIGHT INDEX FINGER . . . I CAN'T GET ENOUGH EDUCATION!"

an eighty-four-year-old man from Toronto who warns his peers how slowly he'll be typing ("Only using my right index finger . . . I can't get enough education!").

"The diversity of experiences people are bringing to this is pretty amazing," says Shenk. "It's obviously gratifying to open up the Columbia experience to people who might never step foot on this campus."

The challenge now faced by Shenk and seven other history PhD students working on the course is formidable: to corral the online conversations taking place among thousands of people whose backgrounds and educations vary wildly, into the type of provocative yet respectful dialogue that is the hallmark of any great classroom. Each Columbia graduate student is spending several hours a week reading online posts, chiming in to answer questions, guide conversations, and tamp down any misguided comments. Each week, they earmark ten particularly insightful student posts for Foner to respond to personally. They are also encouraging students to form breakout discussion groups with people who share their interests or educational backgrounds, which they can do through the course's Facebook and Twitter pages.

"The best way for smaller communities to form, based on the lessons of previous MOOCs, is to let it happen organically," says Shenk. "Our strategy here is to gently push people in the direction we'd like to see them go."

Foner, meanwhile, is watching the project unfold with an excitement tempered only slightly by its endless unknowns. He has begun to wonder: How long will the course remain relevant? Will there come a time soon when he'll want to update its content? Or might it be wiser to retire the course altogether in a few years, thus clearing the way for some younger Civil War historian to assume the throne?

For now, though, he's trying not to over-analyze. "I'm skeptical of a lot of things," he says. "But I'm not skeptical of this."

Andrea Stone '81JRN contributed reporting.



MIKE GBOLL / AD

REWIRED: By Paul Hond TIM WU'S FANTASTIC FORAY

What happens when a leading tech theorist absorbs the rays of electoral politics?

I think that we need regular people to go into politics. By regular I mean people who are not creatures.

- Tim Wu, August 14, 2014

JUNE 16. Tim Wu, a Columbia law professor, stood at a wooden lectern inside the state capitol in Albany. He was about to embark on a whole new trip. He hadn't really planned it. A month earlier, when he'd written, in the *New Yorker*, of "the coming war," he certainly hadn't been talking about *this*. Rather, he was referring to an issue he knew better than anyone, and whose name he'd invented: net neutrality.

It was the principle to which Wu had devoted much of his career: that Internet service providers should treat all traffic equally (no high-speed lanes for big companies, no monopolistic control of the wires, no blocking of legal content). But now the vision of an open Internet was imperiled: on May 15, the Federal Communications Commission proposed new Internet rules whose language, according to Wu, would permit broadband carriers like Comcast, Verizon, and Time Warner to charge websites "a payola payment to reach customers through a 'fast lane.'" Such a system, Wu contended, would, among other things, hurt small businesses, reduce the freedom of consumers, and discourage innovation. The FCC was accepting public comments on the proposed rules until September 15.

Yet Wu, dressed this June day in a white shirt, black jacket, and striped tie, was preparing for a different fight. The woman beside him at the lectern, wearing a lemon-chiffon skirt and jacket and a pearl necklace, was Zephyr Teachout, a Yale-educated Fordham University law professor. Teachout, virtually unknown in New York politics, had come to Albany to announce her bid to unseat Governor Andrew Cuomo in a Democratic primary to be held on September 9. Wu was her running mate, vying to become lieutenant governor, or "LG," a largely ceremonial position that Wu wanted to transform into one of public advocacy.

"If New York gives us a chance to govern," Teachout told the group of reporters on hand, "we will build an economy that works for everyone, not just the wealthy and well-connected." The state, she said, was "more unequal than at any time since the plutocratic era," reflecting a "politics of the few, by the few."

Wu, whose governmental experience included a post as senior adviser to the Federal Trade Commission in 2011, where he worked on tech-sector antitrust and privacy issues, had, just a week earlier, envisioned a different summer for himself. He would go sailing and fishing. He would work on net neutrality, of course, and also on his new book, called *Your Attention, Please*, whose premise was that human attention is the twenty-first century's most important resource. Wu had earned a \$200,000 advance, an indication of the success of his 2010 book, *The Master Switch*, a revelatory history of tech monopolies that showed how communication innovations pass from periods of openness and decentralization to periods of consolidation and control — what Wu called "the Cycle," and whose patterns he saw in politics.

Now those summer plans would be shelved. The book would go to the back burner. Net neutrality would have to share elbow room with New York State education, immigration, the environment, and a particular cable merger. There would be no sailing. And the fish in the Hudson could breathe easier: Wu had others to fry. Though he and Teachout faced monumental odds against a powerful incumbent, they had a plan. They would raise their money not from a few large donors, but from a lot of small ones. They would speak candidly, fearlessly. They would call for debates. And who knew what the news cycle might have in store?

"We're underdogs," Wu told the Washington Post that day, "but we think we have a chance."

JULY 22. The Peruvian Independence Day celebration at the Elmhurst-Jackson Heights Senior Center in Queens was not an occasion for wonkiness. A hundred Spanish-speaking citizens of assorted Latin American heritages sat at round, blue-draped tables with centerpieces of balloons of red and white, Peru's national colors. Women in blouses of turquoise and crimson. Men in flowered shirts. There would be dancing soon.

Tim Wu's message was brief. "All I want to say is, I am the son of immigrants," he said into a handheld microphone from the front of the room. "My name is Wu, I am the son of immigrants, and I believe that New York should always remain a place that welcomes immigrants and treats them with respect and dignity, and makes New York a place where everyone feels at home."



Moments earlier, Teachout had led the seniors in a recitation of her first name, which had confounded some of the ladies at the front tables. Then she shared a slice of her biography — large, tight-knit family from a small town - and reminded everyone that the Statue of Liberty was a woman. Wu, standing nearby in a black suit, clapped hard at Teachout's applause lines.

He was getting the hang of this politicking stuff. The past month had been a blur of community centers, farmers' markets, local political clubs, places of worship. That morning he'd spoken Mandarin at a Chinatown church. Now, in Queens, he and Teachout were tapping into the frustration in immigrant communities over the state legislature's failure, in March, to pass the DREAM Act, which would have opened tuition aid to undocumented immigrant students.

"I am running on a pro-immigrant platform in order to see that we're all treated with dignity," Wu told the seniors.

Afterward, Wu spoke to a reporter about his other campaign themes. He talked about money in politics, and what he saw as the anti-progressive record of his opponent, Democrat Kathy Hochul, a former Buffalo congresswoman from a conservative district who had been handpicked by Cuomo. (In New York, the governor and LG run separately in the primaries.) But no matter the topic, the bird of conversation always wheeled back to the nest of concentrated power. This thread ran through Wu's papers, articles, and books, his class in antitrust law, and in his frequent allusions to Teddy Roosevelt's Progressive Party and the depredations of consolidated wealth as articulated by Woodrow Wilson and Louis Brandeis. His pet campaign issue — the Comcast-Time Warner cable merger — was a case study of what ailed the republic. And as with many problems, the remedy was already on the books, if only elected officials would apply it.

"States can block a merger if they think it's not good for the people," Wu said, referring to the powers of the New York State Public Service Commission, which was to announce its decision on the merger in October. "States should have special concern for mergers that involve life's necessities, like health care and telecom, because these affect their citizens. Telecom is clearly a utility. We need to talk openly about having an electric bill, a food bill, and an information bill. Food, housing, information, transportation, energy — these are the basics." Wu compared the average Time Warner bill of \$105 to the average Comcast bill of \$156 and warned of a price hike that would cost New York cable customers \$1.6 billion per year, should the merger go through. "The executive vice president of Comcast said prices will continue to rise," said Wu. "On the other side, he says, 'We'll bring in innovative services.' What I think people care about is prices. When they want excitement and innovation, they turn to the Internet, not the cable company. There's nothing in this merger that's of public interest, so the state should block it."

The merger had been on Wu's radar long before he entered the LG race — he wrote an article for the New Yorker website last February called "The Real Problem with the Comcast Merger" — and as a policy issue it flowed nicely into his conception of the LG as a position that "uses the power of the office to shine attention on important things that aren't in the public consciousness." As president of the state senate, the LG has a legislative function, casting the tiebreaking vote, but Wu saw an expanded, creative role. "He or she should be a policy entrepreneur, constantly trying to figure out what policies would make New York better, thinking fresh about some very old problems, and moving the entire state apparatus in the direction of policy entrepreneurship."

Outside the Elmhurst senior center, Wu and Teachout caught a cab to their next event. Later, they would head up to Kingston to speak to the Ulster County Democratic Women, never imagining that, by the next morning, their campaign would shift into a whole other gear.

JULY 23. The streets of Manhattan were clogged with cars, but Tim Wu bypassed the gridlock. Astride his black 1971 Raleigh racer, Wu, wearing a dark suit and helmet, pedaled past luxury high-rises, banks, chain stores, and FOR RENT signs in the windows of small businesses. On this hot day, Wu had the wind at his back.

That morning, the New York Times, on its home page, ran a long exposé titled "Cuomo's Office Hobbled Ethics Inquiries by Moreland Commission." The Moreland Commission was an anti-corruption panel convened by Cuomo in July 2013 and then abruptly disbanded the following March after the governor struck an ethics deal with the legislature. The *Times* revealed possible interference by Cuomo's office in the panel's probe into the campaign-finance activities of the governor's allies, and reported that Preet Bharara '93LAW, the US attorney for the Southern District of New York known for his aggressive prosecutions of insider traders and terrorists, was investigating the commission's shutdown.

The story in the Times was not a shock to Wu — the Moreland affair had been percolating for months — but he understood that political manna had fallen. This development was all the more timely "We're underdogs," Wu told the in that the Cuomo campaign had, the day before, initiated court proceedings to contest Teachout's residency status. Though the outcome of the case was never in doubt, Teachout's shoestring campaign (her war chest amounted to about 1 percent of Cuomo's \$32 million) still had to cover the legal costs, which it did through crowdfunding. It was the sort of tactic Wu had in mind whenever he compared monopolistic companies to entrenched politicians: "Both do great stuff for a while, but then there's a turning point when a politician or a company becomes less interested in doing good things, or in improving its product, and starts to think it needs to destroy its competitors, or create enormous barriers to ever being challenged."

Wu rode his Raleigh up to Teachout-Wu's garment-district headquarters on Seventh Avenue. The campaign had made camp in four small, bare-bones offices of generic desks, forlorn phone jacks, and fire-resistant carpet. In one of them, Nona Farahnik '12LAW, Wu's former student and teaching assistant, and now his campaign manager, was on her laptop monitoring the fallout from the Times story. Another room contained a desk, a chair, and a

placard of Teachout and Wu standing on a rooftop against the Midtown skyline.

Wu, a fan of science fiction and Kafka, might have appreciated these nondescript rooms as an apt setting for some secret transformation. And as the son of scientists, and as a heavy analytical thinker, he could hardly have entered politics without the curiosity of the laboratory savant sipping a brew of known effects, to see what it would do to him.

He was scheduled to meet with tech entrepreneur and liberal political mover Bill Samuels in an hour, to get some advice.

"I'm probably not going to come with you, so I can help blast things out," Farahnik told him. As Wu began to suggest that it would be good for her to meet Samuels, Farahnik said, "Actually, I think I'll come with you. The other thing," she said, "is that there might be a rally at four p.m. in front of the legislative offices. Maybe you could stop by before dinner. You should, if it happens."

AUGUST 14. The synth-pop anthem "Anything Could Happen" by Ellie Goulding shook the American-flag-draped wall and the bookcases of the Greenwich Village duplex where Tim Wu had come to speak. About thirty-five people filled the living room and the small backyard. Many of them, like John Love '13LAW, who lived there, were Wu's recent students, and had paid sixty dollars to eat hummus, drink beer and wine, and hear the professor. The bookcases contained red-bound law books, The World Atlas of Wine, a collection of Onion spoofs, and, on display, a copy of The Master Switch.

Wu, chatting with Farahnik and Andrew Reich '13LAW, had just blown in from Christopher Street, two blocks away. There, he had stood in a meeting room of the Village Independent Democrats, an old and raucous neighborhood political club, some

Washington Post, "but we think we have a chance."

of whose members could recall when a young Ed Koch tried to become club president back in '60. The VID had endorsed Kathy Hochul for LG, but that was before Wu entered the race. Tonight they were taking a re-vote, and Wu had showed up to personally make his case. "We're in a situation where there are a lack of checks and balances in the Albany system," he'd told the club. "I believe America, and the state, works best when we have critical voices, when we have people in office whose job is not absolute loyalty, but to question when questions need to be asked. I ask tough questions, I seek the truth, and I'm not easily cowed." Wu was asked to leave before the club took its vote.

More people arrived at the duplex. Everyone who knew Wu was eager to talk about him. Reich, an associate at the firm of Paul, Weiss, Rifkind, Wharton & Garrison, had known about Wu's work on net neutrality, and as a law student had sought out Wu's telecom class. "He teaches from the seats and not from the lectern," Reich said. "He doesn't want to just lecture to you. He wants to teach you interesting things, and then he wants to have a discussion about it. That was so beneficial when I was learning this area of the law. He made me passionate about it." Reich was Wu's research assistant for a paper that asked if computer communications could claim First Amendment protection. "I got to see how he thinks," said Reich. "If I thought he was smart before, I *really* thought he was smart after."

"Not only is he brilliant," said Kathleen Farley, a Columbia law student and Wu volunteer, "he's good at bringing out the brilliance of other people."

Farahnik, standing behind the sofa, got a phone call. It was a Wu staffer on Christopher Street. Farahnik repeated the message to the room: the Village Independent Democrats had voted to withdraw their Hochul endorsement and back Wu.

Cheers went up. In the political winds of a primary, when it was the obsessives who turned out at the polls, the VID's stamp was another gust to the good.

Minutes later, Farahnik took the floor and introduced the man whom, before she took a leave of absence from her job at Latham & Watkins to run his campaign, she had called Professor Wu. "Tim has no message discipline and is not interested in learning any," Farahnik said. "He answers questions with an honesty you don't typically see in political life." This was perhaps a nice way of calling someone a loose cannon, but if Wu at the microphones had ever made his staffers hold their breath, it was because, as Wu often said, "If you say something stupid, you can destroy your career in one sentence" —

"I've said to a lot of people: my brain is becoming rewired by doing politics."

and "stupid" in this sense did not preclude honesty or intelligence. "It's really interesting and exciting," Farahnik said, "that Tim is running for a position that has not meant anything to the state. Basically, the lieutenant governor serves as a ribbon cutter. For the first time, we have somebody who's brilliant and who wants to put some policy into action. He's not scared of much, except scorpions."

Wu, known for showman's flair in the lecture hall, stepped up onto a folding chair, a Magic Hat pale ale effervescing in his fist. "It's not a speech unless you're standing, right?" The guests laughed and gathered round. "I've said to a lot of people: my brain is becoming rewired by doing politics," said Wu. "One thing that's happened is that I've become nicer and friendlier and more extroverted. When you spend a lot of time writing, you kind of start to hate people. Ever notice that writers are really cranky, difficult people? It's because they spend all their time in isolation. Politics is the opposite: you spend all your time with people, and it's started to change my personality. One of the ways that politicians' personalities change

is that they start thinking about donors a *lot*. As someone once said, money is the mother's milk of politics. So people think about their positions, and one part of their brain asks, 'What's the right answer?' and the other part asks, 'How will this work with donors?' When you start thinking like that, that is the dark path. Where does the path of darkness start? It starts when you think, 'Which policy issues should I adopt because they make it easier to fundraise?' You can see it's tempting. But that is the path. And I already feel it. I feel like I'm resisting it, but I feel it. This is where it all starts inside the minds of candidates: when they decide, 'I'm not going to take that position, because it might make my donors angry.'"

Wu had been riding this theme. Earlier that night, in front of a tech crowd in the Flatiron District, he'd said, "Money is just the wrong value. When you're always thinking, 'What is this going to mean for my donors, what is this going to mean for my ability to raise money' — when *that* is your compass, where the fuck is that going to lead you?"

Now, atop a chair and full of the beer of grassroots endorsement, he said, "Let me tell you how I'm going to win the lieutenant governor race."

His advantage, he said, was that he would be the first Asian-American in New York history to hold statewide office, and that support for his campaign was "enormous" in the Chinese-American community (he had been in Flushing that afternoon, playing table tennis at a senior center). Then there was the enthusiasm of young Democrats excited about a candidate that "looks more like them," though Wu admitted he wasn't *that* young (he is forty-two). But mostly, he said, his positions were more aligned with the average voter than those of Hochul, who, Wu liked to point out, had received an "A" rating from the NRA and had voted to drill for oil in the Arctic National Wildlife Refuge. "The real challenge for us," Wu said, "is getting the minimal amount of name recognition so that people know that Wu is the noncorrupt, clean alternative — I sound like a gasoline — the progressive alternative to the usual Albany bullshit."

He also felt he enjoyed a psychological edge. "If I lose this election, I go back to the best job in the world," said Wu, a tenured, popular, well-paid professor. "So I feel like I run with a certain degree of fear-lessness." But Wu, aloft on the chair, was only pointing out that there was a net beneath him. He had no intention of falling. "I have this incredible confidence," he said, "that we're going to pull this off."

AUGUST 27. The air conditioning on the wood-paneled tour bus had petered out somewhere past Goshen, but you'd never have known it from looking at Zephyr Teachout. The candidate running ninety degrees uphill to become the state's first female governor was the only passenger who didn't seem to be sweating. Wearing a black dress, electric-blue blazer, and a pearl necklace, she chatted and laughed with staffers and reporters. She had good reason to be upbeat. That morning, the *Times* had surprised readers by declining to endorse Cuomo, for "his failure on ethics reform"; and even though it had declined to endorse Teachout, either, for her want of "the breadth of interests

and experience needed" to govern New York, Teachout counted this as a victory. The paper had yet to weigh in on the lieutenant-governor race, but the rebuke of Cuomo was clear.

The bus was equipped with a leather wraparound couch, two leather chairs, a table with a printer, a telephone, a temperature gauge that was by now an object of derision, and a kitchen sink. Aides communed with their smartphones while a two-person film crew that had been documenting the campaign kept the camera rolling. In one of the chairs, Conor Skelding '14CC, a thorn-sharp reporter who'd been covering the campaign for the political news website *Capital New York*, tapped at his laptop.

The bus stopped near the Pennsylvania border and picked up some passengers, including Ray Kemble, a bandanna-wearing, gray-bearded mechanic from Dimock, Pennsylvania, who had worked hauling wastewater from hydraulic fracturing, or fracking, and then quit after a gas company drilled near his house and polluted his drinking water with methane (Kemble carried a plastic jug of liquid the color of flat Budweiser that he said came from his tap). He was joined by "Brother Lee" McCaslin of Bath, New York, a soft-spoken but talkative member of the Ottawa Nation who called himself the best gas driller in America. These men claimed to have seen the toxic effects of fracking on workers, residents, farm animals, and drinking water. They sat with Teachout in the back of the bus, where the candidate, who had made a ban on fracking central to her platform, spent an hour asking questions and patiently listening, impervious to the wilting heat.

Wu, at the front of the bus, had barely loosened his tie. He, too, opposed fracking (the bus, whose first stop had been an Orange County nursing home that the county executive wanted to privatize, was heading to a fracking site in Montrose, Pennsylvania), calling it a "step back for civilization" (clean drinking water being the great advance). Nor did he see fracking as a real solution for depressed upstate communities: resource-extraction economies, he said, were "ultimately a dead end."

This bus trip was billed as the "Whistleblower Tour," aimed at calling attention to Albany corruption. But the candidates were focused less on illegal corruption than on the legal variety — "when public officials aren't serving the interests of all New Yorkers, but doing the bidding of private interests," as Teachout had put it at the tour's kick-off that morning on West 57th Street. There, across from Carnegie Hall, the candidates had stood in front of the tallest residential building in the Western Hemisphere — best known for the dangling crane that had caused evacuations during Hurricane Sandy, for the giant finger of a shadow it now extended over Central Park, and for its \$90 million penthouse — and spoke of how the developer had donated \$100,000 to Cuomo's campaign in 2013 and received a \$35 million tax break that was buried in a bill signed by the governor.

The bus pulled over on a country road. Not many people get to see a fracking site close up. This one, downslope from the roadside and carved out of the rolling green farmland that surrounded



it, was five or six football fields big, a flat concrete-colored slab spiked with a drilling rig and populated with trucks, storage tanks, trailers. Wu stood on the ravine and watched for a few minutes, remarking to Kemble that the workers didn't seem to be wearing any protection from possible contaminants.

Back on the bus, Wu did another phone interview. "Concentrated wealth is dangerous to the moral fabric of our society . . . politics are too important to leave to career politicians . . ." It was only later that afternoon, when the bus reached Binghamton, that Wu got a chance to really connect with voters.

Inside the Cyber Café West on Main Street, a homey college dive with sofas, beer signs, and, despite the name, a pre-Internet aesthetic, Wu sat in a cushioned chair at a low coffee table with six or seven middle-aged locals and told his story.

His parents were immigrants. Immigrant immunologists. His father was from Taiwan. His mother was from England. Dad studied T cells, Mom studied B cells. They met in Toronto. Nomads, Wu called them. They moved to Berkeley, California, then to Washington, DC, where Wu was born. His father became ill, and the family moved back to Canada. Wu was eight when his father passed away. His mother took him and his younger brother to Switzerland, then back to Toronto, where Wu was editor of his high-school paper. He was supposed to be a scientist — all his uncles were PhDs in science or MDs, a tradition that Wu was expected to follow. But Wu felt he had more talent for writing.

Writing and computers. He and his brother were "complete geeks," Wu liked to say, obsessed with the Apple II that their mother had brought home, fatefully, in 1982. The brothers would take it apart, plug stuff into it. They also wrote computer games. Still, when Wu got to college at McGill, he majored in biochemistry. "I found the laboratory scary," he said. "There was radiation around, and if you made one mistake you might contaminate everybody. One time I

contaminated part of the lab — it was like Spider-Man or something. Geiger counters beeping. It was a little nerve-racking." After college, Wu decided to go to law school — "I was rebelling, I guess."

At Harvard Law, the apostate had no plan. One day, he wandered into the classroom of a young professor named Lawrence Lessig. The class was called The Law of Cyberspace. Wu took the class, and it changed his life. "This intersection of the law and the Internet — now this was interesting," he said. "I knew computers as well as anyone, but nobody knew the law stuff. It was 1996, '97, right at the beginning. I thought, 'This is red-hot.'" He became Lessig's research assistant. Lessig helped Wu get a clerkship with Seventh Circuit judge and scholar Richard Posner. Wu graduated from law school in 1998, and a year later he clerked for Supreme Court justice Stephen Breyer. Then, in 2000, he went to Silicon Valley to make money — just in time for the pop! of the dot-com bubble. Wu returned east after two years. From 2002 to 2004 he was an associate professor of law at the University of Virginia, where he wrote his landmark 2003 paper "Network Neutrality, Broadband Discrimination." He held visiting professorships at Columbia, Stanford, and the University of Chicago before coming to Columbia in 2006 for a tenure-track position at the age of thirty-four. That year, he published his first book, written with Harvard law professor Jack Goldsmith, called Who Controls the Internet?



After an hour, Wu had to take off for Albany, where he was scheduled to release a dossier on Hochul's environmental record the next day at the capitol. That night, as Wu ate a late dinner at a Thai restaurant in Albany after his five-hundred-mile day, the New York Times, in its online edition, ran a short headline on its opinion page, which hard-copy readers would see in the morning: Timothy Wu for Lieutenant Governor.

SEPTEMBER 3. In this political game, the *Times* endorsement shook up the board. Later, Wu would recall that the momentum had "exploded" — what Teachout called "Wu-mentum." The *Times* had criticized Hochul on her votes against Obamacare and her record on immigration and the environment, and praised Wu's public-advocacy notion of the office. "Although he lacks time in politics," wrote the editors, "Mr. Wu has an impressive record in the legal field, particularly in Internet law and policy."

It was a huge boon for Wu, but the Cuomo campaign continued to not mention the candidates by name or agree to a debate. (The local cable news network NY1 had invited the candidates to a televised debate on September 2. Teachout-Wu accepted; Cuomo-Hochul did not.) This was frustrating. Wu had been acquiring skills and was eager to deploy them. He'd learned to talk on television — not the easy way he'd talked as a net-neutrality expert on The Colbert Report or on Charlie Rose, but in a rapid-response style that called for drastic nimbleness. He'd learned how to debate through reporters, making statements that the press would then bring up to the other side. He'd gotten better at distilling complex messages, and was always refining his stump work, the variations of cadence, body language, and eye contact that came less naturally to him than it did to Teachout. He loved to talk, working out ideas on the fly into proffered voice recorders, while cultivating, on the stump, a near-firebrand style whose textures he evaluated even as he spoke (during one speech, he heard an off note in a verbal gambit, and chuckled discreetly to himself). Sometimes, mid-rumination, his eyes would close lightly, the eyelids fluttering as if waves of thought were passing just behind them. He'd clasp his hands together, interlock his fingers, pace pedagogically, bow his head during pauses, rock on the balls of his feet, step backward and forward, jam his hands into his pockets.

On the morning of September 3, Mark Ruffalo, the movie actor, Sullivan County resident, and anti-fracking activist, stood on the steps of the Tweed Courthouse in Lower Manhattan, around the corner from City Hall. Wu and Teachout were beside him. It was among the campaign's sexier events — Ruffalo had pop-cultural appeal, and tourists were stopping to aim their iPhones — but the *Times*-powered Wu-mentum was about to meet another force, one that Wu had not foreseen.

First, some background. The Working Families Party (WFP) is a small but influential New York political party formed in 1998 by progressive activists and labor unions. The party had no great love

for Cuomo, and many members supported the newcomer Teachout, a scholar of political corruption, for governor. But in late May, New York City mayor Bill de Blasio '87SIPA met with the party's leadership and brokered a deal: the WFP would endorse Cuomo, and in exchange, as reported in the *Daily News*, Cuomo would fight for a Democratic-majority state senate, a minimum-wage hike, the DREAM Act, and public campaign funding. Many in the WFP were angered. Among them was Mike Boland, the party's field director, who quit to become Teachout's campaign manager.

It was Boland who told Teachout to think different in her search for a running mate. He told her: "Think Internet." The answer, Teachout later told *Columbia Magazine*, was "obvious." She had met Tim Wu at an Internet conference in Hungary in 2006. They hit it off, wrote a paper together, and stayed in touch periodically. When Teachout called Wu in June and asked him to be her running mate, Wu jumped at it. "The secret about Tim — and there are a lot of non-secrets, like his brilliance, his affability — is that he has extraordinary drive," Teachout said. "He has a relaxed demeanor, but he is deeply driven. It was one of the reasons I picked him. There's all the external bio stuff,

"The secret about Tim – and there are a lot of non-secrets, like his brilliance, his affability – is that he has extraordinary drive," Teachout said.

but if you're going to do something like this, you need someone who is completely motivated, and Tim always has been."

Ruffalo, on the courthouse steps, praised Wu and Teachout for their stance on fracking. Behind Ruffalo, members of the Sierra Club raised their banner. To his right, Ray Kemble held a jug of fluid that on this day was a bright Gatorade yellow. Ruffalo said, "It's an honor to be here with Zephyr and Tim and to support the vision that they have for our beloved state, whether we're talking about public education, open democracy, ethics, or of course the environment."

But while Ruffalo was calling the candidates "the most exciting thing happening in state politics," a counter-narrative was unfolding around the corner in City Hall Park. There, the press, in heavier numbers, was assembling, waiting for the mayor to make an announcement. At the Ruffalo event, a reporter asked Wu what he thought of the mayor's move. "I support Mayor de Blasio in many areas of policy," Wu said, "but I think he has made a serious mistake." Ruffalo offered his own view. "It's pretty amazing and really shocking," he said, "that two blocks from here, one of the great liberal politicians in the United States is actually going to be endorsing Hochul. But he made a commitment to support that ticket a while ago, and I think he's probably a man of his word."

Democrats were divided. Was de Blasio's decision to support Cuomo-Hochul a selling-out of progressive principles? Or was he in fact doing the smart and responsible thing in extracting a promise from an all-but-certain-to-be-reelected governor to support major progressive initiatives?

Would a Mayor Wu or an LG Wu, faced with political reality, act any differently?

The only way to find out was for Wu to win, but perhaps there were clues to be gained along the way. Walking from the Tweed Courthouse to City Hall Park, Skelding, the *Capital New York* reporter, was asked if he'd noticed whether Wu, exposed to the gamma rays of a political campaign, had become, how shall we say, more of a —

"A creature?" said Skelding, with journalistic alertness. "Uhhh. Well, no, I don't think so. He didn't tie his shoes today before he met with the press corps. Not just one shoe, but two shoes. I don't think he's becoming a *creature*. I don't think insiders would have him if he wanted to join them."

SEPTEMBER 8. The day before the election, Hochul and Wu appeared back-to-back on The Brian Lehrer Show on WNYC radio. It was the closest thing there'd been to a debate. Lehrer '96PH challenged Hochul on her congressional record and the Moreland Commission. On Moreland, Hochul said that as much as the media was talking about the issue, "the voters are talking to me downstate about affordable housing, passing the DREAM Act, getting a minimum-wage increase, and women's issues." Wu, in his segment, attacked. "Voters think there's already overrepresentation of moneyed interests and banks in Albany," he said, noting Hochul's work as a bank lobbyist. "I have a completely different vision for what the lieutenant-governor position can be. I'll be an advocate for the public. I will be a critic of the governor's policies when I think they go wrong, I'll be a supporter of the governor when I think he or she is doing the right thing. All Kathy Hochul will do is be a lackey who repeats what the governor has said. We have too much concentrated power in Albany already. We don't need another lackey."

It was a gray day, threatening rain. Wu and Teachout were scheduled to appear at a final rally that evening in Union Square. It was looking like a washout. But by 6:30 p.m., the sheet-metal clouds had split their seams to the west, exposing long, horizontal strips of crisp blue and Creamsicle orange. Wu, in a dark suit and tie, appeared on the plaza, and about a hundred revelers, some wearing buttons indicating an Occupy past, cheered and made way for the candidate to ascend the three low, wide steps.

Wu thanked the crowd. "Use the people's mike!" someone shouted, but Wu declined, and Farahnik beckoned people to simply come closer. Wu recounted how, that morning, Lehrer had asked Hochul about the Moreland Commission, and how Hochul said that the voters she'd talked to didn't seem to care about that. Now Wu asked the crowd: "Do you care?" Yes! "Do you care?" Yes! "If you're embarrassed that our state politics is the mockery of the entire nation, please say to me: We can make it better!

Teachout was on her way. In the meantime, Wu shook hands, spoke to supporters, and even held and kissed a baby — the textbook move of the political animal. It turned out, though, that the baby was his.

SEPTEMBER 9. Children with cartoon-character backpacks streamed into PS 33 on Ninth Avenue in Chelsea, a block from where Wu lives with his wife, Columbia law professor Kate Judge, and their infant daughter, Sierra. A news van shared curb space with gold school buses disgorging more youngsters, and the scrum of reporters in front of the school drew curious looks from the trickle of parents and voters heading inside. "There he is!" someone said, and a cameraman from ABC 7 ran to the middle of the sidewalk and aimed his lens at the two figures walking up from the corner. Wu and Teachout strode together, smiling, stopping to shake people's hands.

The duo reached the front of the school, talked with reporters. Then Wu said, "Wanna vote? Let's go vote."

Teachout had already voted in Brooklyn, so Wu led the way into the school. The gym was lined with long tables of voter rolls and election clerks. The voting booths were at the back. With TV cameras

"Net neutrality stands for a simple principle: that in certain parts of life, we need equality," Wu said.

on him, Wu got his ballot and took it to a booth, where he enjoyed a rare solitary moment. He filled out the form, held it up for all to see, and then fed it to the optical-scanner machine. His small entourage applauded, and so did voters in the gym who realized who it was.

Outside, Wu told reporters, "I was so proud to fill out the oval for Zephyr Teachout. And honestly, I also voted for myself."

The next couple of hours were spent rushing to Manhattan polling places to greet voters (the weather had turned drizzly; turnout was light, as expected). Wu's last stop of the day was in Harlem, at PS 153. Just past noon, Wu and Kathleen Farley, who was now Wu's teaching assistant, walked to Broadway and 145th Street to catch the train.

During the ride down to 116th Street, Wu, at the end of a campaign to which he'd given everything, was still absorbing all that had happened, especially after the Times endorsement, when the party elite had closed ranks around Hochul (even Hillary Clinton had recorded a robocall). Neither Wu nor Farahnik had anticipated that.

Wu and Farley got off the subway at 116th. The polls would be open for another eight hours, but Wu had to switch gears now. He had a copyright class to teach. He strolled across College Walk, to the best job in the world.

The victory party, as it was called, was held at a party space in Hell's Kitchen. After the long, misty day, the atmosphere inside was joltingly electric, festive, bustling: a youthful crowd, a cluster of hot TV cameras, reporters and bloggers on the couches typing on their laptops, a beaded chandelier above, Blondie's "Call Me" pulsing, bordello-red curtains, an overpriced bar, a blue sign on the stage that said MONEY OUT, PEOPLE IN. Though the odds of victory were remote, a certain wire of suspense ran through the room. Anything could happen.

Mike Boland, in jeans and untucked shirt, gave updates from the stage that alternately tantalized the crowd ("Zephyr and Tim have won both counties") and deflated it ("Governor Cuomo is ahead 58-38"). With half the precincts reporting, and Cuomo and Hochul both ahead by double digits, the crowd passed through an imperceptible threshold, into acceptance. Minutes later, as Wu approached the microphones, the room erupted into a joyful chant. Wu! Wu! Wu! Wu!

This was not exactly a concession speech. As the cameras flashed, Wu did not resemble the archetypal losing candidate with the stricken smile, winking gamely at supporters in an ill-lit ballroom. Rather, he looked moved, grateful, pleased. He and Teachout had done, if not the impossible, then the possible — and at this moment the distinctions were meaningless. Calling the campaign "one of the most incredible, enriching, startling, amazing experiences of my life," Wu swallowed whatever regret he may have felt at the outcome and considered the numbers. "I think we gave a pretty damned good show," Wu told the crowd. "We took at least 40 percent of the vote, twenty counties — and I have one paid employee." Wu never mentioned Cuomo or Hochul. Instead, he raised his rhetoric to a national register. "Inequality has become a moral issue," he said. "The wealth disparity between the haves and have-nots has become repulsive to anyone who believes we share a common humanity. We have lost touch with the fundamental American value of equality, and that must change." He proclaimed himself a Democrat rooted in Progressive Era antitrust, anti-corruption values. "Let me remind you: corporations are not human beings. An economy that works for corporations does not necessarily work for us. We're in competition with corporations. We need to reaffirm that this is a party — this is a country — that cares about humans more than it cares about legal fictions."

It became clear, as Wu spoke, that he and Teachout had an agenda beyond the election. "You know this doesn't end here," Wu said, though he hardly had to. As many in attendance knew, another battle was coming, and it was right over the next hill.

WU 2.0. "This is the fight of our times."

Six days after the election, Tim Wu stood in a gray suit under a crystal-blue sky amid a group of more than a hundred demonstrators on Broadway next to City Hall. People held signs that said SAVE THE INTERNET.

It was September 15, the deadline for comments on the FCC's Internet rules, whose language permitted "commercially reasonable" deals for carriers. The public had submitted 3.7 million comments. "The problem," Wu had written on the New Yorker's website in May, "is that the words 'commercially reasonable,' on



their face, imply slow-lane and fast-lane deals, whereby carriers like AT&T and Comcast would favor the strong and hurt the weak, while enriching themselves in the process."

Four months and one political campaign later, Wu, the father of net neutrality, was addressing the movement that he had started. Only he wasn't exactly the same. His brief rewiring on the political circuit might have been part of it (followed by a post-election *re*-rewiring), but some other switch had been thrown: two months on the trail had brought him out of his writer's solitude, out of cyberspace, and into the living street.

"Why has net neutrality struck a nerve?" Wu said to the throng, oratorically. "I'm telling you, it is a debate over what kind of country we want to live in, and a debate over the meaning of America."

Among those applauding Wu was Zephyr Teachout. This was the pair's first public appearance together since the election — a mini-reunion of sorts, almost nostalgia-tinged, and a substantiation of Wu's election-night remark that "this doesn't end here."

"Net neutrality stands for a simple principle: that in certain parts of life, we need equality," Wu said. "The sense that when you go on the Internet and speak your piece, that you have the chance to be heard as much as the big guys do — that's the kind of country we want to live in. Net neutrality stands for the idea that there are some parts of the public sector that are just too basic to be divided between the haves and the have-nots, that are just too essential to let some people go faster and others go slower."

Wu reminded people, too, that in October, the public-service commission would announce its verdict on the Comcast merger.

"Billions of dollars in higher prices is not in the public interest," Wu said, returning to his pet campaign topic. "There is no way that Americans need to be paying more for cable and Internet. The public interest is open Internet and lower prices. What's not in the

public interest is higher prices and a consolidated cable industry. Anyone who looks at the issue for five minutes, who hasn't taken money from Comcast, sees it."

Back in the fight, it seemed that Wu's loss in the primary might be net neutrality's gain. As LG, he would have had a public platform from which to shine light on the subject. But as a private citizen, he was completely unfettered.

The next day, after teaching his copyright class, Wu sat behind his desk in his book-filled office at Columbia, paring his fingernails with a three-and-a-half-inch hunting knife that he'd gotten in Argentina. Behind him, on the floor, a hulking, rock-fleshed, three-foot-tall replica of the Marvel Comics superhero The Thing stood ready to clobber somebody.

Wu couldn't say whether he'd try politics again, but he knew his experience had been unusually positive — he'd had a great staff, for starters — and was unlikely to be repeated. He'd enjoyed himself immensely, had stayed true to himself, and hadn't been bloodied. Best of all, he still had a major stage from which to shine his light.

"Columbia is a great platform for addressing the issues that I care about and intend to keep pushing on — antitrust, communications, infrastructure," he said. "Everyone's talked about taxes, but how about the access to daily necessities, and the power of private monopolies over cable?"

As Wu angled the lustrous blade against his cuticle, he was asked about a comment he once made, that it was regular people who should go into politics — not creatures.

Wu thought for a moment. "I did notice something on the trail. One morning, I said, 'You know, every day on this campaign, my skin gets thicker.' Which I guess is a good thing, but it's also how you become a reptile."



Remembering the poet John Berryman in his centennial year.

Heavy Heart, By James McGirk Empty Heart

n 1963, back when it was still acceptable for poets to be openly, ferociously competitive, and Frank Lloyd Wright's whorled Guggenheim Museum in Manhattan was still new and aesthetically suspect, the greatest poet of his day mounted the stage under Wright's spiral ramp and inaugurated a reading series sponsored by the Academy of American Poets. Robert Lowell, a tall, elegant man of letters from an old New England family, read his own work to the crowd and then introduced a friend, "an underground poet still digging." On cue, a stooped, heavily bearded, intoxicated man approached the lectern, and, in a peculiar, strangled voice, explained why it was proper for a trick-or-treating tot to use an expletive to curse the chairman of the First National Bank who'd dropped a polished apple into his sack and broke his cookie.

The crowd laughed nervously. Berryman's description of the way that different levels of diction could modulate poetry would serve as the prologue to the first public performance of a new cycle of poems the poet was calling "Dream Songs." The words came out quaking with a voracious carnality:

Filling her compact & delicious body with chicken páprika, she glanced at me twice.

Fainting with interest, I hungered back and only the fact of her husband & four other people kept me from springing on her

("Dream Song 4")

Carnal lust was one element of these strange semi-sonnets. A selfpitying sorrow was another:

There sat down, once, a thing on Henry's heart só heavy, if he had a hundred years & more, & weeping, sleepless, in all them time Henry could not make good.

Starts again always in Henry's ears the little cough somewhere, an odour, a chime.

("Dream Song 29")

Here was a sorrow so profound that the narrator could only console himself with the thought that at least he had never actually killed anyone:

But never did Henry, as he thought he did, end anyone and hacks her body up and hide the pieces, where they may be found. He knows: he went over everyone, & nobody's missing. Often he reckons, in the dawn, them up. Nobody is ever missing.

("Dream Song 29")

The drunken, bearded author was John Berryman '36CC. Born in McAlester, Oklahoma, in 1914, Berryman had become, by the age of forty-nine, a world-class Shakespeare scholar. But he was primarily

a poet, one who fancied himself on par with Robert Lowell and Elizabeth Bishop, even if readers had yet to catch on.

The Dream Songs would change that. This "Henry" was an impish creation, like a Shakespearean fool or a truth-telling country yokel. At a reading at the University of Iowa in 1968, Berryman said of Henry: "He is a white, middle-aged man who has suffered an irreversible loss, and who is also spoken to in a Negro dialect by a white friend wearing blackface who calls him at times 'Mr. Bones."

"Henry is accused of being me and I am accused of being Henry and I deny it and nobody believes me," Berryman told the *Paris Review* in an interview published in 1972. He got the name from his second wife, Elizabeth Ann — they'd asked each other what names they most despised. He said, "Mabel." She said, "Henry."

To complicate this matter of names, Berryman wasn't born Berryman. He was John Allyn Smith Jr. until John Allyn Smith Sr., a banker, died of a gunshot to the heart by the steps of the family apartment in Tampa, Florida, in 1926. It was written up as a suicide, although Berryman's classmate, the publisher Robert Giroux '36CC, would later speculate that Berryman's mother, Martha, may have murdered him.

Paul Mariani, in his 1990 biography of Berryman, *Dream Song*, notes that the characteristic powder burn of a self-inflicted wound was missing from Smith Sr.'s shirt. Moreover, Martha had motive: she wanted to divorce Smith and marry their landlord, John Berryman, and Smith was making things difficult. But the Tampa police department barely looked at the case. Florida was in the middle of a real-estate bust in 1926, and many ruined businessmen were killing themselves.

Such personal themes as loss, infatuations, and hangovers, which occur throughout *The Dream Songs*, typify what is known as the



confessional style, though this was a label Berryman rejected (he rejected all labels, wanting simply to be known as a great poet). Up until the early twentieth century, poetry — at least poetry written in English — was supposed to be about lofty themes like love and war and nature and religion and beauty; writing about familiar, intimate things like shoes and boredom and money and anxiety was taboo. As Columbia poetry professor William Wadsworth points out, Theodore Roethke's 1942 poem "My Papa's Waltz" was the first to focus wholly on a poet's parents.

For Berryman, "papa" is at the center of things. Alan Gilbert, a poet and critic who teaches a seminar at Columbia called Postwar American Poetry: The 1950s and 1960s, says his favorite lines of Berryman are in "Dream Song 241":

Father being the loneliest word in the one language and a word only, a fraction of sun & guns

"Dream Song 384" refers to his father's suicide more directly:

I spit upon this dreadful banker's grave who shot his heart out in a Florida dawn

Like all the confessionalists, "Berryman sought to disturb the intricately wrought, self-contained poem that was the dominant mode of the 1950s," Gilbert says. "This kind of poetry eschewed overtly biographical, social, and historical references." It could also be dry and academic, more concerned with crafting intricately wrought allusions than delivering an emotional punch.

But Berryman's poems were a little more intense than the usual lyrical confessional poem. Here was a man — a scholar deeply embedded within the literary establishment — who shambled onstage wearing grubby glasses and a wild beard, sodden with drink, inhabiting a character so obviously based on himself and his horrendous family life, speaking strangled sentences so emotionally painful that his voice was little more than a croak. Where had he found Henry's squealing, slurring voice? How had he tapped this nerve?

As a college student, Berryman had mentors who pushed him toward the study of literature, a pursuit that was just compelling enough to distract him from the memories of his father and his father's cuckolder, "Uncle Jack" Berryman, and the relentless monologues of his increasingly mad mother, who changed her name from Martha Smith to Jill Angel Berryman. Berryman often asked his mother to tell him about the day his father died, but she always obfuscated and poured new poisons on his father's memory.

Despite getting carried away with drink at Columbia (his antics, Mariani writes, included crashing a faculty dance with three friends, then escaping a security guard by sliding down a banister) and almost flunking his junior year (his scholarship was rescinded and he was asked to take a semester off), Berryman rebounded. With the help of professor Mark Van Doren '21GSAS, '60HON, Berryman

not only graduated, plowing through and annotating sixteen books of eighteenth-century literature in five days, but had the energy to play a "nursemaid and belle" in the 1936 Varsity Show, publish two poems in the *Columbia Review* (thanks to Giroux, the journal's editor), and win a Euretta J. Kellett Fellowship to sail to England and read literature at Clare College, Cambridge.

Berryman lived most of his life as a transient academic, drifting from contract to contract. At Princeton, where he taught for ten years beginning in 1943, he became friends with Lowell and Saul Bellow, and although he published books of poems in 1942 and 1948, he wasn't nearly as recognized as his contemporaries. For decades he was better known as a Shakespeare scholar. He received a Rockefeller fellowship during the Second World War to work on *King Lear*, and spent years editing and standardizing the varied original quartos and folios. This close attention to the mechanical workings of Shakespeare's poetry shaped his work as a poet.

"The Dream Songs were his version of a Shakespeare sonnet," Wadsworth says. "Berryman took Elizabethan syntax and applied it to modern English," resulting in a "wrenched syntax" — the attempt to join modern English with the rules of early-modern verse. Berryman had a vast vocabulary and used multiple layers of diction to create his "songs."

As a teacher, Berryman nurtured many poets, including Pulitzer Prize winner Philip Levine, who wrote about his experience studying with Berryman at Iowa in an essay called "Mine Own John Berryman." Even though Berryman had once sneaked up behind him and whacked him with a Scotch bottle (Levine had dared to ask him to stop running his hand up his wife's skirt), Levine recalls his experience as Berryman's student fondly, saying Berryman "took his class with a seriousness I'd never seen before. Here was this brilliant man preparing for each of our classes and letting us know that what we were doing is immensely important."

The Dream Songs, written over a period from 1955 to 1969 while he was teaching at the University of Minnesota, made Berryman famous, but he kept innovating, his later work becoming more prose-like. Unfortunately, his drinking continued. Alice Quinn, who is the executive director of the Poetry Society of America and an adjunct professor at the School of the Arts, describes how a friend of hers spotted Berryman before a reading at Bard College, drinking with others at a local bar, and was "so ashamed because no one was attempting to curb him in any way." During the reading he was devastated with drink.

In 1971, Berryman, motivated in part by the birth of his third child and the threats of his third wife, Kate, to leave him, managed to quit drinking for eleven months. But quitting was torture, flooding him with physical and spiritual pain. He was trying to write a novel called *Recovery*, but it wasn't coming through. Mariani reports that Berryman's boss at Minnesota, Ralph Ross, saw him that summer, and, in a letter to their friend Allen Tate, noted Berryman's lack of warmth, concluding, "the only John one could love

was a John with 2 or 3 drinks in him, no more & no less, & such a John could not exist."

On January 5, 1972, Berryman relapsed. After writing a note to his wife that read, "I am a nuisance," he strolled out onto the Washington Avenue Bridge in Minneapolis, which overlooked a chunk of rock. In what would be a dress rehearsal, he climbed over the railing, clutching the knife with which he planned, as Mariani describes it, to "slash his throat so that he would feel faint and have to pitch forward." He even wrote a sonnet beforehand describing how he would do it, "unless my wife wouldn't let me out of the house, / unless the cops noticed me crossing the campus up to the bridge / & clappt me in for observation, costing my job —" The next day, he walked out on the bridge to complete the act, but a friend spotted him and they talked books for a few minutes and he lost his nerve. The day after, he walked three-quarters of the way across the bridge, climbed the rails again, and tipped over the railing, not needing the knife. He battered himself against the rock, rolled down a small slope, and was swept away into the icy flow of the Mississippi.

In October 2014, Bob Giroux's old publishing house, Farrar, Straus and Giroux, republished Berryman's work with new introductions, including reissues of *Berryman's Sonnets*, 77 *Dream Songs*, and the complete *Dream Songs*, as well as *Poets in Their Youth*, a memoir by Eileen Simpson, Berryman's first wife. At Columbia, Wadsworth is helping to organize a Berryman program this winter in conjunction with the Heyman Center for the Humanities and the Poetry Society of America.

Not that Berryman has ever left Columbia. Lucie Brock-Broido '82SOA, the director of the poetry program at the School of the Arts, reads aloud one of Berryman's last poems, "He Resigns," for each of her classes, hoping that none of her poets will have to experience what he did.

Age, and the deaths, and the ghosts. Her having gone away in spirit from me. Hosts of regrets come & find me empty.

I don't feel this will change. I don't want any thing or person, familiar or strange. I don't think I will sing

any more just now; ever. I must start to sit with a blind brow above an empty heart. \square

James McGirk '07GS, '11SOA is the author of American Outlaws, slated for release as an Amazon Kindle Single in October.

NEWS

Amale Andraos appointed dean of GSAPP

Amale Andraos, a New York architect who joined the Columbia faculty three years ago, has become dean of the University's Graduate School of Architecture, Planning, and Preservation. President Lee C. Bollinger announced her appointment over the summer, and Andraos took up the position September 1.

"An inspiring teacher, a respected colleague, and a pioneering practitioner whose innovative commissions in cities around the world have earned widespread admiration, Amale is a new leader among a rising generation of creative architects and designers of our physical environment," says Bollinger. "She is just the kind of person who can further expand the role of the school as a center of interdisciplinary thinking across Columbia about how to develop a more just and sustainable society."

Andraos is a principal at WORKac, an architecture and design firm that she cofounded with her husband, Dan Wood '92GSAPP, which is known for projects that combine elements of manmade and natural environments. The firm's designs often feature green roofs, indoor waterways, gardens that float above courtyards, and large openings that blur the line between indoors and outdoors. The firm's ongoing and recently completed projects include a new conference center in the capital of Gabon; a master plan for seven new university campuses in China; the Blaffer Art Museum at the University of Houston; the Children's Museum of the Arts in Manhattan; and

the Edible Schoolyards educational gardens at PS 216 in Brooklyn and PS 7 in Harlem, where children grow, cook, eat, and compost organic food, working between an outdoor garden and a small building that combines a greenhouse and a kitchen-classroom.

"A structure can make you feel connected to the world, rather than sheltered from it," she says. "In the 'Edible Schoolyards,' the roof collects rain and distributes it to the garden; this is something the children can see and understand. The slope of the roof and the shape of a water cistern below are communicating something about how architecture and the environment can work together."

A native of Lebanon, Andraos attended the McGill University School of Architecture in Montreal and the Harvard Graduate School of Design. Before cofounding WORKac in 2003, she worked with the acclaimed architect Rem Koolhaas in his Rotterdam and New York offices. She has taught at Princeton, Harvard, the University of Pennsylvania, the Parsons School of Design, the New York Institute of Technology, Ohio State's Knowlton School of Architecture, and the American University of Beirut, in addition to Columbia.

Andraos is a leading voice on urbanism and globalization — especially as they relate to environmental and social concerns. These interests have led her to become deeply involved in Columbia's international programming, serving on the faculty steering committee of the Columbia Global Centers in Amman

Thirteen new global projects receive seed grants



Rwandan farmers, like those pictured here, have benefited from the soil expertise of Pedro Sanchez, an Earth Institute researcher who is now expanding his work to China.

The University has announced the latest recipients of grants from the President's Global Innovation Fund, established last year to help faculty develop innovative research, teaching, and service projects overseas. This year's seed grants, which range from \$25,000 to \$225,000, were awarded to thirteen projects chosen from fifty-three proposals. All will make use of the University's network of Global Centers located in Amman, Beijing, Istanbul, Mumbai, Nairobi, Paris, Rio de Janeiro, and Santiago.

"The goal of the Global Centers has always been to make it easier for faculty and students to pursue academic projects that have a global character," says Safwan Masri, executive vice president for Global Centers and global development. "These grants will help new and particularly forward-thinking projects get off the ground."

This year's grant recipients include scholars working in astronomy, biology, ecology, law, pediatrics, theater, art history, architecture, psychology, archaeology, nursing, epidemiology, and soil management. Their awards follow an initial round of grants from the President's Global Innovation Fund last year that supported twenty equally diverse projects.

"Collectively, these and future projects will play an essential role in realizing the potential of the Columbia Global Centers to create new opportunities for faculty and students, and in defining in tangible and Istanbul, teaching a design studio and seminar at GSAPP's Studio-X in Amman, and organizing a symposium on the concept of "the Arab city" in Amman last fall. (A similar symposium will take place at GSAPP's Wood Auditorium on November 21.)

"What interests me about the notion of the Arab city is how Western architects and planners still fall back on clichés when thinking about places that are exotic to them," she says. "If we work in a city like Amman, or in any 'non-Western' city, for that matter, we tend to assume that our work should necessarily say something meaningful about that region's cultural identity, and the result is often quite reductive. Most cities' needs aren't any different from our own. They need creative solutions to problems involving density, water distribution, energy efficiency, and sustainability, just as all cities do."

Andraos, who succeeds Mark Wigley as dean, says she is determined to help GSAPP faculty collaborate with scholars from across the University to address a wide range of pressing global issues — everything from public health to water security to flood control to education.

"Columbia is already a leader in addressing the challenges of high-speed urbanization around the globe, and I believe it can lead in recasting architecture at the heart of the dialogue between urban societies and the natural environment," says Andraos. "This is a



NATHAN LATTIF

school whose creativity and diversity of global perspectives make it an ideal place to consider these large issues, and I am honored by the opportunity to expand on the work that Mark Wigley has done in welcoming people like me to the conversation."

ways what it means for Columbia, the most global of universities, to explore new frontiers of knowledge in the twenty-first century," wrote Provost John Coatsworth in an e-mail announcing the awards. "It is gratifying to see such a high level of interest in this program from our faculty."

According to Masri, a panel of senior faculty who selected this year's grant recipients gave priority to applicants who will make use of multiple Global Centers, such as by conducting research in one part of the world that will benefit people in other regions. For instance, Pedro Sanchez, a senior research scholar at the Earth Institute and one of the world's leading experts in soil management, received a grant to compare sustainable agri-

culture practices in sub-Saharan Africa and parts of China.

"The challenges in the two regions are contrasting: in Africa the soil tends to be depleted of nutrients, whereas in China farmers add too many nutrients, causing pollution," says Sanchez. "We thought that comparing these extremes could make for some interesting joint research projects and possibly help our collaborators in each area."

A team of researchers at the Mailman School of Public Health, meanwhile, received a grant to study the Chinese government's health-related assistance aid to Africa, which has ramped up dramatically in recent years. The researchers will use the Columbia Global Centers in Beijing and Nairobi as bases of

operation, building partnerships with local academics in both regions to examine the characteristics and effectiveness of China's health assistance to African countries.

"This is an opportunity to open dialogue and establish relationships among international health leaders, officials, faculty, and students from Africa, China, and the United States," said Wafaa El-Sadr, a prominent epidemiologist and AIDS researcher who is leading the group. "We can make inroads toward greater crossnational understanding and collaborate to help inform future research and policies, and ultimately advance the health and well-being of communities in Africa."

>> Visit globalcenters.columbia.edu.

Media institute opens

The Brown Institute for Media Innovation, established two years ago to support the development of new, high-tech methods of newsgathering and reporting, officially opened its doors at Columbia Journalism School in September, having renovated roughly a third of the ground floor of Pulitzer Hall. The space, which the institute shares with the Tow Center for Digital Journalism, features an open work environment with movable workstations, hardwood bleacher-style seating, and numerous projection screens — all of which are intended to make it easy for groups of people to come together and exchange ideas.

"This is a place designed for experimentation, for collaboration, for workshops and seminars," says Mark Hansen, the East Coast director of the Brown Institute, which operates as a partnership between Columbia's journalism school and Stanford's engineering school. "We want to build a community of people within the school who are interested in developing new approaches to journalism and storytelling, connecting with students and faculty and alumni."

The Brown Institute has maintained a high profile since it was created in 2012 with a gift from the late *Cosmopolitan* editor Helen Gurley Brown, despite lacking a home base until now; it has awarded eighteen "Magic Grants" to groups of journalists, historians, artists, engineers, computer scientists, and other data experts — led by students and faculty alike — who are collaborating on innovative



Mark Hansen at the newly opened Brown Institute for Media Innovation.

projects using high-tech tools. The funded projects include an exploration of the lives of Iranian artists using immersive video technology; an investigation of the types of information the US government keeps classified using data-mining techniques; and a search for corporate financial malfeasance using forensic accounting tools.

Now that the institute has a proper home, Hansen expects it to become more integrated into the school's daily educational activities.

"Part of our mission is to help acquaint the school's general student body with data-driven journalism techniques," says Hansen. "We hope that anybody who is curious about using computational methods will stop in."

>> Visit brown.columbia.edu.

Sportsmanlike conduct

A group of freshman football players spent their first summer in New York City tackling trash, sacking leaves, and picking off loose branches in Riverside Park. Their efforts were part of a communityservice program that Lions head football coach Pete Mangurian



Freshman Lions football players, seen here chatting with neighbors in a West Harlem community garden, spent three weeks in July volunteering in local parks and schools.

started, to instill an appreciation in his incoming players for their new urban home. While some players pulled weeds and moved mounds of dirt in temperatures that topped ninety degrees, others volunteered at a local preschool — reading to children, helping them with arts and crafts, and chaperoning field trips.

"One month living in New York City, working alongside all our wonderful neighbors, alongside the Columbia community, you start to understand what it means to be a leader," says La-Verna Fountain, Columbia's vice president for construction business services and communications, who helped Mangurian design the program. "I think it will show up on the field, and it also means, more importantly, that our athletes are going to be leaders on campus and in the community."

Thirty-four freshman Lions participated in the three-week program, which ended with them giving presentations about what they did and reflecting on the experience.

Says Mangurian: "A lot of these guys are from much different places than New York City. It's a life lesson to learn how to interact a little outside your comfort zone. Another positive is they become more familiar with Columbia and the people here. This is a win-win situation for everybody involved."

>> See video at news.columbia.edu/newyorkstories/3488.



Columbia Secondary School graduated its first class on June 24.

First-class finish

The Columbia Secondary School for Math, Science, and Engineering sent its first graduates out into the world this summer, with every departing senior accepted to college - three of them to Columbia University. The school, located on West 123rd Street between Morningside and Amsterdam Avenues, opened in the fall of 2007 as a joint effort by the New York City Department of Education, the University, and local civic organizations to create a selec-

tive public school that would provide science, technology, engineering, and math education to students from Upper Manhattan and elsewhere. Today, everyone involved is feeling good about the experiment. "I am so proud of this school we set up with the city," says Columbia president Lee C. Bollinger. "We are now embarked on an adventure with these young people that will be a source of pride for the University for generations to come."

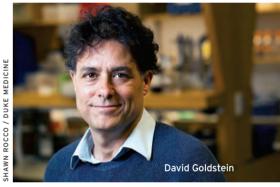
Goldstein to head new genomics institute

David Goldstein, a prominent geneticist at Duke University, will soon join Columbia as a professor of genetics and development at the College of Physicians and Surgeons and as director of a new Institute for Genomic Medicine to be run in partnership with NewYork-Presbyterian Hospital; Goldstein will assume the new positions January 1, 2015.

Goldstein, who currently directs Duke's Center for Human Genome Variation, is an expert on the relationship between human genetic variations and diseases such as epilepsy, hepatitis C, and schizophrenia, as well as drug treatments for these conditions. He was recruited to Columbia to lead an institute that will integrate genetics and genomics into research, patient

care, and education. Goldstein will also serve as an adviser to Columbia president Lee C. Bollinger and medical campus head Lee Goldman on the genetic and genomic components of Columbia's University-wide initiative in precision, or personalized, medicine, which was announced last February.

"Having a pioneering researcher like David Goldstein join us marks a crucial S next step in our initiative to be at the forefront of genomics, data science, and the core science and engineering disciplines essential to this emerging field of truly humanistic medicine," says Bollinger. "The potential for progress in this broad subject encompasses not only new cures for disease, but also virtually every part of the



University, including areas that explore fundamental issues of human self-understanding, as well as the legal, policy, and economic implications of revolutionary changes in knowledge and practice."



Deans of social science, humanities appointed

This summer, the University appointed Alondra Nelson the dean of social science and Sharon Marcus the dean of humanities, positions that involve working with fellow academic deans to manage the departments, research centers, and institutes in their divisions in the Faculty of Arts and Sciences. More specifically, they will help to oversee budgets and faculty hiring, as well as the departments' com-

pliance with equal-opportunity and conflict-of-interest policies.

Nelson is a sociology professor recruited to Columbia from Yale in 2009; Marcus, the Orlando Harriman Professor of English and Comparative Literature, has taught here since 2003. As divisional deans, they join physics professor Amber Miller, who has served as dean of science since 2011.

In brief

Bollinger's term extended to 2018

The Columbia University Board of Trustees announced this summer that President Lee C. Bollinger had accepted its request that he extend his term for two additional years, which means that he will continue serving as Columbia's president until 2018.

Mike Pride named Pulitzer administrator

Mike Pride, a former editor of the Concord Monitor who led his small New Hampshire newspaper to national prominence, has been named administrator of the Pulitzer Prizes. He assumed the position this summer, following the retirement of Sig Gissler.

Pride, sixty-seven, became editor of the Monitor in 1983 and helped it win the New England Newspaper of the Year award nineteen times. He served on the Pulitzer board from 1999 to 2008.

Global free-speech project launched

Earlier this year, the University established a major initiative to bring Columbia faculty and students together with outside experts to survey, document, and strengthen free expression around the world. The Columbia Global Freedom of Expression and Information Project is being led by Agnès Callamard, who previously directed the international human-rights organization Article 19.

In its first phase, the project is surveying some thirty countries to determine how freedom of speech and information is handled by their justice systems.

CU's close-up

This fall, New York City public-television station WNET aired Treasures of New York: Columbia University, a documentary about Columbia's history and growth. It is available to watch online at thirteen.org/treasures.

Columbia wins writing, design awards

Columbia Magazine recently won several awards from the Council for Advancement and Support of Education (CASE). Senior editor David J. Craig won a gold award in the "best articles of the year" category for "Heady Collisions," his Summer 2013 cover story about Columbia physicists' search for supersymmetric particles. Associate editor Paul Hond won a silver for his Winter 2013-14 article "The Wages of Health," a twin portrait of Harlem-based health advocates Manmeet Kaur '05BC, '12BUS and her husband, SIPA professor Prabhjot Singh, Art director Eson Chan and freelance artist Davide Bonazzi won a gold in the illustrations category for the Winter 2013–14 issue's cover art, portraying a historian's efforts to investigate the US government's classification practices.

Upcoming Career Events:

Columbia Alumni CAREERS CAA

Discover your network

October 14, 2014 Fashion, Film, Marketing, & Environmental Online Speed Networking

October 23 & November 20, 2014 Alumni Networking Breakfasts Columbia Alumni Center; New York City

October 30, 2014 CCE/CAA Alumni Speed Networking Low Memorial Library Rotunda; New York City

Job tips, career conversations, and more at:



@CAACareerServices



in Columbia Alumni Association Network

alumni.columbia.edu/career-connections

NEWSMAKERS

Labor Lion

Labor organizer Ai-jen Poo '96CC is the recipient of one of this year's MacArthur Fellowships. Poo is the director of the National Domestic Workers Alliance, codi-



Ai-jen Poo '96CC

rector of Caring Across Generations, which is a national coalition of more than two hundred advocacy organizations, and the cofounder of Domestic Workers United, an organization of home caregivers in New York. The \$625,000 awards, commonly known as "genius grants," recognize creativity, originality, and long-term potential in the recipients' fields.

Artistic Spaces

Andrew Byrne '99GSAS was named artistic director of Symphony Space, a performing-arts center on the Upper West Side of Manhattan. The Australian-born Byrne originally came to New York on a Fulbright scholarship in 1993. He joins Symphony Space after ten years at Carnegie Hall . . . Minsuk Cho '92GSAPP won the Golden Lion award for best pavilion at the 2014 a Venice Architecture Biennale. He designed the Korean pavilion, which was praised for presenting new knowledge of architecture within a highly charged political landscape.

Televisionaries

Several Columbia College and School of the Arts alumni were nominated for Emmy Awards. Beau Willimon '99CC, '03SOA was recognized for his hit Netflix series House of Cards, which received thirteen nominations and won in the sound-mixing category. Orange Is the New Black, created by Jenji Kohan '91CC, was nominated for twelve awards and won in three categories: casting, guest acting (by Uzo Aduba), and editing. The HBO thriller True Detective, co-produced by Jessica Levin '02SOA, racked up twelve nominations, while The Daily Show with Ion Stewart, co-produced by Kahane Cooperman '91SOA, received six. Composer Tom Kitt '96CC (with lyricist Lin-Manuel Miranda) took home the 2014 Creative Arts Emmy for original music and lyrics for writing Neil Patrick Harris's showstopping opening number from the 2013 Tony Awards.

Superhuman

President Barack Obama '83CC bestowed the National Humanities Medal on fellow Columbian Wm. Theodore de Barv '41CC, '53GSAS, '94HON. Long revered for his service and his scholarship in East Asian studies, the ninety-five-year-old John

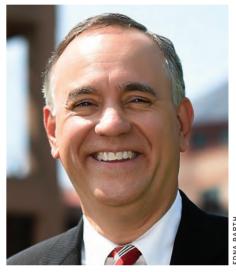


Wm. Theodore de Bary '41CC, '53GSAS, '94HON

Mitchell Mason Professor Emeritus and Provost Emeritus is one of ten recipients this year.

King of Queens

Félix V. Matos Rodríguez '94GSAS was appointed president of Queens College by the trustees of the City University of New York.



Félix V. Matos Rodríguez '94GSAS

Matos Rodríguez is a historian and an authority on women's issues in Puerto Rico. He was most recently the president of Hostos Community College, also a part of CUNY.

High and Long

Carl Hart, an associate professor of psychology at Columbia, won the PEN/E. O. Wilson Literary Science Writing Award for his book High Price. The \$10,000 award recognizes literary excellence in writing about the physical and biological sciences . . . The UnAmericans, the debut story collection by Molly Antopol '07SOA was longlisted for the 2014 National Book Award in fiction. At last year's awards ceremony, Antopol was selected as one of the "5 Under 35" best writers. School of the Arts professor Mark Strand's Collected Poems was also on the poetry long list this year.



TO BE ALWAYS THE BEST

TAKE A BREAK IN CHILE

From the driest desert in the world to pristine Patagonian Ice, Chile attracts by the vitality of its contrasts.



UNFORGETTABLE SCENERIES

The Atacama Desert amplifies sensations, especially with the striking differences encountered between the desert lowlands and the unique life and natural formations in the Andean Plateau perched high above it. Santiago is full of energy, culture, history. It's a city best explored by foot! The south of Chile is a whole new world of lush green forests and wild waterways, brought to life by a humid, rainy climate, which also fosters a rich ecological diversity.



BREATHE ADVENTURE

Rafting, kayaking, sport fishing, trekking and skiing are among the most favorite in the area. During the summer, its beaches become the main attraction for its visitors. It is also a destination for foodies, given its wide gastronomic offer, and its casino gathers people who enjoy a bit of gambling.



HERITAGE & MODERNITY

Chile offers the perfect balance of tradition and modernity. The country has five unique sites that have been recognized as World Heritage Sites by UNESCO. Chile has also been internationally recognized for its modern development, including architecture, design, and road and housing infrastructure – in projects spanning an incredible variety of geographical conditions.



CONGRESSES & CONVENTIONS

Chile's first class infrastructure and economic and political stability have generated high levels of trust. Traveling throughout Chile is comfortable, easy and safe, thanks to excellent land transportation and domestic flight infrastructure. Santiago offers five- star convention centers and a large accommodation infrastructure with over 14.500 hotel rooms within urban radius.

Chile is a country rich in diversity and contrast. It possesses a special geography that distinguishes it from other world destinations. One of its most unique features is having territory in three world regions: South America, Oceania, and Antarctica. Its continental length from north to south reaches over 4,300 kilometers in a narrow strip of land between the rugged Andes Mountains and the Pacific Ocean.





EXPLORATIONS

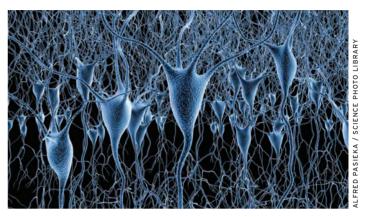
Researchers find synaptic link to autism

Columbia neurobiologists led by David Sulzer have made a discovery that may help explain why people with autism are prone to epilepsy and often oversensitive to noise and social experiences.

The scientists have found that autistic young people have an overabundance of synapses in some parts of their brains, and that this excess is the result of the brain having failed to weed out unnecessary synapses through a process called "pruning." Scientists have long known that synapses — the connections that neurons use to send and receive signals - grow at a furious pace in childhood and must be periodically thinned out, but the Columbia study is the first to show that unchecked synaptic growth is associated with autism.

"From early childhood to adolescence, synapses are pruned," says Sulzer, who is a professor of psychiatry, neurology, and pharmacology. "In other words, you start out, say, at age three, with about twice the density of synapses than you have at the age of fifteen. But this doesn't occur with people with autism."

Sulzer and his colleagues discovered this by examining brain tissues of people who had died between the ages of two and twenty, about half of whom had autism. In comparing the brains of young people with and without the disorder, the researchers found little difference in the density of synapses at a very young age but a pronounced difference by adolescence — indicating, they say, that the problem in the autistic brain is not one of overproduction but rather of inadequate pruning.



Synapses, located on the tentacles that protrude from neurons, grow rapidly during childhood and are thinned out periodically in a healthy brain.

The scientists are hopeful that their research could aid in the development of new treatments for autism. They've already shown that a powerful immunosuppressive drug can restore normal function to the brains of mice that have been genetically engineered to stop pruning. The treatment also alleviated autistic-like social behaviors that the mice temporarily displayed.

Although the drug, rapamycin, has serious side effects that may preclude its use in people, "the fact that we can see changes in behavior suggests that autism may still be treatable after a child is diagnosed, if we can find a better drug," says Sulzer.

Study of Ashkenazi Jews opens genomic window

The Ashkenazi Jewish population has played an important role in the study of human genetics because of its history of demographic isolation. Since Ashkenazi Jews have little genetic variation among them, scientists have a relatively easy time spotting anomalous genes that increase the risk of disease insights that can lead to better diagnostics and medical treatments for everybody.

This year, a team of researchers led by Columbia Engineering's Itsik Pe'er conducted what they say is the most comprehensive study of Ashkenazi genes ever. By analyzing the genomes of 128 healthy Ashkenazi Jews and comparing their profiles to those of nonJewish Europeans, Pe'er and colleagues identified many previously unknown mutations common among Ashkenazim. They have since published their entire database online, in hopes that other medical researchers will find links between some of these genetic variants and complex diseases such as schizophrenia, Parkinson's, diabetes, and cancer.

"Our study is the first full DNA-sequence data set available for Ashkenazi Jewish genomes," says Pe'er, an associate professor of computer science who is also a co-chair of the Health Analytics Center at Columbia's Institute for Data Sciences and Engineering. "What's especially gratifying is the idea that our work will pave the way for personalized genomics in other populations."

The mapping effort drew on contributions from scientists at eleven labs in the New York City area and Israel as part of the Ashkenazi Genome Consortium, which Pe'er cofounded three years ago.

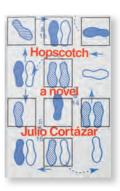
"We fully expect the creativity of the scientific world to come up with additional uses for the data," says Pe'er, who is now working with additional collaborators, including the New York Genome Center, to sequence approximately five hundred more Ashkenazi genomes to make the catalog even more comprehensive.

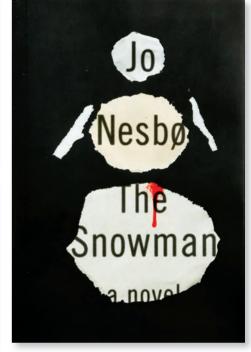
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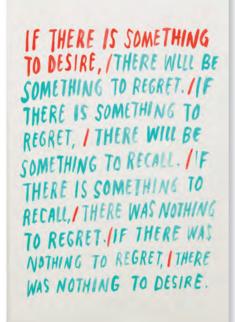


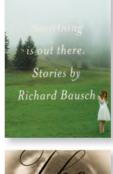


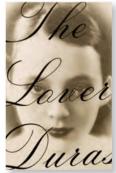
















Full Mental Jacket // By Joshua J. Friedman

Cover

By Peter Mendelsund (powerHouse Books, 104 pages, \$60)

What We See When We Read

By Peter Mendelsund (Vintage, 448 pages, \$16.95)

Peter Mendelsund's *Cover* — a compilation of book covers and jackets that Mendelsund '91CC designed over his eleven years (so far) in the business — is a confident-looking art book, but when the author tells his own story, he sounds surprisingly unsure. Design was Mendelsund's second-choice profession, a stopgap while he re-evaluated his career as a concert pianist. He had stud-

ied piano from boyhood and then at conservatory, but he taught himself design on his home computer in less than a year, and was shocked when the publisher Knopf hired him on the basis of a ragged portfolio and an interview done as a favor to his mother. In the book's foreword, Mendelsund confesses that he is still coming around to self-identifying as a designer, though the present volume

amounts to an admission that "perhaps what I am is what it says I am on my business card."

And yet Mendelsund's covers bear none of this hesitancy. Simple and unforced, they fulfill Will Strunk's mandate that art should be like a machine with no unnecessary parts. His layering of photographs, drawings, and type gives the covers a three-dimensional quality — even an implied motion, like a freeze-frame of a film that might start up again at any moment: a pair of dancing feet mid-lesson, a twisting wisp of flyaway hair, a churning construction-paper sea. You want to touch them and take them home and hang them on your walls. This thing that Mendelsund isn't sure he is — he is one of the very best.

Cover designers are translators: they convert hundreds of pages of words into a modest rectangle of color, shape, and pattern that for most readers will be their first impression of a book (and for many others their last). Their tools are manifold but finite. Mendelsund, a methodical thinker, enumerates the possible subjects of a book's cover art: character, object, event, place, time, text sample, tone, plot, theme, and parallel imagery. Of course, these are not equal choices. Pictures of people should generally be avoided, because they can "rob readers of their satisfying acts of imagination." Objects work better, because they are "saturated with metaphoric potential." The worst cover Mendelsund labels "The Tell-All": it is crammed with illustrations of plot events. "Only one part of the author's output is being addressed here — the most mundane part, namely: 'what happens' during the course of a given tale," Mendelsund writes. "I detest this kind of jacket."



But avoiding the tell-all is no small challenge. Mendelsund is all too aware that the cover designer and the author work, in a sense, at cross-purposes: the author traffics in the intellectual and free-floating, the designer in the concrete and fixed. "It is my job," he writes, "to drag the text, the author's work, perfect in its disembodiment, into awful specificity."

He copes with this imbalance by favoring a modernist, semi-abstract aesthetic that had been more or less out of

fashion since the middle of the twentieth century. For his redesign of the works of Kafka, for instance, he uses a bright-colored eye motif, which conveys Kafka's humor, alienation, and surrealism better than any photograph could. On the cover of *The Metamorphosis*, rather than an insect we see a pair of eyes: one human, one hexagonal and compound. (Whether we are viewing these eyes from the inside or the outside remains ambiguous.) A book of letters between

Kafka and his love Milena is covered in fragments of faces and lines of motion, capturing the long-distance relationship in a few gestures. Mendelsund benefits from the constraints of a visual theme; his work seems to say, see how much I can do with so little.

While Mendelsund excels at series design, his highest-profile series is his least interesting: the cover of *The Girl with the Dragon Tattoo*

has an uncharacteristic blandness that is likely a byproduct of the publishing bureaucracy (though the covers improve as the series goes on). Compare these with Mendelsund's covers for another Swedish crime trilogy, Jens Lapidus's Stockholm Noir books: their neon-colored backgrounds, blackand-white photos of weapons, and gratuitous accent marks (Mendelsund writes the titles as *Life Delüxe*, *Easy Money*, and *Never*



Fück Up) make the books exude a perversely joyful criminality. Or take Jo Nesbø's Harry Hole series, whose deliciously ominous covers are decorated with bloodstained scraps of newspaper.

Mendelsund's covers deliver pure emotion, but his writing — whether in *Cover* or its companion volume, *What We See When We Read* — tends toward the cerebral. *WWSWWR*, an illustrated meditation on how our minds turn fiction into mental images, presents Mendelsund as an inveterate questioner, testing his ideas through thought experiments, with an occasional reference to Wittgenstein or Barthes. He brings the same scholarly intensity to the books he designs. "When I first spoke with Peter," writes Ben Marcus, a Columbia professor of creative writing, in a short contribution to *Cover*, "I was struck by how carefully he'd read [my] book. He fucking seemed to have *studied* it. This is the kind of close reading one longs for from an editor. To have it from a designer is unnerving and, of course, a piece of very good luck."

When he's feeling doubtful about his identity as a designer, Mendelsund likes to tell himself that design is easy. Compared to his first career, he writes, design has the freedom of the rehearsal without the fear of the concert, and with this confidence comes daring and playfulness. In a conversation with Peter Terzian for the *New Yorker*'s website, Mendelsund says he got a "crazy revelation" on the subway that he should design text-only covers for the works of Italo Calvino, each one bearing a description of an *imaginary book jacket*. It's no wonder the anxious authors who put themselves in his hands invariably end up grateful. "Peter's cover is like the novel's score," writes Alexander Maksik. "What magic this is."

Dangerous Nouns // By Jennie Yabroff

All Our Names

By Dinaw Mengestu (Knopf, 273 pages, \$25.95)

When a friend said she'd picked up *All Our Names*, then put it down, finding it "generic," I covered my ears, but the damage had been done — that night, when I returned to the novel, the word *generic* floated before my eyes like a scrim. I'd been devouring the book, but now I was filled with doubt. Were not the characters opaque? Was not the landscape indistinct? Was not the plot itself wan, almost anemic? Even as I kept reading, I had to admit: yes. My friend was right. Many aspects of the novel could be described as generic. But I soon realized that it was intentionally so, and that its lack of specificity was part of its brilliance.

All Our Names, the third book by the Ethiopian-born, Mac-Arthur grant winner Dinaw Mengestu '05SOA, explores themes of immigration and the search for identity through the twin stories of a displaced African fleeing his country's civil unrest in the 1970s and a Midwestern social worker who falls in love with him. But it's also about what it means to write, an art that depends on specificity, when your physical and emotional survival depends on specificity's opposite: the suppression of details about your name, your country, what you saw and did, and what was done to you as you sought



Kampala, Uganda, 1971.

escape. How, the book asks, can the narrator create a history that is generic enough to save his life without erasing himself altogether?

The novel opens with the African narrator shedding his birth

name as he arrives in Kampala, which he refers to as simply "the capital," because Kampala "belonged to Uganda, but the capital, as long as it was nameless, had no such allegiances." At the local university, where the narrator impersonates a student, he meets Isaac, who christens him "the Professor"; Isaac renames all the wealthy students "Alex," interchangeable faces at an unidentified school in a nameless capital. Proper nouns, like all identifying details, are dangerous. Unlike Isaac,



who has come to the capital to be a revolutionary, the narrator wants to be a famous writer. His first published work, a tongue-in-cheek list of "Crimes Against the Country," contains its own negation: "It is a Crime Against the Country to read this."

The students' revolution becomes a real revolution (though since we never learn the name of the president or the exact year, it's hard to know whether it corresponds to a historical one), with Isaac as a lieutenant and the narrator his uneasy ally. Even events the narrator witnesses firsthand have a murky ambiguity: Isaac provokes some "Alexes" sitting outside a café into beating him up, then re-appears on campus, flaunting his injuries. "I imagined him, as an old man, pointing to an old wound on his hand or his face, and saying, 'This one came from the police,'" the narrator says. "Or, 'This one I can't remember anymore. I have so many on my body."

The narrator soon sees the utility of this willed forgetting. Walking through an unfamiliar neighborhood with a newspaper under his arm, he is attacked and beaten unconscious. "My memory of what happened after the paper was taken has never returned; if parts ever did start to emerge, I would do whatever was necessary to keep them buried." The narrator is taken to a hospital, where Isaac visits him, bringing him a blank notebook to write in, saying, "Now you know what it feels like," meaning, now he can be trusted to tell both their stories.

Mengestu explored similar ideas about the trickiness of transforming personal experience into historical narrative in his previous novel, *How to Read the Air*. In that book, the main character differs from the narrator of *All Our Names* in that he can't stop telling stories about immigrants' experiences. But he, too, struggles with

the truth; the stories he tells are lies. In both books, the narrators' audiences are complicit in the acts of fabrication and obfuscation. All Helen, the social worker in All Our Names, knows about the narrator is that "he was from somewhere in Africa, that his English was most likely poor . . . and his life may or may not have been in danger," and that may be all she really wants to know: "Just as I had wanted him to talk, I needed him to stop." It is easier for Helen that the narrator remain a generic immigrant, in the same way it is easier for the narrator to present himself that way.

Helen may never know the extent of Isaac's story, but we, as readers, do. Mengestu pulls off a sly authorial sleight of hand, for though the narrator insists he does not have the words to describe the brutal, hopeless denouement of the revolution, he brings it to life on the page: "I tried to write down what had happened. I thought of counting the dead, but I was too far away to do so. I tried next to describe one of the bodies, but all I could see was death . . . When that failed, I tried to describe a woman dragging what looked to be an old man through the grass, but before I

knew what to write, she was gone, and then walking back, emptyhanded." In the end, he only fills six pages of the notebook Isaac gave him, four with maps, which, he says, are "far from poetry, less than a journal, and worthless as history."

As the narrator prepares to leave Africa, Isaac gives him two gifts: a Kenyan passport, enabling the narrator to assume Isaac's identity, and a new, note-filled journal: "He had made a better record of our lives together than I had ever done," the narrator says, though of course he is the one who will go on to write the story we've just read. Isaac also has made an addition to the list of Crimes Against the Country: "It is a Crime Against the Country to forget this happened." This tension between memory and forgetting, between history and oblivion, between the specific and the universal thrums through the book like a heartbeat, anything but generic.

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

Death Row Records // By Lauren Savage

The Wrong Carlos

By James S. Liebman and the Columbia DeLuna Project (Columbia University Press, 448 Pages, \$27.95)

In 2006, U.S. Supreme Court justice Antonin Scalia boldly declared that there has not been "a single case — not one — in which it is clear that a person was executed for a crime he did not commit." Perhaps an extensive new study by Columbia law professor James S. Liebman will force him to reconsider.

When Professor Liebman and a group of his students — Shawn Crowley '11LAW, Andrew Markquart '12LAW, Lauren Rosenberg '11LAW, Lauren White '11LAW, and Daniel Zharkovsky '11LAW — first came across the case against Carlos DeLuna for the murder of Wanda Lopez, they had no idea that they would uncover such a clear-cut miscarriage of justice. Liebman had wanted to follow up on his findings that almost two-thirds of death-penalty verdicts in the last twenty-five years were overturned due to error. On the hunt for cases that rested on that least reliable type of evidence, eyewitness testimony, he started in Texas, where executions have been performed at nearly five times the rate of any other state since 1976 (according to the Death Penalty Information Center). His investigation, which included crime-scene photos, witness interviews, court records, and original news coverage, unfolds in The Wrong Carlos: Anatomy of a Wrongful Execution and its accompanying website, thewrongcarlos.net.

The tragedy began with Wanda Lopez, a convenience-store clerk in Corpus Christi, Texas, who was fatally stabbed while working the

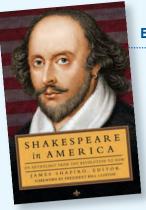
night shift on February 4, 1983. In less than an hour, police arrested twenty-yearold Carlos DeLuna after they found him hiding under a nearby truck. The state executed him just six years later. Yet from the moment of his arrest until the day he died, DeLuna maintained not only that he didn't do it but that he knew who did.

As Liebman and his team of young legal scholars reconstruct the crime and resulting conviction in shocking detail, they forgo impassioned prose in favor of a facts-only approach. In doing so, they



give readers the rare opportunity to dissect a capital case and "make up their own minds about the reality of wrongful executions." The details tell a chilling story.

Carlos Hernandez was the same height and weight as Carlos DeLuna. The two men both lived in Corpus Christi and looked so much alike that friends and family mistook photos of one for those



Bard in the USA

The book: Shakespeare in America (Library of America)

The editor: James Shapiro '77CC, Larry Miller Professor of English and Comparative Literature

Columbia Magazine: Your new anthology charts the history of America's fascination with Shakespeare. How did the book come to exist?

James Shapiro: Shakespeare is increasingly a global phenomenon, though what interests readers and playgoers in, say, India or China may differ from what audiences in Brazil or Russia might find compelling. Knowing that I planned to be engaged more fully in global Shakespeare in the coming years (ideally, through Columbia's Global Centers), I thought it would be wise to learn more about my own country's responses to Shakespeare. Over the course of my research, I was amazed by how much extraordinary writing about Shakespeare there has been in this country over the past two centuries, much of it unknown to me.

CM: What were some of your most intriguing discoveries?

JS: Easily the strangest thing I encountered in the course of putting together the anthology was the amateur production of Othello in 1846 in Corpus Christi, Texas, staged by American troops on the eve of war with Mexico. A young officer named Ulysses S. Grant was cast in the role of Desdemona. I'm still wrestling with what it meant for a future Civil War general and president of the United States to see this play about racial division through the eyes of its tragic heroine. I was also surprised to come across a poem written in 1848 by a Native American named Maungwudaus, who was visiting Stratford-upon-Avon and wrote a tribute there to Shakespeare.

CM: Tell us more about *Othello* and America. It seems as if Americans have grappled with

that play in a way that reflects our national reckoning with slavery and race.

JS: America's Othello was certainly not England's: while the African-American actor Ira Aldridge could perform the title role on the London stage in 1825, well over a century would pass before Paul Robeson would become the first African-American to play that part on Broadway. The anthology is rich in American writing about Othello, from President John Quincy Adams — a great opponent of slavery — nonetheless attacking Desdemona for betraying her father and marrying a black man, to Mary Preston (a fervent supporter of the Confederacy) insisting that "Othello was a white man!" It's powerful and disturbing stuff.

CM: The book is introduced by President Bill Clinton, which initially seems like a surprising choice. How did he get involved? JS: Shakespeare had a particular gift for creating plays that put individuals under incredible pressure — in his tragedies, to the breaking point. It's no surprise that those among us who experience the most intense pressure day in, day out — the presidents of the United States - have been drawn to his plays, from George Washington and Abraham Lincoln up to the present day. I knew that President Clinton had spoken about reading Macbeth in high school and had quoted from Shakespeare in speeches. I reached out to him through the editors at the Library of America and he graciously provided a foreword to the book.

CM: What was your own first encounter with Shakespeare in America?

JS: My earliest encounters with Shake-speare onstage took place in London and

Stratford-upon-Avon, in the 1970s; I'd work during the summers until August, then travel to England, sleep in youth hostels, and see a play a day for three weeks every summer, for years. It's only lately that my engagement with Shakespeare has been primarily American, since I've signed on to serve as Shakespeare scholar in residence at the Public Theater downtown, Easily my most memorable experience in that regard was going with a company of actors from the Public to Rikers Island, where they performed Much Ado about Nothing. I've never seen a more attentive or engaged audience, and the experience of watching inmates respond to the play was deeply moving. I'll be heading back there this year with a company performing Pericles.

CM: What are some of your favorite pieces in the collection?

JS: My absolute favorite is Jane Addams's 1895 essay "A Modern Lear." It's brilliant, passionate, and in choosing to view Shakespeare's tragedy through the lens of the bloody Pullman strike, a hundred years ahead of its time. The powerful (and Learlike) industrialist George Pullman made sure that it wasn't published at the time, and it didn't appear in print until 1912. I also love the final entry, from Jen Bervin's 2004 volume Nets, in which Bervin takes Shakespeare's sonnets and puts key words in bold, thereby uncovering fresh meanings and resonances. One of her most haunting revisions is "Net 64," which highlights language in that sonnet that foreshadows the destruction of the Twin Towers on September 11, 2001: "I have seen . . . towers . . . down-razed . . . loss . . . loss."

— David Ebershoff

of the other. The jury would never learn the truth about DeLuna's "tocayo," or namesake: that he was notorious in the Corpus Christi community for his violence — often directed at poor Latino women — and that he had a penchant for Buck knives, like the one used to kill Lopez. When DeLuna named Carlos Hernandez as the real culprit, many, especially the jury, were doubtful. The prosecution maintained that they "exhausted all avenues to find Carlos Hernandez," and that the "phantom" killer didn't exist. But it was Hernandez, not DeLuna, who openly bragged about killing the young single mother.

Add to those key facts police cover-ups, prosecutorial misconduct, and a lack of DNA evidence, and it's clear that Carlos DeLuna was sentenced to die based largely on one nighttime witness identification. By the time we reach the epilogue, Liebman explicitly says what most will have already concluded — that the state did not prove DeLuna's guilt in the murder of Wanda Lopez

beyond the shadow of a doubt. In fact, most of the evidence points to Hernandez, a vicious criminal who continued terrorizing his community until his death in 1999.

Though the authors suggest methods for improving the accuracy of evidence, the fact remains that no case is beyond human error. Moreover, the greatest opportunity for error seems to exist in cases involving those who live in relative obscurity, which only emphasizes the crucial role that race and class play in our justice system. Carlos DeLuna's case went without reconsideration for almost twenty years.

As we follow the man described as a "slow thinker" preparing for his final day on "Death Roll," Liebman reminds us that "we have no idea how many Carlos DeLunas there are among the well over 1,300 men and women executed since the reinstatement of the death penalty in the 1970s." They can be found if the police, prosecutors, defense lawyers, and others summon "the curiosity and gumption to look just an inch or two below the surface."

Into the Woods // By Kelly McMasters

No Book but the World

By Leah Hager Cohen (Riverhead, 320 pages, \$27.95)

How do we judge those who are closest to us? Is empathy something we can offer and withhold at will? Is there a moral line beyond which it cannot reach? One of the most satisfying aspects of reading Leah Hager Cohen's new novel, *No Book but the World*, is watching her struggle with these complex questions.

The catalyst for these questions is a terrible crime: the murder of a young boy. Standing accused is Fred, the brother of our protagonist, Ava.

Fred is not like most other men. He is both lesser — unable to control his emotions or relate to the world around him — and greater — a beautiful savant who quotes lines from his favorite book, *The Little Prince*. We never learn his diagnosis, because there never was one; his father saw Fred's differences and difficulties simply as part of who Fred was, and refused evaluation or therapies. From the first page, we can feel Ava's mix of helplessness and tenderness toward her brother: "Oh Fred. Oh Freddy." It feels inevitable that she would one day become his caretaker.

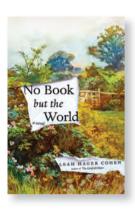
Human guidance has always been discouraged in Ava and Fred's family. Their father, Neel, was a kind of education prophet, a man who spoke at conferences, was quoted in textbooks, and founded his own "free school," called Batter Hollow, deep in the woods. Batter Hollow's educational philosophy was based on the ideas of Jean-Jacques Rousseau, or, as Ava knew him as a child, "Jay-Jay."

By the time Ava and Fred were tromping around and being freeschooled, they were the only pupils left in the isolated compound of rundown outbuildings.

In Ava and Fred's family, as at Batter Hollow, nature was the chief teacher. In one memorable scene, the young Ava races into Neel's study hysterical and howling with pain after scratching herself on a nettle, astonished as much by the pain as by the audacity of nature — so far, her main companion aside from Fred — to harm her. Ever distant, Neel attends to her as a scientist monitoring an experiment rather than a father comforting his daughter; after she quiets down, Neel requests that Ava show him the nettle, and they both observe its properties, harvest it, and turn it into a soup they then consume, transforming the experience into a metaphor he recounts in essays and speeches. Ava absorbs Neel's lessons, albeit with mixed emotions, but Fred lives in his own world.

When the awful day comes that Fred is accused of murder, Ava travels to the small upstate New York town of Perdu, where he has been jailed. Ava is concerned about her brother's role in the boy's death, but mostly she is concerned about Fred, and what he must be going through, trapped inside the jail. More than anything, Ava is concerned about Fred being trapped inside Fred.

The novel is told in alternating perspectives, though the first shift comes as a surprise, and a somewhat unwelcome one. By the book's halfway point, we are entrenched in the story as told by Ava, and comfortable in her skin and brain (or at least comfortable with her own discomfort). In the shorter sections that follow, we see the world through the eyes of Ava's husband; then through the eyes of his sister, Kitty; then — masterfully — through Fred's own eyes, before we return to Ava for the final clutch of pages. After the shock wears off, it becomes possible to appreciate how



the different sections work to illuminate one another and the growing mystery of the young boy's death.

Cohen '91JRN, who grew up on the grounds of a school for the hearing-impaired and wrote about the experience in her first book, *Train Go Sorry*, is sensitive to the power of sound and silence. The novel is startlingly quiet. There is the insulating quiet of the forest surrounding the children in Batter Hollow. There is the invasive quiet of the bed and break-

fast where Ava stays while in Perdu, where her every breath and step are on display. There is the unnerving contemplative silence of Neel, clinically detached from his children and unable to respond to their joys or pain. Even in Ava's work as a traveling "Singalong Lady" for toddlers, the percussive clangs made by her maracas and triangles are muted, a secondary soundtrack to her thoughts as she scans the children for similarities to her brother.

Empathy makes us human; it is what enables Ava to love Fred no matter what. So when Cohen finally lets us into Fred's head, we encounter the greatest challenge yet to our capacity for empathy: Fred is unbearably, rawly human.

This is a difficult book. It contains love and beauty, and also darkness and hate. But just as Neel and Ava boiled nettles into soup, Cohen guides us to a deeper understanding of Fred's experience, and our own.

Kelly McMasters '05SOA teaches journalism and creative writing at Columbia. She is the author of Welcome to Shirley: A Memoir from an Atomic Town.

Second Movement // By Rebecca Shapiro

The Late Starters Orchestra

By Ari L. Goldman (Algonquin Books, 304 pages, \$23.95)

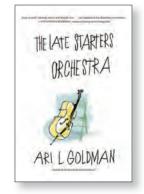
The motto of the Late Starters Orchestra, a ragtag bunch that meets on weeknights in a former coat factory in Midtown Manhattan, is, "If you think you can play, you can." When Ari L. Goldman '73JRN joined, just shy of his sixtieth birthday, he wasn't even sure he had the first part down.

A cellist who had hardly picked up his instrument in twenty-five years, Goldman was convinced that he was going to be the laughingstock of the group. As his friend Elie Wiesel told him before the first rehearsal, "Remember, Ari, you may play the cello, but you are a writer." But Goldman had had a lifetime to think of himself as a writer — he'd built a successful career at the country's most famous newspaper and then at Columbia Journalism School, had written best-selling books, had raised a family on the output of his pen. As he entered the next stage of life, he wanted to explore the parts of himself not so prominently featured on his résumé, to prove to Wiesel that, yes, he was a writer but maybe a musician, too.

"With age, learning anything new is hard," Goldman admits. "Learning a classical string instrument like the cello or violin is close to impossible." To master the instrument in a way that satisfied him, Goldman hired a private instructor, swapped his gym ses-

sions for practice every night, attended an adult music camp in Maine, and, of course, joined the Late Starters Orchestra (or LSO, as he sweetly insists on calling it, because it reminds him of the slightly more eminent London Symphony Orchestra). To give himself something to work toward, Goldman decided that he would play his cello at his own impending birthday celebration.

As far as book subjects go, the stakes of Goldman's feel pretty low, even con-



sidering that his family is particularly musically inclined (two children were music majors, the third is an accomplished teenage cellist); the birthday concert also seems an unnecessary narrative frame. But Goldman is a thoughtful and charming writer, and the pure joy that he gets from the learning process is infectious. Most people want to feel that they are more than their chosen careers, even if they don't have to prove it to a Nobel laureate. Goldman's book is a good reminder to do something about it.

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Miracle of the Mines

"On the 15th of November next, Columbia College will open a School of Mines," the *New York Times* reported in July of 1864. "This will be a novelty in our City, but its utility cannot be too strongly asserted."

The school opened that fall in the basement of Columbia's home on East 49th Street and Madison Avenue; it later moved into its own building (above) at 49th and what is now Park Avenue. The first semester it had twenty students and three teachers: the Paristrained engineer Thomas Egleston, who saw a need for a school of mineralogy in the United States and convinced the Columbia trustees to take up his plan; mineralogist and Civil War brigadier general Francis L. Vinton; and the chemist Charles F. Chandler, the founding dean of the school, who remained at Columbia for forty-six years and whose contributions to Columbia, chemistry, and public health are hard to overstate.

This year, the Fu Foundation School of Engineering and Applied Science (as it came to be called) marks its sesquicentennial with a number of events, including a symposium on November 14 that will highlight faculty research, past and present, through a series of TED-like talks. Among the older research: the creation of the punch-card machine (and automatic computation) by Herman Hollerith 1890SEAS; advances in x-ray technology by Michael Pupin 1883CC, 1904HON; and the invention of FM radio by Edwin Howard Armstrong 1913SEAS. Today, the school is a leader in fields like nanotechnology, tissue engineering, and data science.

In the school's 150 years, few figures cast as long a shadow as Chandler. As the head of the New York City health department from 1873 to 1883, Chandler led health-promoting initiatives in, among other things, indoor plumbing, vaccinations, and

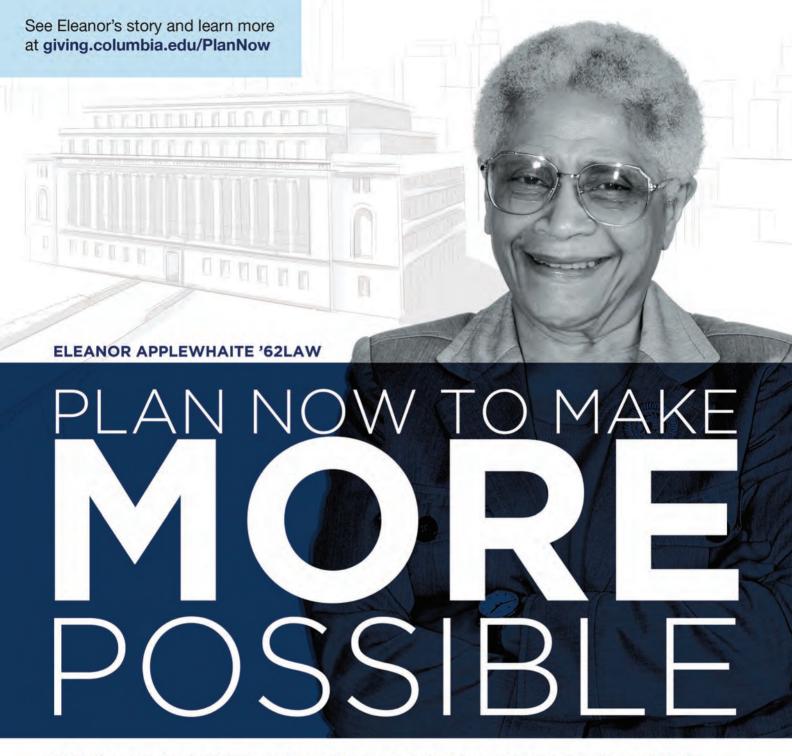
the regulation of gas, water, and milk. As an industrial chemist, he broke new ground in fields as diverse as sugar refining, petroleum refining, and photography. He also founded the American Chemical Society.

Chandler retired from Columbia in 1910, and was feted by six hundred chemists, engineers, and other well-wishers at the Waldorf-Astoria Hotel. There, in a speech, Columbia president Nicholas Murray Butler compared Chandler's role in founding the engineering school with a biblical miracle.

"Back then," said Butler, "they at least had the water to start with when they made wine out of water. But Professor Chandler made a School of Mines out of a hole in the basement."

Learn more about the 150th anniversary. seas150.columbia.edu





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Submit your nomination to the Alumni Medal Committee no later than Friday, November 7, 2014 to the attention of Jessie Mygatt at 212–851–7935 or jsm9@columbia.edu.