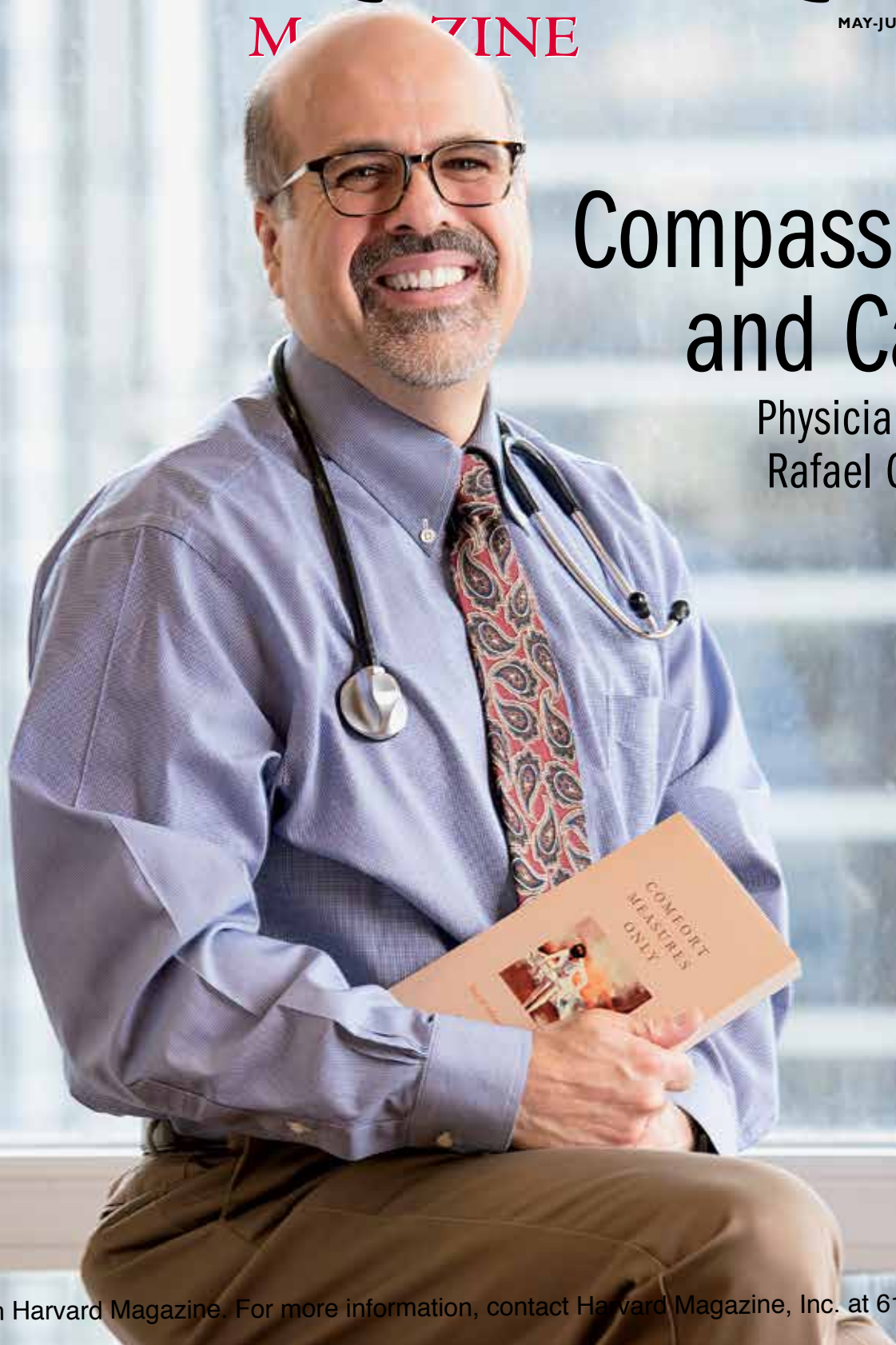


Justice Holmes • Inflammation • Harry Widener

# HARVARD

MAGAZINE

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## Compassion and Care

Physician-Poet  
Rafael Campo

# HARVARD

## MAGAZINE

May 2019

### Dear Reader,

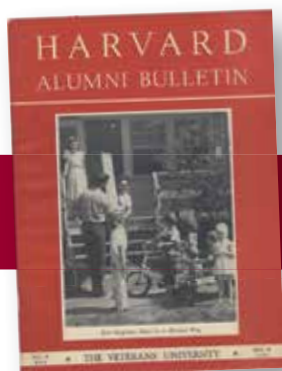
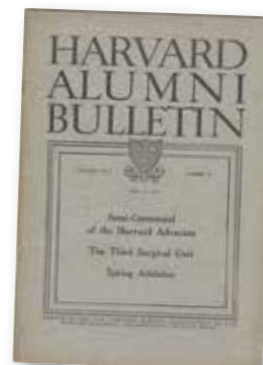
In 1898, an association of Harvard graduates established the *Harvard Alumni Bulletin*, “to give selected and summarized Harvard news to graduates who want it” and “to serve as a medium for publishing promptly all notices and announcements of interest to graduates.”

Today, nearly a century and a quarter later, the name has changed, to *Harvard Magazine* (as have the look and contents), but the founding principles have not:

- The magazine exists to serve the interests of its readers (now including all University alumni, faculty, and staff)—not any other agenda.
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- We and our colleagues hold as our highest responsibility maintaining that mission, created at the magazine’s founding and enhanced by our outstanding predecessors who saw to its publication during the decades that followed.

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Your *Harvard Magazine* can capture alumni voices (see the letters responding to the March-April feature on the events of April 1969, beginning on page 4 of this issue), dive deep into critical research (read the feature on the scientists exploring inflammation, and how their work contributes to understanding disease, on page 46), and keep you current on the critical issues facing higher education on campus and around the world (see John Harvard's Journal, beginning on page 18).

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A handwritten signature in black ink that reads "I. Kuksin".

Irina Kuksin  
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# HARVARD

MAGAZINE

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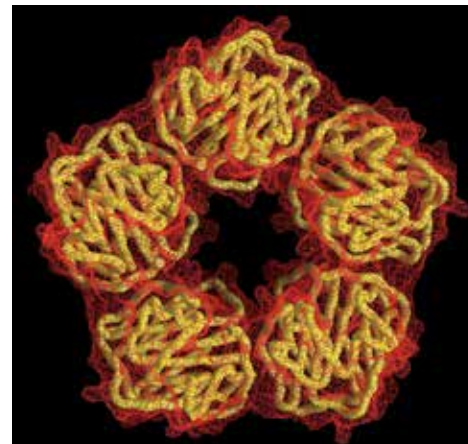
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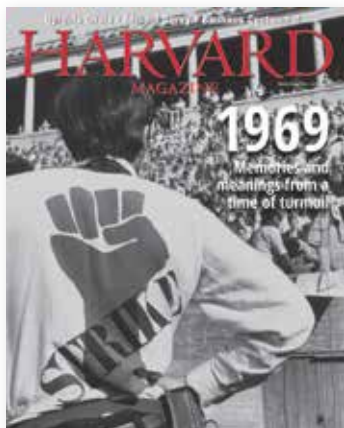
## 1969, ECHOING

AS AN ACTIVIST in the Harvard Strike of 1969 and the SDS speaker at the 1969 Commencement ceremony, I welcome the retrospective in the March-April issue ("Echoes of 1969," page 52). However, the article trivializes the events of April 1969 in important ways. Some recollections focus on unimportant details from the authors' lives, such as Fox News commentator Chris Wallace bragging about "making a great over-the-shoulder catch" in a touch football game the day the strike began. Others focus on unimportant consequences of the strike, such as abolishing the rule requiring male students to wear coats and ties to dinner, mentioned by Richard Hyland.

Mostly absent from the recollections is the real reason the strike occurred: the brutal war in Vietnam that killed 58,000 Americans; 1.1 million North Vietnamese rebels; 250,000 South Vietnamese soldiers; and 2 million civilians. Harvard provided crucial support for this war: with military officers trained by ROTC; as a recruiting ground for companies like Dow Chemical; and with political operatives like Henry Kissinger.

Against all odds, the people of Vietnam ultimately vanquished the armies of the most powerful nation on earth, ending the war. The Harvard Strike was an important event that undermined the will and the ability of the U.S. government to continue that war. That is why the strike happened, and that is why it is important.

Much has changed. Vietnam is no longer the enemy. But we struggle with a presi-



dent who promises to block all Muslims from entering the country, and to erect a 2,000-mile wall across our southern border. The fight for a just, inclusive, and democratic society must continue. As we pass the torch, we call upon the students and faculty at Harvard today to show the same dedication, courage, and commitment that was shown by the participants in the 1969 strike.

BRUCE C. ALLEN '69  
Beachwood, Ohio

DURING THE 1969 occupation of University Hall, one of my professors, Nathan Glazer, stood nearby quietly surveying the scene. A respected member of New York's liberal intelligentsia, he and others were now being labeled the "Old Left," while a younger generation, including members of SDS, Democratic Socialists, the Progressive Labor Party, and others were neologized as the "New Left."

Both factions generally sought a redistribution of society's resources to eliminate the extremes of wealth and poverty in America. But they were polarized along fault lines predicated on how that goal should be achieved. Among some New Lefties, securing power by force was now justifiable, so distrusting were they of conventional democratic institutions and processes. But for Old Lefties, such a premise was a nonstarter.

Accordingly, Glazer approached a small cluster of radicals, panic in his voice, his hands shaking.

"Don't you see what you're doing?" he implored. "This is exactly how Hitler created the Third Reich! He convinced Germans

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# Enduring Connections

**E**ARLIER THIS SPRING, I made my first major international trip as president of Harvard, and it easily ranks among the most memorable experiences I have had abroad. Alumni and friends turned out in full force to welcome me and my wife, Adele, to Hong Kong, Beijing, Shanghai, and Tokyo, where I learned about their hopes for the University's future. I also met with college and university leaders at our partner institutions to discuss, among many other topics of mutual interest, the role that higher education can and should play in the world. No matter where I found myself, there were many opportunities to speak about the importance of strengthening existing academic ties at a moment when some of the traditional bonds of cooperation and collaboration between nations are under strain.

One of the absolute highlights of my visit was delivering a keynote address to students, faculty, staff, and administrators at Peking University. Speaking about longstanding connections between China and the United States, I recounted being a young faculty member at MIT in the late 1970s and witnessing a historic visit from a delegation of visiting scholars from China. Long separation had not weakened the bonds of affection among students and their teachers or faculty and their colleagues. Some of them had not seen each other for decades, but they greeted one another as if they had been apart for only a short while and soon found themselves engaged again in areas of common interest. It was powerful evidence to me that universities can be sources of strength through tough economic, political, and social times.

Universities can also be sources of strength because of the diverse communities they create and nurture. When I last traveled to Beijing, I was president of Tufts and hosted a dinner for a dozen alumni of the Fletcher School of Law and Diplomacy. They all held ambassadorial rank: nine ambassadors serving in China and three Chinese ambassadors serving in Australia, New Zealand, and North Korea. Many of these individuals had overlapped during their time at Fletcher, and the relationships they developed as students helped to bridge differences between their countries. Embracing diversity is not just good for enriching our campus communities—it is good for improving the wider world.

In the weeks since my return, I have received many emails and letters, some of them underscoring the kinds of deep and lasting bonds that colleges and universities create among their students and between students and their teachers. The responses made me think more deeply about my own early days at Harvard. I still recall wonderful parties at the home of my Harvard Kennedy School classmate Jack Reed. At the time, I couldn't have dreamed that he would one day be the senior senator from Rhode Island, and I imagine that my own path to the Harvard presidency was



just as unimaginable for him. We are now old friends bound by fond memories who are working side by side to strengthen not just the institution that brought us together but all of American higher education.

Therein lies one of the great strengths of campus life. Where else can one engage with so many different types of people who share a common interest in pursuing knowledge? Everyone I know who attended Harvard enjoys friendships that have endured long after graduation, friendships that have not just sustained them but proven meaningful and useful in ways they never could have predicted. If one thing has struck me over the course of my first year in office, it is the extraordinary—and oftentimes incredible—strength of these connections, and the ways in which they shape and change the world.

I hope you will take time during this season of commencement exercises and graduation celebrations to reflect on the relationships you formed at Harvard and the difference they have made in your life. So much of what makes the University wonderful are the stories of people it brought together—and where they went afterwards.

Sincerely,



## “Y-you’re playing right into the hands of the right wing, the fascists in this country.”

that democratic processes were regressive. He glorified force...and discrimination...and...suppression.”

A few students cheered Glazer while others tried to shout him into silence. But he would not yield.

“Y-you’re playing right into the hands of the right wing, the fascists, in this country,” he stammered. “They can use the occupation to justify vilifying people who support progressive social policies.”

The drama I witnessed that day cut to the very core of the democratic experience. No matter how urgent or how defensible one’s goals may be, process—in the final analysis—is far more important than product. How fortunate I was to have witnessed Glazer’s display of intellectual courage, a lesson that has remained with me throughout my scholarly career.

DENNIS E. GALE, M.ED. ’69  
Professor Emeritus, Rutgers;  
Lecturer, Stanford  
Burlingame, California

THANK GOODNESS for Mark Helprin, a lonely voice. For the record I received my B.A. in 1968 and was at the B School, the one area of the University which emphatically did not support the shutdown.

What followed has been 50 years of a subtly orchestrated, culturally enforced, restriction of free thinking (presented by the Orwellian name of Free Thinking), along with a tightening of the mandated image of the properly reeducated and spiffed-up life as a good citizen, which functions as the major purpose of Harvard. I wonder: how many graduates and Harvard minions have even noticed this? Has a person with dirt on her hands or an imperfectly done tie ever appeared in a Harvard publication? I have

### SPEAK UP, PLEASE

*Harvard Magazine* welcomes letters on its contents. Please write to “Letters,” *Harvard Magazine*, 7 Ware Street, Cambridge 02138, send comments by e-mail to [yourturn@harvard.edu](mailto:yourturn@harvard.edu), use our website, [www.harvardmagazine.com](http://www.harvardmagazine.com), or fax us at 617-495-0324. Letters may be edited to fit the available space.

frequently been amused when the classmates whose notes in anniversary reports most skillfully exuded secular righteousness end up called on one carpet or another for ethical infractions.

Harvard imposes its own model for the correct living of a life. How dare they? Sterility is at its core. To avoid it I should have stuck to math and physics or gone to MIT. All in all I learned better things from uneducated dudes I served with in Vietnam and ordinary folks putting together their highly individual lives. Life isn’t like the Stepfordish image promulgated by Harvard and astonishingly accepted by so many thousands strong in brainpower but weak in will and independent thinking. This article sums my argument for never recommending Harvard to the bright kids I continue to work with (professor, now tennis pro). When asked where I went to school I say, “Harvard, but it didn’t take.”

JAMES SLOAN ’65, B ’70  
River Forest, Ill.

PROFESSOR HYLAND is correct that “Most of these [post-bust and occupation] changes would have happened anyway.” Indeed, some of them occurred before the occupation and the bust. Many of my freshman classmates in the fall of 1968 wore dashikis to the Freshman Union for their meals, and the coat-and-tie dress code disappeared before the spring semester. Enforcement of parietal rules had disappeared at least from Stoughton North by the same time. As for the structural changes enumerated by Professor Hyland that actually did occur after the occupation and bust, the argument that the occupation “contributed...a sense of urgency” seems a wistful attempt to appear as an actor on history’s stage.

THOMAS PIPPETT ’72, J.D. ’75  
New York City

TO ADD TO your series of compelling reflections on 1969, I had my own unique experience. I was in the final stages of my doctoral dissertation at Harvard (“The Latvian Communist Party Under Soviet Rule”) in January 1969 when I became a reporter for United Press International in Boston. On the night of April 9, 1969, UPI received a tip that the police would forcibly re-

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move the demonstrators from University Hall early the next morning, and I was assigned to cover the bust. So there I was at 5 A.M., standing on the steps of Widener Library—where I had spent hundreds of hours doing research and writing—documenting the invasion of Harvard Yard by hundreds of helmeted police with their billy clubs. And a bloody “invasion” it was, still

one of the most searing memories of my life. Many of the police took full advantage of the long-awaited “opportunity” to pummel the privileged students whom they had always resented. It was a sickening sight. After University Hall was cleared and the students were arrested, I raced back to the UPI bureau and filed my story, which landed on the front page of dozens of newspa-

pers around the country later that day and the next morning.

I took part in the ensuing strike with my two-year-old son Rick. He was featured on the cover of one of the strike bulletins wearing the ubiquitous “Strike” T-shirt with clenched fist, identical to the one on the cover of your magazine. At the ensuing graduation I joined hundreds of others in wearing a black arm-

## 7 WARE STREET

### “No more pencils, no more books...”

EVEN IN elementary school, one suspects, the incursion of technology—tablets, laptops, smartphones—has now rendered all but obsolete students’ venerable end-of-year ditty: “No more pencils/no more books/no more teachers’ dirty looks....”

In the College context, however, a different, and unsettling, notion brings the old lyric to mind. At year-end, *The Harvard Crimson* helpfully published “Ten Stories That Shaped 2018.” It had been “a momentous year” for the University: as it “welcomed its twenty-ninth president Lawrence S. Bacow, it struggled with numerous challenges including lawsuits alleging discrimination, accusations of sexual harassment levied at prominent affiliates, and an ‘unprecedented’ endowment tax.” Accordingly, the paper examined the stories that “most defined 2018”:

- the Students for Fair Admissions lawsuit alleging discrimination against Asian-American applicants to the College;
- “#MeToo Hits Harvard”;
- the inception of the Bacow presidency;
- social-group opposition to the new sanctions on single-gender organizations;
- University diversity initiatives;
- graduate-student unionization;
- the arrest of a black student and allegations of police brutality;
- the \$9.6-billion Harvard Campaign;
- “academic probation” for Harvard College Faith and Action following the group’s pressure on a leader to resign over her same-sex date; and
- Title IX issues.

As any AP statistics student knows, 10 stories is not a large sample. But the selections no doubt reflect both the editors’ news judgment and revealed preferences of readers, including the online, global audience for all things Harvard. Certainly the com-

munity itself has a legitimate interest in its new leader, its norms and conduct toward its members, and weighty challenges pressing in on the University from the society beyond.

But one is struck by the nearly total absence of anything *academic*: the teaching, learning, and research that presumably explain Harvard’s very existence—and students’ rationale for being here. For example, this was the year in which a long-serving dean of undergraduate education handed off his responsibilities to a successor, and she, in turn, shouldered the task of making the entire General Education curriculum ready for students this coming fall. In the past, undergraduates have, with reason, criticized this required part of their curriculum, and they presumably have a stake in how the new one turns out. On a finer scale, they have an interest in how their concentrations are refining courses, tweaking pedagogies, and bringing nascent University intellectual initiatives that cross disciplines and departments (i.e., data science, quantitative biology, and so on) into their own learnin’.

The *Crimson* touched on many of these issues during the year, of course, but none apparently were top-10 concerns. In a way, this is unsurprising. Although one encounters intensely academic, intellectual students at Harvard, most of them have many other things going on most of the time. Howard Gardner’s research on contemporary campuses (see page 31) is only the latest to find that few students list courses, the curriculum, teaching, or other academic priorities as most on their minds. After all, one of the most famous academic tropes of all time is the late University of California president Clark Kerr’s definition of administrators’ chief problems as “sex for the students, athletics for the alumni, and parking for the faculty.”

And the latter group’s own deliberations have been rather unacademic as well. Faculty of Arts and Sciences monthly meetings are no more representative of the work of 700-plus

professors than the *Crimson*’s list is a comprehensive guide to the work of the University. But during the past half-dozen semesters, it is fair to say that far more time was spent discussing regulation of those unrecognized single-gender social organizations, and matters like re-synching class schedules to accommodate classes in Allston once the engineering and applied sciences complex opens in the fall of 2020, than has been devoted to teaching and learning. The parameters for advanced standing (see page 28), and the implications for the foreign-language requirement, stand out almost as an anomaly in recent memory. If the professors—who teach and do the research—and their leaders are choosing to set the agenda that way, is it any wonder that the students, who after all are merely passing through, aren’t getting the message about its mission very clearly?

A recent conversation about the composition of the faculty with senior vice provost Judith D. Singer ended up in an unexpected place (see page 25). She noted that research universities like Harvard are the seedbed for the faculties of the future: the people who make discoveries of fundamental importance and educate leaders who will have a huge impact on society. She also observed that it is by no means certain that students pursuing the surging STEM fields will opt for academic careers (especially given the salaries immediately available in industry and finance). Attracting *some*, she thought, might depend on professors better conveying both the values of their disciplines and the rewards available to those who invest themselves in the life of the mind.

Beyond that long-term payoff, the professors also might find that students become more invested in their work together, *right now*. It will take more than that to make a future *Crimson* top-stories list, but Singer’s idea bears on the larger issue of making teaching, learning, and discovery continuously more central to all the community’s conversations. ~JOHN S. ROSENBERG, *Editor*



band over our robes, and to my surprise my photo appeared in a *Newsweek* spread on campus protests across America.

I have lived near Cambridge ever since, so on occasion I walk through Harvard Yard. And I am always carried back to that moment—standing on the steps of Widener, watching the Soviet-like invasion and violence. It may have been a mini-version of the Soviet ouster of Dubček in Czechoslovakia eight months earlier, but the parallels have always lived with me.

MICHAEL WIDMER, PH.D. '69  
Belmont, Mass.

WE, INITIATORS OF and participants in the occupation of University Hall in 1969, and supporters of the demands of the ensuing strike, were happy to see the magazine explore the events of April 1969. However, we were disappointed that the retrospective captured neither our nor the Harvard administration's motivations and actions. We believe the events were important enough to justify a more thorough approach.

The occupation of University Hall was the culmination of years of thinking, petitioning, planning, and canvassing. The war in Vietnam, racism, and Harvard's destructive incursion into neighboring working class communities—all these and more were the subject of intense discussions in classrooms, hallways, dorm rooms, and on the street. We mounted multiple campaigns to no avail. Student government organizations voted to abolish ROTC, and the faculty voted to withdraw academic credit for ROTC, and both were ignored by the Corporation and senior administrators. This reality led us to make what might be considered a last-resort move—escalating to militant civil disobedience. We knew the risks. Harvard had already meted out hundreds of probations, suspensions, and losses of scholarship for, among other things, the Dow Chemical recruitment demonstration.

In 1969, Harvard thought it knew best about everything and escalated to repression almost immediately. The administration suggested that challenging its authority threatened the very foundations of civilized society. Some punishments escalated to permanent expulsions and, a couple of years later, to incarceration. Yes, two University Hall occupants were charged with assault—an “assault” that consisted of gently escorting Dean Watson out, as per his request to signal that he disagreed with us. Ironically, he

initially pressed charges against one student, who was convicted, and then, when one of the actual escorts came forward to correct an injustice, changed his testimony to ensure they were convicted and jailed. (They served nine months.) Watson later apologized privately and helped one of them get into law school despite the criminal record.

Knowing this, your readers may better understand Robert Hall's recollection, which captures Harvard's attitude: believing that black students were planning a Widener Library search-and-destroy mission. Racism, sexism, and authoritarianism are accurate words to describe the character of most of Harvard's leadership in 1969. There were only three women on the faculty, reproductive services were illegal, the university provided no child-care services, and most women working on campus were in dead-end, poverty-level positions. Given that reality, the retrospective's first sentence mystifies us. “In the late 1960's American society seemed in crisis.” America was in crisis.

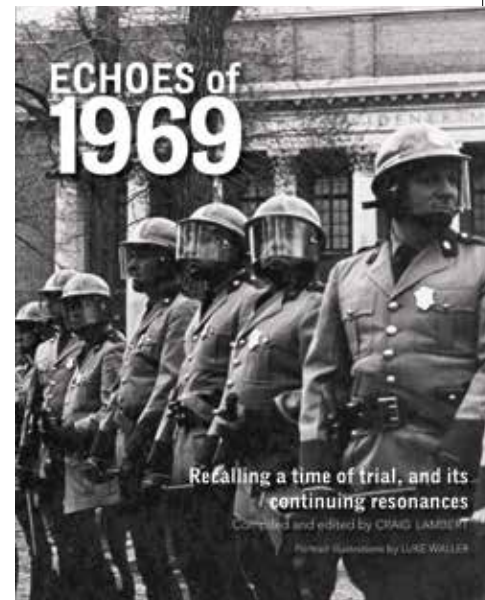
Harvard's leadership was serious about keeping ROTC and not creating an Afro American Studies program. We and college activists across the country were equally serious about eliminating ROTC, reasoning that its loss would deprive the armed services of its primary source of junior officers, which would significantly impede the prosecution of an immoral and criminal war. We want your readers to understand that we weren't frivolous and were largely, though not always completely, successful at planning and maintaining an orderly presence.

We cannot help but wonder how Harvard will respond to the increasing activism among today's students? Today President Bacow continues Drew Faust's insistence that the endowment is not an appropriate instrument for social change. According to a *Crimson* poll, most of the faculty feel differently. This is hopeful, but it didn't help in 1969, and it may not in 2019 as long as the administration refuses to use the university's vast resources to respond to such critical issues as climate change.

The magazine's retrospective diminishes the possibility of learning from history, and of nourishing civil public discourse. If Harvard doesn't embrace history's complexity and candid discussions of the issues before us, it is doomed to be on the wrong side of history again.

E. JOHN PENNINGTON '67 AND 56 OTHERS  
(A complete list of signers appears online.)

**HM** Visit [harvardmag.com](http://harvardmag.com) for more passionate correspondence about April 1969, and other matters.



As AN SDS member and University Hall alum: Beautifully written by all participants and obviously deeply felt. As it was at the time. There is a lot of meaning in this piece, not just elegy. Congratulations.

DELIA O'CONNOR '70  
Newburyport, Mass.

THE FIST-CENTERED cover of the March-April magazine reminded me that not all of us students supported the strike that April.

An 18-year-old freshman 50 years ago, I saw a campus dominated by SDS-generated unrest. I could not enter or exit the Yard that year without being handed a leaflet protesting something. The evening after the “bust” at University Hall, I heard fellow Pennypacker classmates, upon their release from jail, shouting expletives laden with invective for President Pusey. I think it was the next morning when an SDS member barged into our chemistry lecture hall, demanding to read a statement announcing the strike. After he left, our professor, an elderly gentleman with a European accent, calmly said that he had not experienced anything like that since the day Brownshirts invaded his classroom in the 1930s.

Later, I attended the large meeting in Harvard Stadium, sitting in a spot near the

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## LETTERS

closed end. I remember being surprised to see the teaching fellow for my American history class section leading the meeting. It may have been Dr. Buhl, one of those participants editor Craig Lambert selected to reflect on those events. Buhl wrote that the meeting did "fulfill the moderate hopes" to "bring the Harvard community together toward a fairly quick de-escalation of the crisis and a return to normalcy," for not long afterward, classes resumed, things settling down by May.

After exams, I took a leave of absence to do an active-duty stint in the Marine Corps. By the time I returned to Harvard in 1972, the mood on campus was far different, the ROTC program banned, the war ending soon, the draft functioning under a seemingly fairer lottery system. It was as if the strike of 1969 and the fiery riots and university shutdown following the invasion of Cambodia in the spring of 1970 had never occurred. There were no leaflets, no signs of SDS. The Yard was a strangely quiet place.

DAVID CORNISH '72

Milton, Mass.

As ONE OF the editors of "The Choices We Made: Class of '67 Responses to the Vietnam War," for our fiftieth reunion, I read all of the excellent "Echoes of 1969" essays with great interest; and I also was left with a clear sense of wishing that I had known "Jet" Thomas.

TIM HATFIELD '67, Ed.M. '69

Winona, Minn.

ON PAGE 57, Chris Wallace remembers signing off an April 9, 1969, news report from the Middlesex County jail to Harvard's radio station, WHRB, with the line, "This is Chris Wallace in custody."

For the record, the same phrasing was immortalized five years earlier by John Chancellor, NBC reporter, as he was dragged from the floor of the 1964 Republican National Convention: "This is John Chancellor, somewhere in custody."

ROBERT A. BROWN, Ph.D. '71

Green Valley, Ariz.

## OPIOIDS

TO BRING the dilemma of opioid addiction "home" ("The Opioids Emergency," March-April, page 36), I attribute my husband's suicide in 2018 in considerable part to this relatively new fear of prescribing opioids.

In the early 2000s Tom suffered, not unlike Kate Nicholson in your article ("The Persistence of Pain," (please turn to page 86)

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**DEADLINE:  
May 15, 2019**



page 41), from severe back pain for several years. He worked while lying on his back (he was a transportation consultant) and didn't drive. He was prescribed high doses of opioids and other strong meds to manage the pain. With help from a physical therapist and others, he began to get better. He gradually weaned himself from the opioids (he never got a high, but did experience physical dependence). A former rock climber, he became an avid and expert cyclist, and we traveled widely for many years.

In late 2017, Tom once again began to experience severe hip and back pain. He saw a primary caregiver who first prescribed 30 pills of "low dose" hydrocodone and subsequently gave Tom 15 more pills, saying that was ALL, as he, the caregiver, had worked in an ER and knew about addiction. Tom then went to a pain management specialist who humiliated him, saying, cynically, "I'll give you three pills to help you through the MRI because at least there will be someone there if you collapse." At home over the next several weeks Tom became depressed and anxious, with very little access to the medications which had essentially saved him before. He died last March.

I hope, as we work to quell this public health crisis, that physicians are trained to treat the individual patients who can successfully benefit from opioid medications or newly developed alternatives.

NANCY DYAR, M.A.T. '67, PH.D.  
Oakland, Calif.

I WAS VERY DISAPPOINTED by the article. Certainly since 2000 the over-availability of prescription opioids made them attractive to addicts seeking a heroin-like high. There have always been questions, however, about the overlap between those addicts and chronic pain patients. Typical is a study in the *American Journal of Psychiatry* which found that 78 percent of OxyContin addicts had not obtained their drugs via prescription. Longitudinal studies have also repeatedly shown surprisingly low risks for opioid addiction among chronic pain sufferers. And a recent study in JAMA Open Network showed that further restricting opioid prescriptions will not substantially affect the death rate in Massachusetts—unsurprisingly, since 90 percent of overdoses are now fentanyl-related.

What is indisputable is that even current restrictions on legally prescribed opioids are harming genuinely ill patients for whom these drugs remain the best solution and last resort. Studies have shown both sickle-cell patients and diabetics with neuropathic pain being undertreated and criminalized due to the opioid panic. A survey of more than 3,000 pain patients found that 70 percent reported



increased pain and a lowered quality of life as a result of having their prescriptions cut off or restricted. A recent op-ed in JAMA noted that the opioid "alternatives" have little effect on many pain disorders, but dangerous side-effects; cited the research showing that the majority of pain patients do not misuse opioids; and called for an end to the media's irresponsible use of the term "opioid epidemic."

Unfortunately, legitimate concern over fentanyl-driven overdoses is creating a parallel crisis, that of genuinely ill patients who are being undertreated and criminalized through no fault of their own. It seems to me that theirs is a story worth reporting.

TARA KELLY '91  
Gloucester, Mass.

MANY PEOPLE take opioids because they want the high. By all accounts, the high is an intense pleasure. "The Opioids Emergency" says nothing about this. Not one word. Surely the doctors interviewed for the article know that lots of people want the high. The doctors evidently regard that as inconsequential. With such a narrow focus, they are not likely to solve the problem.

JACK HARLEE '63  
Washington, D.C.

#### BAUHAUS

THE VINTAGE PHOTOGRAPH of a typical dorm room in the Gropius Graduate School

complex ("What A Human Should Be," on the Bauhaus and Harvard, March-April, page 44; see below) reminds me vividly of my two years in just such a room in 1967-69: Richards Hall 301. A little-known fact I discovered at that time is that the rooms were the same size, 10 feet by 15 feet, as the cell at St. Denis of Abbot Suger—the "inventor" of the French Gothic style; and, closer to home, also the same size as the interior of Thoreau's cabin at Walden Pond, where his philosophical ruminations were born. There must be some connection here....

DANIEL D. REIFF '63, PH.D. '70  
Kenmore, N.Y.

#### SAMUEL STOUFFER

THE "VITA" on Sam Stouffer (March-April, page 50) brought back welcome graduate-school memories. Sam's work on *The American Soldier*, important as it was, represented only a fragment of his contribution both to demography and survey research. Absent from the article was a reference to his landmark McCarthy-era statement, *Communism, Conformity, and Civil Liberties*, published in 1955.

In his later years he was one of the early pioneers in research on the connection between educational achievement and social status that became one of the chief concerns in the sociology of education over the next half-century. His work also contributed to social action. He developed the point system for establishing priorities governing the order in which soldiers returned to the States following World War II—not to mention coining the phrase "Move Up To Schlitz," based on his studies of social status, as it pertained to beer drinking.

Funniest memory: I sat next to Sam at a lecture that B.F. Skinner gave on teaching machines (one of the sillier educational hobbies by horses at the time). Sam sat there shaking his head: "Burrhus [what the B stands for] has the highest I.Q. of anyone I've ever met. Too bad he can't use his head."

I suspect you could fill a whole magazine with Sam Stouffer stories.

ROBERT DREEBEN, PH.D. '62  
Evanston, IL

#### THE ECONOMY UNFETTERED

"THE NEW MONOPOLY" and the quoted explanations of professor Jason Furman (March-April, page 11) are a monument to



political correctness, but an affront to sound reasoning. Let us count the ways:

The premise that American workers are being victimized by a monopsony is belied by the historically low rates of unemployment, below 4 percent at this writing. It also fails to take into account what is happening to workers' standard of living and wealth, as opposed to their share of an income distribution, which I suggest has substantially improved in recent years more often than not. Indeed, even granting the assertion that market concentration has increased in three-quarters of American industries since 2000 hardly establishes the existence of a monopsony or even of a material increase.

The article also fails to take into account the situation described later in this issue, namely "The Opioids Emergency." Persons afflicted with this addiction—which clearly calls for a strong response on many fronts—are not the ones being impacted by changing market structure.

On a more technical level, the references to noncompete agreements as contributing to the purported imbalance of market power ignore several fundamental considerations. As a business lawyer, frequently advising clients on such agreements, I feel compelled to respond. First, even if nearly a quarter of the population is covered by such agreements, many—perhaps a majority—apply to senior management (sometimes in connection with the sale of a business), who, by the author's hypothesis, are the ones falling behind, while others probably are only non-solicitation agreements applicable to customers and employees, but not keeping people from working in their field.

Second, all such agreements have finite duration, usually no more than a year and often only three to six months. They are simply not a permanent impediment to economic advancement.

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Finally, many persons covered by such agreements are implicitly or explicitly paid for their forbearance from competition. Furman is correct that there are too many cases involving hourly employees where such agreements serve no useful purpose and should be prohibited, but to attribute large-scale macroeconomic implications to them is a gross overstatement.

Before we pursue drastic structural changes in our economy, we need to ensure that there is actually a sound rationale for doing so.

MARTIN B. ROBINS, J.D. '80  
Barrington Hills, Ill.

### HENRY STREET SETTLEMENT

I AM A GRADUATE of Harvard Divinity School and a Unitarian Universalist minister, now retired. I loved the article featuring the work of David Garza '86 ("The Good Fight," March-April, page 71). I am a faithful reader, and Garza's story represents a world I know far better than the one most frequently highlighted in this magazine, which, from my perspective, skews to the accomplishments of rich white alums (mostly male).

While I appreciate the remarkable endeavors and accomplishments of so many alums, it is rare to read about the remarkable endeavors and accomplishments of someone like Garza whose mission—to open doors of opportunity, to enrich lives, and enhance human progress—can be seen and experienced at the Henry Street Settlement in Manhattan's Lower East Side. More like this, please! And thanks to David Garza.

REV. KATIE LEE CRANE, M.Div. '97  
West Roxbury, Mass.

### LEGACY ADMISSIONS

IN RESPONSE TO a class fundraising solicitation, I must advise you that for some time now I have ceased making any gifts to Harvard College...and will continue in that course of action as long as Harvard continues to provide an admissions preference to legacy applicants or applicants whose parents have contributed substantial amounts to Harvard.

The reason for my action is not complex. I believe that the current Harvard admissions preferences serve primarily to reinforce the gap between the most and least well-to-do members of our society, to the detriment of the nation as a whole.

Harvard profits handsomely from the

beneficiaries of its preferential admissions policies, and will not notice or much care about losing my comparatively tiny contributions. My views of sound social policy, however, are better served by transferring my contributions to organizations that are seeking to reduce the income/influence gap in our society, rather than perpetuating it as do the Harvard preferential admissions policies.

STEPHEN B. GOLDBERG '54, LL.B. '59  
Chicago

### FAN MAIL

READING OBITUARIES would seem to be an unusual way to uplift one's spirits, but reading them in *Harvard Magazine* does that for me regularly. The world can be such a dour and depressing place these days, with examples everywhere of decent values being compromised and diminished. But it's uplifting to read many or most of the obituaries in the magazine.

So many of the men's and women's lives summarized there are heartening examples of good and productive and honest lives led by fine people who have placed service above self, and who typically try to do the right thing throughout their lives. It's a breath of fresh air to see how many served the public good, quietly and steadily. So many of them constituted the warp and woof of a healthy democratic social fabric.

And these profiles are also a pleasure to read from a reading standpoint alone, beautifully edited as they are by Deborah Smulyan. It is often said that *The New York Times* has the best written and most interesting obituaries in the world. That is because those saying it don't know of this terrific section of *Harvard Magazine*, which in that respect matches the *Times* in quality.

KENNETH E. MACWILLIAMS '58,  
M.B.A. '62, L '62  
Portland, Me.

### ERRATA

THE FIRST PARAGRAPH of Spencer Lee Lenfield's review of a biography of Edward Gorey ("The Memorable Eccentric," March-April, page 68), refers to *cross-hatching*. The correct term in this instance is *hatching*.

And we inadvertently demoted puzzlemaker Paolo Pasco ("Remaking the Grid," March-April, page 63), identifying him as a member of the class of 2023, which has not yet been admitted. A freshman this academic year, he is a member of the class of 2022.

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RIGOR WITH JOY?

## Rethinking the American High School

**W**HEN JAL MEHTA and Sarah Fine embarked on a six-year study of 30 of the most effective public high schools in the United States, what they found among students was largely “bored, disengaged compliance,” Mehta recalls. The dominant pattern of instruction is rote transmission: worksheets, multiple-choice questions, and teachers lecturing. Objective comparisons to other countries confirm the mediocrity of this model: U.S. high-school students score near the bottom in math, and are just middling in reading and science. “Not surprisingly,” he says, students consistently called

lectures a “very disengaging mode.” But there were bright spots: classrooms where “teachers had moved away from that by dint of their own skill and inventiveness.”

In every school, the researchers found at least one or two settings where students were engaged and inspired by what they were learning—often in activities outside the classroom. By the end of their study’s first year, Mehta, an associate professor at the Harvard Graduate School of Education, and Fine, who began the project as Mehta’s doctoral student (and is now director of a teacher preparation program associated with a network of schools in San Diego), decided to focus on the bright

spots. Their book about the project, *In Search of Deeper Learning: The Quest to Remake the American High School* (Harvard), weaves analysis and richly descriptive vignettes together in the most comprehensive assessment of the topic since the 1980s.

The authors offer a thoughtful critique of three of the most successful schools, pseudonymously named Dewey High, No Excuses High, and I.B. High. The first, which follows the pedagogical philosophy of John Dewey, LL.D. ’32, is characterized by project-based learning that works because it actively engages students in their own education. No Excuses High is strict, demanding, and goal-oriented. Tight discipline and control, paired with teacher-directed learning tasks, have proven highly successful by quantitative measures: the poor urban students who attend outscore their suburban counterparts on the SAT, Advanced Placement (AP), and state tests, and all go on to college. I.B. High is modeled on the International Baccalaureate (IB) curriculum originally created by Swiss educators for the children of mobile global elites; it has been successfully adapted in the United States for use in high-poverty-area schools. The rigorous, deeply intellectual curriculum asks students to participate in finding the answers to open-ended questions through thoughtful analysis.

But each system also has drawbacks. Dewey High’s project-based teaching can lack rigor: students folding origami in math class, for example, were unable to connect their activities to any broader learning goals. No Excuses High, while effective, was a joyless place to learn: neither students nor teachers were happy, and the program failed to engage students as participants in their own education. Mehta and Fine write that it reaches floors—but not ceilings. I.B. High was perhaps the most promising of the three

approaches (the IB curriculum has been adopted in about 2 percent of American high schools), but worked best when practitioners trained in its underlying precepts were present to help other teachers connect the curriculum to its broader goals of creating thoughtful citizens of the world.

The very best learning environments in each of these schools shared several features. “First, *purpose*,” says Mehta. “The clear goal that is motivating to students in the present”: producing a play, filming a documentary, or understanding Descartes’s statement, “I think, therefore I am.” In the latter case, students wondered, “What if they were in a vegetative state?” and asked, “Does a computer think?” “Purposes can be concrete or intellectual,” says Mehta, “but they have to be what motivates the action.”

He and Fine identify three additional elements fostering learning: *mastery*, *identity*, and *creativity*. “Mastery is developing knowledge or skill in a domain,” he says. “Identity is becoming more invested in thinking of yourself as someone who does that kind of work, moving from a conception of oneself as ‘I’m someone who swims,’ to ‘I’m a swimmer.’ And then

creativity is not just taking in knowledge, but making something from it.” Frequently, deep learning was facilitated by an apprentice-type teaching model in which students learned from teachers and even peers with superior expertise in a particular domain.

The obstacles to deep learning are not necessarily intrinsic, Mehta and Fine believe, and they illustrate that point with a story. During one visit to a nonselective IB-for-all school, the researchers split up so

copied down. “There was no cognitive work at all, not even memorization.” Then Fine described an amazing class *she’d* seen: “They had put Andrew Jackson on trial the previous day, and were having rich discussions, debriefing the debate, and getting ready to start a writing task that asked them to take a stand” on Jackson and the Trail of Tears.

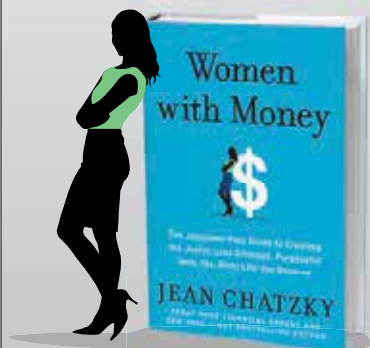
They were sharing these stories in the school copy center, when a woman walked in—and they realized it was the same wom-

**“It was as though she had...a whole different repertory of pedagogy, depending on whom she was working with.”**

each could shadow one student for a day. “We would come back together once or twice during the course of the day...to share data, impressions, and to sharpen our questions,” reports Fine, who followed a higher-skilled student. Mehta told Fine that he had seen a history teacher project a fill-in-the-blank worksheet on the board and then write in the answers, which the students

an who had been teaching two very different classes across tracks. “It was a profound moment for us,” says Fine. “It was as though she had a whole different set of working assumptions, and a whole different repertory of pedagogy, depending on whom she was working with.” The teacher, under administrative pressure, was “trying to get those [less adept] kids to pass a fact-heavy exam.”

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## PREDICTING PERFORMANCE

## Reading the Market

This is at least part of the reason so little creative experimentation occurs in U.S. high schools, the researchers believe. Teachers feel hamstrung by an “ecosystem of constraint”: externally imposed curricular requirements, standardized testing benchmarks, and metrics that colleges use in admissions processes. These external forces are extremely normative, explains Fine; teaching well within that context, as within any context, requires skill, mentorship, and practice.

“Every teacher we talked to, to a person,” she says, “expressed a desire to have their classroom be a place where powerful learning was happening, regardless of what kind of kids they were teaching. They all wanted it.” The challenge, she says, is that often “the system responds to perceived threats by asserting more control, rather than allowing for a natural release that empowers kids to make more choices and to take ownership of their education.” ~JONATHAN SHAW

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FINANCIAL MARKETS can sometimes seem impenetrable, subject to unpredictable forces. At Harvard Business School, however, two researchers believe they have found a means of anticipating the movements of individual companies’ stock prices, at least. Simmons professor of business administration Lauren Cohen and Coleman professor of financial management Christopher Malloy claim that firms publish reliable indications of their future financial performance in yearly and quarterly reports. But—as they write in their recent working paper “Lazy Prices” (coauthored with Quoc Nguyen, now an assistant professor at DePaul University)—investors simply are not paying enough attention to notice.

By law, all publicly traded firms publish 10K (annual) and 10Q (quarterly) reports, thereby alerting shareholders to significant risks that could affect returns. Investors can

sue over the omission of foreseeable problems, giving firms strong incentives to include even the tiniest details. As a result, the reports have lengthened over time: Apple Inc.’s 2018 iteration runs 85 pages. They are also dense and repetitive, with many firms printing nearly identical reports year after year.

Yet Cohen and Malloy found significance in the *exceptions* to this uniformity. Analyzing thousands of documents beginning with 1995, they measured the year-to-year changes firms make in the language of their reports, finding that variability “significantly predicts future negative earnings surprises.” (The vast majority of alterations are negative in tone.) When firms make such changes, Cohen explained in an interview, “that has a huge amount of information for future firm operations and for returns.” In some cases, the predictive nature of alterations is only



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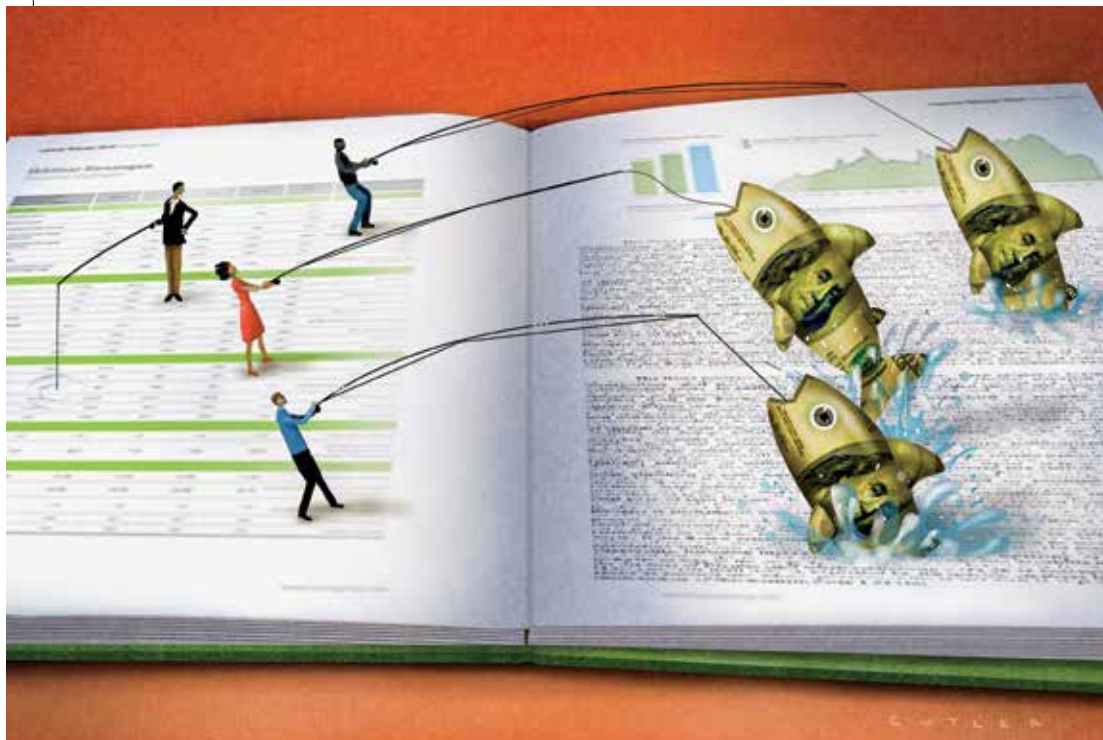
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Investors are simply neglecting to expend the energy necessary to scrutinize these documents.

to its potential rewards, but as Cohen explains, “If there’s one thing we know from behavioral economics and finance, it’s that small frictions lead to large differences in behavior.”

For modern investors, he says, there is “an infinite amount of information deluging you, in some sense”—and

sensible: When firms report a CEO’s departure, for example, performance is likely to change. Yet even innocuous textual changes, such as an increased prevalence of words suggesting uncertainty, tend to portend diminished returns.

One might expect investors to monitor this rich source of information closely—but that has not been the case. Instead, they often react to issues discussed in reports only after public announcements on the same topic, leading to a lag in the reaction of prices (which are thus “lazy”). In 2018, for example, Apple’s 10K warned investors about the implications of the U.S. trade war with China. “Three or four weeks later,” Cohen recounts, “they announced the same thing publicly”—and only then did prices plummet. “So,” he continues, “had you read the

10Ks, you could have made a quick 10 percent on the world’s most liquid stock.” The problem is one of inattention.

The researchers posit several reasons why investors might ignore this crucial information. One is the lack of comparative language: most reports do not directly address how they differ from the previous year’s. (Cohen and Malloy found that investors are more likely to respond appropriately to reports that do contain such language.) In addition, investors’ training in finance may engender a preference for quantitative measures of performance, such as earnings per share, over paragraphs of text.

More broadly, investors are simply neglecting to expend the time and energy necessary to scrutinize these documents. The effort may be a “small friction” compared

that deluge can cause important details to be overlooked, especially when details are harder to parse than quantitative data like a firm’s stock-market value. Cohen and Malloy are now approaching the same problem from a different direction, investigating how investor attention affects a firm’s performance.

Since “Lazy Prices” was published, they have seen their results replicated several times. They have also seen financial companies specialize in work informed by research like theirs, comparing documents qualitatively over time. Moving forward, the authors expect that such research will motivate investors to pay more attention to these documents, despite the inherent “frictions” involved.

The result could be an arms race of sorts between firms and investors. Faced with a more attentive set of investors, firms could attempt to make the most important information harder to find. But the federal

mandate on firms—and the potential lawsuits that could arise from nondisclosure—limit that strategy. “One weapon on the firm’s side,” says Cohen, “is that there’s no mandate on how long these things can be. They can keep adding, they can obfuscate, move things around.” The computing tools that Cohen and Malloy used to compare reports against each other will help investors combat these maneuvers.

## HM Explore More

For additional, online-only, articles on research, see:

### The Lost History of Iberia

How ancient DNA reveals Bronze Age replacement of Iberian men, raising

new questions about the human past.  
[harvardmag.com/iberia-men-19](http://harvardmag.com/iberia-men-19)

### A Crossroads in Biomedicine?

Admitting uncertainty could be key to addressing the reproducibility crisis, a science historian argues.

[harvardmag.com/reproducibility-19](http://harvardmag.com/reproducibility-19)



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“What you’ll see,” predicts Cohen, “is an equilibrium of those two sides.” Malloy adds that “then, you’d expect to see less predictability. The subtle and interesting part of this,” he says, is that the equilibrium remains undefined. “You see both sides playing,” presenting a dynamic relationship in which either side could conceivably take the upper hand. Papers like “Lazy Prices” might prompt more informed investment decisions, but as firms respond, the target will continue to move. —JOHN A. GRIFFIN

LAURA COHEN WEBSITE:

[www.hbs.edu/faculty/Pages/profile.aspx?facid=340063](http://www.hbs.edu/faculty/Pages/profile.aspx?facid=340063)

CHRISTOPHER MALLOY WEBSITE:

[www.hbs.edu/faculty/Pages/profile.aspx?facid=444656](http://www.hbs.edu/faculty/Pages/profile.aspx?facid=444656)

URBAN TUNNEL VISION

## Cities Too Smart for Their Own Good?

WOULDN'T EVERYONE want a hometown that's a “smart city”? The answer seems obvious: who, after all, wants to live in a stupid city? And indeed, the technologies touted by smart-city advocates can seem utopian: self-driving cars, pothole-reporting apps, and sensors to detect the public's every need—all connected by free public WiFi!

But for Ben Green, this utopian view is precisely the problem. Informed by his experience designing technology for the cities of New Haven, Memphis, and Boston, Green—now a doctoral candidate in applied math at Harvard's Paulson School of Engineering and Applied Sciences and an affiliate of the Berkman Klein Center for Internet and Society—believes the technologies sold to policymakers and the public as tools of a brighter, optimized ur-



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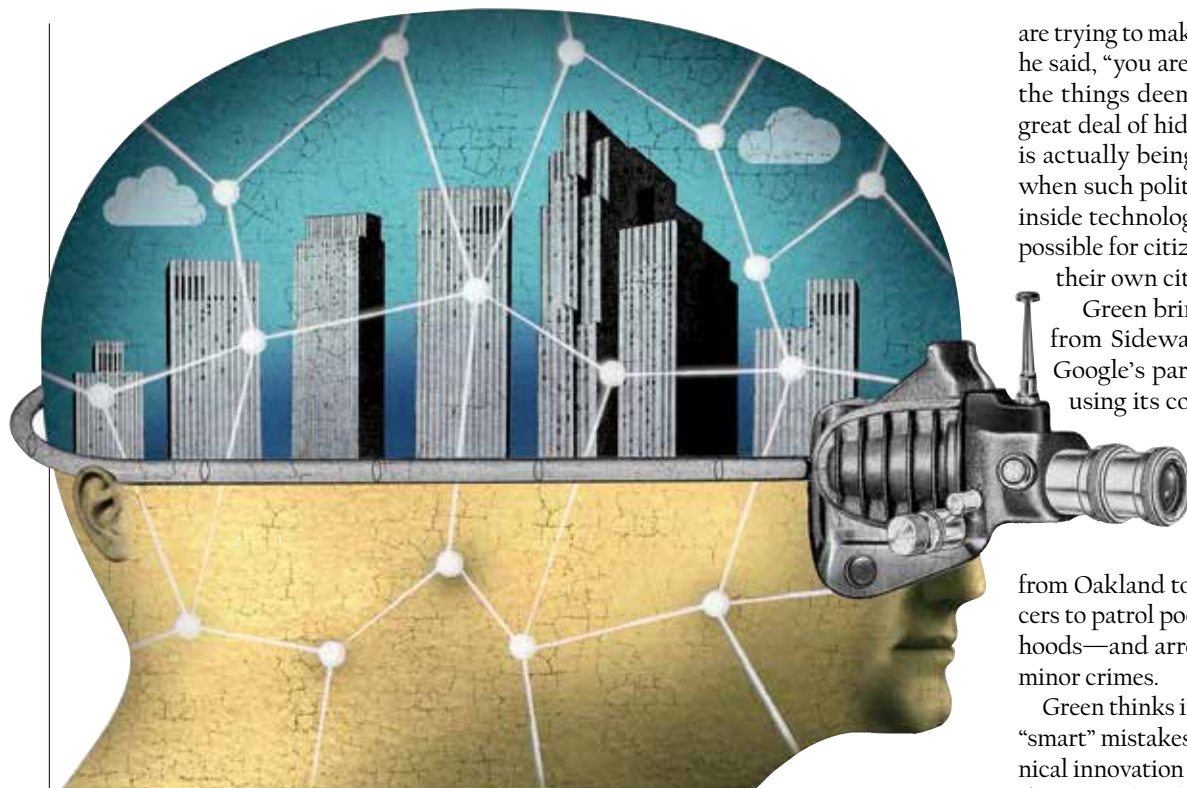
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ban future actually have much darker potential. “The smart city threatens to be a place where self-driving cars have the run of downtowns and force out pedestrians,” he writes in a new book, *The Smart Enough City* (MIT Press), “where civic engagement is limited to requesting services through an app, where police use algorithms to justify and perpetuate racist practices, and where governments and companies surveil public space to control behavior.”

At the heart of Green’s warning is a mindset he calls “tech goggles,” a tunnel vision that answers every problem with new technology. Thus in “smart city” vision, seemingly apolitical aspirations like “smartness,” “efficiency,” and “innovation” take on distorted meanings, focused on technology to the exclusion of all else. Often, Green said in an interview, “these visions are put forward by tech companies with clear profit motives to shift both what the public wants and what city governments believe is useful and valuable.”

As an example of tech-first thinking distorting a solution, he draws a parallel between cities adapting to automobiles in the early twentieth century and to autonomous vehicles in the twenty-first. In the 1920s and ‘30s, automakers and engineers pushed “scientific” and “objective” methods for optimizing traffic speeds to pave the way for their new transportation technology, the

car. Municipal roads redesigned for speeding vehicles pushed bicycles, pedestrians, public transit, and playing children off the streets, forever changing the geography of the American city.

Recent research into using autonomous vehicles to reduce traffic is already repeating this mistake, Green warns. In one instance, researchers at MIT demonstrated the sup-

**When political decisions are hidden inside technology design, citizens can’t shape the future of their own city.**

posed efficiency gains of self-driving cars with a simulation of the intersection of Massachusetts and Columbus avenues in Boston’s South End. Instead of waiting at traffic lights or crosswalks, the simulated cars coordinated with each other to move seamlessly through the intersection. “But there’s one important thing missing,” Green writes: “People.”

If the simulation came to life in the real South End, the bike lanes, crosswalks, and walkable business districts that make it an attractive place to live would vanish. For Green, that’s a warning of how a seemingly objective technical solution could obscure intensely political decisions. “Any time you

are trying to make a system more efficient,” he said, “you are by definition cutting out the things deemed inefficient. There’s a great deal of hidden politics around what is actually being defined” that way. And when such political decisions are hidden inside technology design, it becomes impossible for citizens to shape the future of their own city.

Green brims with cautionary tales, from Sidewalk Labs (a subsidiary of Google’s parent company, Alphabet), using its control of New York City’s free public WiFi hotspots to slurp up detailed personal data, to predictive policing algorithms that exacerbate biases in cities from Oakland to Chicago by sending officers to patrol poor and minority neighborhoods—and arrest the local residents for minor crimes.

Green thinks it’s possible to escape these “smart” mistakes without discarding technical innovation entirely, pointing to cities that considered the social implications of their data and technology as they were developing it—and were better for it. Johnson County, Kansas, for instance, used crime statistics and other data *not* to direct police patrols but to expand social services for citizens at risk of falling through the cracks, *before* they entered the criminal justice system. “It’s not that cities should have no people who care about technology,” he

said, “but they shouldn’t have their entire sense of innovation and progress based *around* technology.”

He hopes his book will be a wake-up call both to practitioners already in the field and to residents pushing for better cities. He says cities should not compete to be “smarter” than their peers if all that means is having newer and more powerful technology. Instead, he challenges them to take off the “tech goggles” and build the cities people want to live in. ~BENNETT MCINTOSH

BEN GREEN WEBSITE:

**<https://scholar.harvard.edu/bgreen/home>**



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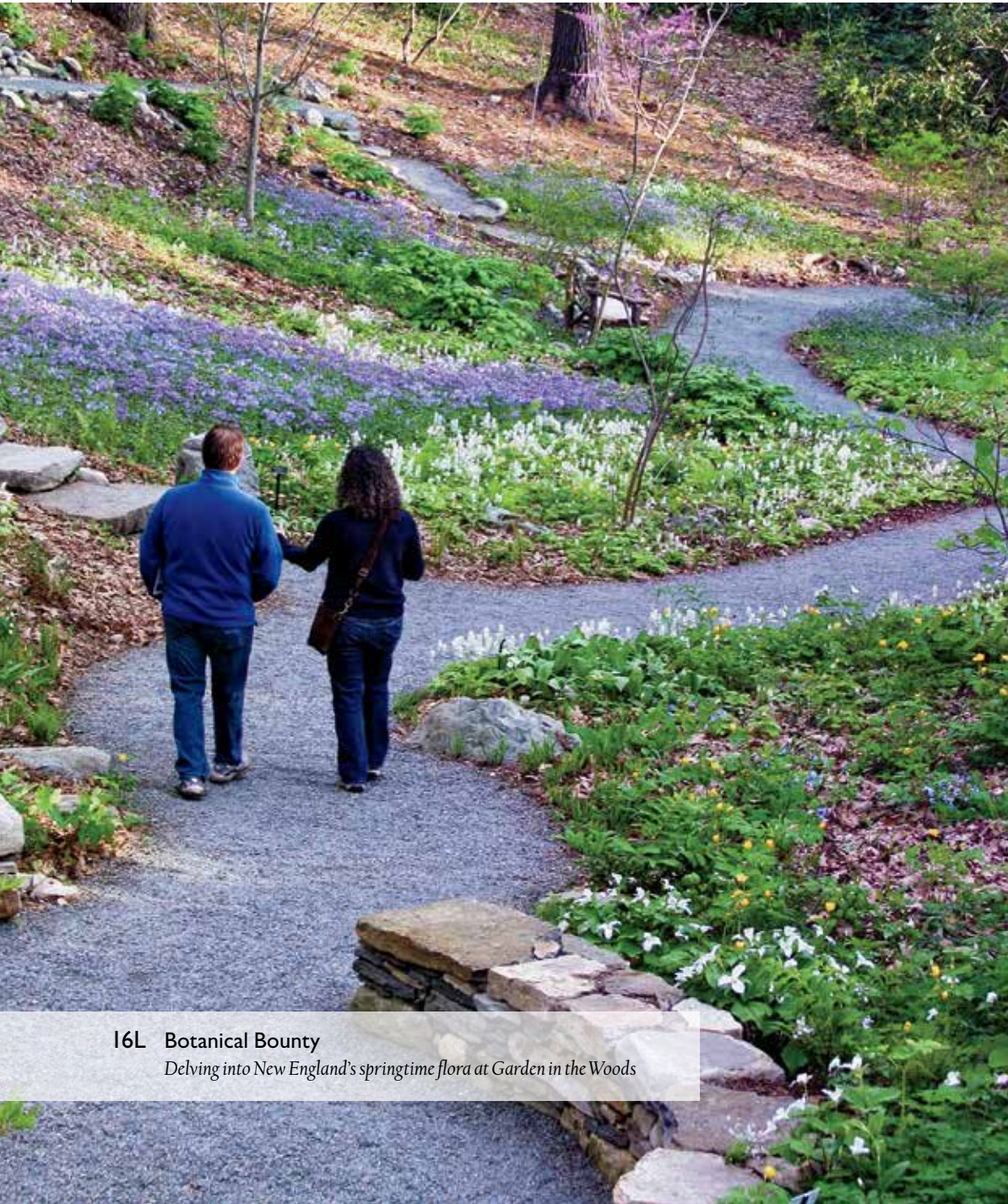


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*A selection of favored Greater Boston restaurants*

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# Extracurriculars

Events on and off campus during May and June

## SEASONAL

### Ceramics Program Spring Show

<https://ofa.fas.harvard.edu>

The annual event showcases unique objects by more than 70 artists. (May 9-12)

### Beacon Hill Garden Club

[beaconhillgardenclub.org](http://beaconhillgardenclub.org)

Explore more than 10 "hidden" private gardens in one of Boston's most historic neighborhoods. (May 16)

From left: Singer/rapper Maimouna Youssef, a.k.a. Mama Fresh, at the Gardner Museum; an 1884 Gorham Silver tureen, at RISD; and Cary Grant and Rosalind Russell in *His Girl Friday*, the classic newspaper film by Howard Hawks, at the Harvard Film Archive

### Humorist Peter Sagal

[harvardboxoffice.edu](mailto:harvardboxoffice.edu)

An evening with the radio host and cultural commentator (and 1987 College alumnus), whose latest ruminations appear in *The Incomplete Book of Running*. (May 17)

### Cambridge Arts River Festival

[cambridgema.gov](http://cambridgema.gov)

This communal jamboree celebrates its fortieth year with live performances of dance, music, and theater, along with art vendors and international foods. New this year: any-

## Harvard Art Museums

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## HARVARD SQUARED

one can dress up in oceanic garb and join the Massachusetts Avenue "Mermaid Parade." Central Square. (June 1)

### Dance for World Community

[ballettheatre.org](http://ballettheatre.org)

The José Mateo Ballet Theatre, in Cambridge, hosts this indoor/outdoor festival featuring free dance classes, demonstrations, films, talks—and performances by more than 80 companies. (June 3-8)

### Boston Festival of Bands

[metwinds.org](http://metwinds.org)

Metropolitan Wind Symphony/MetWinds and a slew of other top ensembles from around New England gather to play classical music, show tunes, and traditional marches. Faneuil Hall. (June 23)

## EXHIBITIONS & EVENTS

### Harvard Museums of Science and Culture

[www.hmsc.harvard.edu](http://www.hmsc.harvard.edu)

At the Peabody Museum of Archaeology & Ethnology, **Zapotec master dyer and textile artist Porfirio Gutiérrez** leads workshops on traditional cochineal-based dyes and weaving techniques (May 18 and 19), and then lectures on "**Preserving Zapotec Weaving Practices**" (May 21).

**Violet**, among the mosaic sculptures by **Stephanie Cole**, at the Cape Ann Museum



COURTESY OF THE CAPE ANN MUSEUM



## Spotlight



RICK LEVINSON PHOTOGRAPHY/COURTESY OF MASS MOCA

**Wilco's Solid Sound Festival**—June 28-30 at MASS MoCA in North Adams—features the alternative-rock band alongside a lineup spanning the musical spectrum. Tortoise integrates electronica, jazz, and “krautrock” (experimental mash-up music originating in 1960s Germany), while the lyrical, Welsh-born Cate Le Bon performs her genre-defying peppery, seductive post-rock. Tuareg songwriter and musician Mdou Moctar takes the stage to play mesmerizing electronic adaptations of traditional Tuareg guitar music. And don't miss Lonnie Holley. The Southern artist, teacher, and late-life improvisational musician, whose 2018 album *Mith* stuns the senses, composes celebrations of life's beauty, and starkly pointed meditations—like “I Snuck off the Slave Ship.” Expect food trucks and pop-up music-related art, along with acts like Circus Smirkus and the John Hodgman Comedy Cabaret, too. ~N.P.B.

**Wilco Solid Sound Festival**  
Solidsoundfestival.com

The **Summer Solstice Celebration** offers art activities, astronomical explanations of the solstice, and free admission to the Harvard Museum of Natural History, Peabody Museum, Semitic Museum, and Collection of Historical Scientific Instruments. (June 21)

### Carpenter Center for the Visual Arts

<https://carpenter.center>

**Anna Oppermann: Drawings** highlights an extensive series of fluid, engrossing images by the largely unheralded German artist. (June 22-September 29)

### Bruce Museum

[brucemuseum.org](http://brucemuseum.org)

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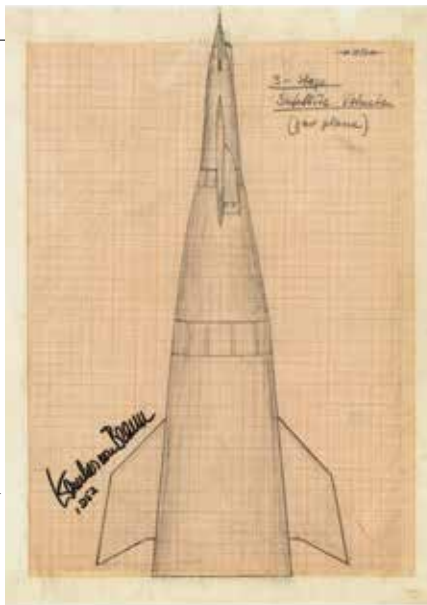
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## Spotlight

**Among the objects** in Houghton Library's fascinating exhibit "Small Steps, Giant Leaps: Apollo 11 at Fifty" is a prescient 1952 drawing of a capsule (at right) by the German-American aerospace engineer Wernher von Braun. He had developed the V-2 rocket as a weapon for Nazi Germany, and was among the technical professionals secretly relocated to the United States after the war. Ultimately, he worked for NASA and was the primary architect of the Saturn V launch vehicle used in the 1969 moon expedition.

The exhibition explores the scientific contributions that led to the space mission through artifacts from Houghton's holdings, and from a private collector. Thus, a diagram featuring the sun, not the earth, as the center of the universe (from Copernicus's 1543 *On the Revolutions of the Celestial Spheres*), and Galileo's early telescopic images of the moon (from his 1610 *Starry Messenger*), share display space with a penned sketch of the lunar module that



Armstrong made to explain his imminent mission to his father. Note, too, the star chart used to calibrate *Eagle's* guidance system after landing on the lunar surface. Signed by Buzz Aldrin, it's still flecked with moon dust.

~N.P.B.

### Houghton Library

<https://library.harvard.edu/libraries>

veloping in eggs and examine life-sized models and jaws and teeth from more than 20 species. (April 20-September 1)

### RISD Museum

[rismuseum.org](http://rismuseum.org)

### Gorham Silver: Designing Brilliance 1850-1970

examines the art and innovation that led this Providence, Rhode Island, manufacturer to put "uniquely American design on the international stage."

(Opens May 3)

### Cape Ann Museum

[capeannmuseum.org](http://capeannmuseum.org)

### "Stephanie Cole—My Life in Pieces: Painting with Stuff"

features the Rockport artist's ornate mosaic "memory sculptures." (May 11-July 7)

### Wadsworth Atheneum Museum of Art

[thewadsworth.org](http://thewadsworth.org)

### Be Seen: Portrait Photography Since

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1969 riot experiences of the queer community. (June 22-September 15)

### Currier Museum of Art

currier.org

Some 40 instruments, including the Fender Stratocaster, exemplify the world's most popular instrument in **Medieval to Metal: The Art and Evolution of the Guitar**. (June 22-September 22)

### Institute of Contemporary Art (ICA)

icaboston.org

**Less Is a Bore: Maximalist Art & Design** reveals how artists "have sought to rattle the dominance of modernism and minimalism." Examples include experimental works by Sanford Biggers and Jasper Johns, and "transgressive sculpture and furniture" by Lucas Samaras and Ettore Sottsass. (June 26-September 22)

### Addison Gallery of American Art

addisongallery.org

Multiple works, by Romare Bearden, Jordan Casteel, Aaron Douglas, and others, illustrate just how a place can become an art-

ist's muse in **Harlem: In Situ**. (Through July 31)

### Museum of Fine Arts

mfa.org

**Toulouse-Lautrec and the Stars of Paris** views celebrity culture and nineteenth-century Parisian nightlife in more than 200 ingenious and evocative works. (Through August 4)

## THEATER

### American Repertory Theater

americanrepertorytheater.org

**We Live in Cairo** is a new musical inspired by the young Egyptians who revolted against President Hosni Mubarak in 2011. The story follows a handful of energetic students armed with laptops, social media, and historic grievances. Book, music, and lyrics by Daniel Lazour and Patrick Lazour. Directed by Taibi Magar. Loeb Drama Center. (May 14-June 16)

**Atlas Soul: Assume the Position**. This world-music ensemble takes audiences on a poly-rhythmic tour of Afro-Mediterranean



COURTESY OF THE BRUCE MUSEUM

**Hammerhead skull at the Bruce Museum**

beats. Featuring band leader, saxophonist, guitarist, and composer Jacques Pardo and poetic powerhouse/lead singer Regie Gibson. Oberon. (June 6)

## NATURE AND SCIENCE

### The Arnold Arboretum

arboretum.harvard.edu

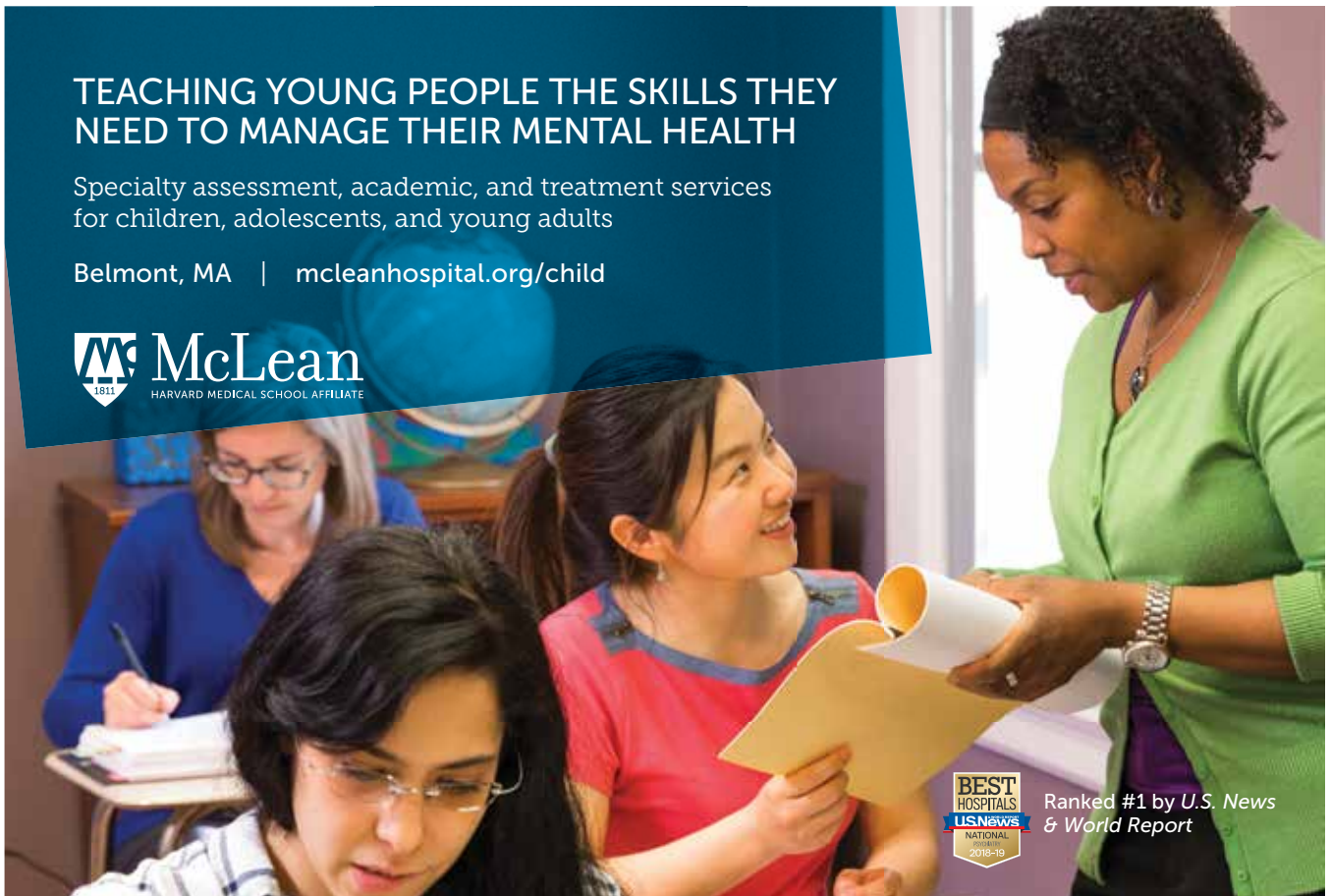
Artist Paul Olson has long explored the arboretum, sketchbook in hand, as reflected in **Drawn to Paint**, a new exhibit of his landscapes and other works. (May 10-July 21)

Bring blankets and chairs for a special outdoor performance of **Pride and Prejudice**,

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staged by the Actors' Shakespeare Project and based on an adaptation of the Jane Austen classic by playwright Kate Hamill. (June 23; rain date June 24)

The new **Science in Our Park Series** offers hands-on learning experiences for kids (ages five and up). "Dissection Dramatics—Flower Form" hones observation and microscope skills (May 26) and "Get

Your Hands Dirty!—Soil Science" employs digital probes and data collection to unearth natural treasures. (June 23).

## FILM

### Harvard Film Archive

[hcl.harvard.edu/hfa](http://hcl.harvard.edu/hfa)

**Extreme Cinema. The Action Documentaries of Kazuo Hara.** The Japanese filmmaker will be on hand for screenings of his

often controversial works—among them *Extreme Private Eros*, *The Emperor's Naked Army Marches On*, and *A Dedicated Life*—which center on radical or marginalized characters. (June 10–July 23)

**The Complete Howard Hawks** highlights the versatile and influential Hollywood director. All of his extant works will be shown, from his silents and early talkies, to classics like *Scarface*, *Bringing Up Baby*, *Gentlemen Prefer Blondes*, and *His Girl Friday*, to later westerns, like the taut 1966 *El Dorado*, with Robert Mitchum, John Wayne, and James Caan. (June 14–August 18)

## MUSIC

### Harvard-Radcliffe Chorus

[boxoffice.harvard.edu](http://boxoffice.harvard.edu)

The group performs Joseph Haydn's *The Seasons*, with orchestra and professional soloists. Sanders Theatre. (May 11)

### Boston Chamber Music Society

[boxoffice.harvard.edu](http://boxoffice.harvard.edu)

The program includes *Sonata for Violin and Cello*, by Maurice Ravel, and *Two Rhapsodies for Viola, Oboe, and Piano*, by Charles Martin Loeffler. Sanders Theatre. (May 12)

### Museum of Fine Arts

[mfa.org](http://mfa.org)

**Guy Fishman: Bach Suites.** The principal cellist of the Handel and Haydn Society surveys all six suites, performing on his two Baroque instruments. (May 19)

### Isabella Stewart Gardner Museum

[gardnermuseum.org](http://gardnermuseum.org)

Singer/rapper **Maimouna Youssef, a.k.a. Mama Fresh**, combines jazz, gospel, and other incantations to honor "A Woman's Worth." With opening acts Dom Jones and SublimeLuv. (May 30)

### Zamir Chorale of Boston

[boxoffice.harvard.edu](http://boxoffice.harvard.edu)

The award-winning ensemble, focused on preserving and presenting Jewish culture, celebrates its fiftieth anniversary with a gala concert honoring its founder, Josh Jacobs. Sanders Theatre. (June 4)

Events listings are also found at [www.harvardmagazine.com](http://www.harvardmagazine.com).

## STAFF PICK: The Allure of Japanese Prints

**Drawing from** the Harvard Art Museums' extensive collection of Japanese woodblock prints, "Japan on Paper," opening May 25, examines the versatile art form and its history. The technique was used "as early as the eighth century to produce Buddhist texts," according to museum exhibit notes; the nearly 50 featured prints span the early Edo period (1615–1868) through the twentieth century, and capture cultural touchpoints—iconic mountainous scenery, Kabuki actors, and beautiful women—as well as contemplative modern portraits.

The innovative artist Suzuki Harunobu, of the Edo era, was especially known for his renderings of feminine grace. He pioneered the use of full-color reproduction technology that emerged in the 1760s, as evidenced in his *Woman Running to Escape a Sudden Shower*, c. 1765–70. Black slashes of rain charge across the paper, juxtaposed against billowing folds of her silky red-trimmed kimono, the open skirting revealing a lovely naked leg. The effect gives a subtle (or not so subtle) eroticism that feels surprisingly liberating—and modern.

To illustrate aspects of the printing process during the New Prints (*Shin hanga*) movement, almost 200 years later, the museum has mounted a series of images by landscape artist Kawase Hasui that were produced between 1945 and 1951. They all depict the same scene, of simple wooden houses by the ocean, entitled *A Cloudy Day in Mizuki, Ibaraki Prefecture*. Yet the mood of the place and forms differ depending on the shifting colorations, from sketched and water-colored versions to the rich blue tones of the fully realized woodblock color-print.

Perhaps the most haunting piece in the show is the *Portrait of Poet Hagiwara Sakutarō* (posthumous edition dated 1957; original dated 1943), by his friend the artist Onchi Kōshirō. It was created a year after the poet, hit hard psychologically by the war and prone to depression and alcoholism, had died. Untamed black hair and deep furrows don't hide eyes that, even cast downward, convey a soulful eloquence that's hard to look away from. ~N.P.B.

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# Botanical Bounty

*Delving into New England's springtime flora*

by NELL PORTER BROWN



**T**WENTY MILES from Boston, amid suburban sprawl, lies a 45-acre haven called Garden in the Woods. This “living museum” offers refreshing excursions through New England’s diverse flora and landscapes: visitors may roam woodland paths; explore a lily pond alive with painted turtles, frogs, and dragonflies; or take the outer Hop Brook Trail. Owned by the Native Plant Trust (the renamed New England Wild Flower Society), the Framingham sanctuary serves as both its headquarters and proof of its successful mission to conserve and promote regional native plants to foster healthy, biologically

diverse environments. The organization also owns other botanical reserves in Maine, Vermont, and New Hampshire, and as a nursery, it produces more than 50,000 native plants annually, grown mostly from seeds found in the wild. Plants are grown primarily at its Nasami Farm, in Whately, Massachusetts,

but plenty are cultivated from seeds in the greenhouse and stock beds at Garden in the Woods.

Plants and gathered seeds help restore



native habitats and landscapes eroded by man-made or natural disasters: the visitor-trampled summit of Cadillac Mountain in Acadia National Park, for example, or the coastal destruction caused by Hurricane Sandy. The trust also operates a leading seed bank that is on track to collect seeds of “the 387 globally and regionally rare species in New England by 2020,” says executive director Debbi Edelstein, who leads a staff of 25, along with hundreds of devoted volunteer workers. The seed project is only part of its research support for horticulturists and botanists worldwide; more than 200 year-round regional educational programs are open to anyone, as are online resources, like Go Botany and Plantfinder, and information to help track endangered species and eliminate harmful invasives. “Plants are the foundation of all life. No matter what you want to conserve, whether the interest is in birds, bats, or bugs—they all depend on plants,” Edelstein adds. “But people tend to

overlook them. People see something green and think it’s good, but they don’t really see the roles that very special individual species play in making everything else healthy.”

THIS GROWING SEASON, a trip to Garden in the Woods might rectify that. There are places to picnic or relax, and a rustic playground for children, who can also try a do-it-yourself scavenger hunt to explore plants and creatures. Guided or self-guided tours, included with the cost of admission, route visitors through themed plantings—rock

garden, coastal zone, meadow, extensive woodland garden—all designed and sustainably maintained to offer various bloom times and transformative colors and textural features from April 15 to October 15.

Trilliums are a spectacular springtime draw. The “quintessential, ephemeral woodland species are delicate, not only in the way they look, but in the way they grow,” explains horticulturalist Dan Jaffe, a principal propagator. “They are very susceptible to changes in habitat, and to being nibbled: the deer love them and trilliums can only handle



**Garden in the Woods** features the white spring ephemerals—*Trillium grandiflorum* (far left), *Trillium grandiflorum* ‘multiplex’ (left), and maroon *Trillium erectum* (lower left)—along with meadowlands, meandering pathways, a frog pond, and live music during **Trillium Week (May 5-11)**.



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so much before they succumb.”

The “tri” refers to three leaves per plant, three petals per flower, and three sepals, which resemble a cross between a leaf and a petal, says Jaffe, co-author of *Native Plants for New England Gardens* (2018): “At first they kind of look like a lollipop on a stick, curled into a ball shape, and then they pop up, and unfurl.” And they demand to be met on their own terms: “The unique survival trait that

allows them to dwell in a forest with full trees is that they only come out when the New England light is high. Then the trees leaf out and there’s no more growing because there’s too much shade, and they go dormant for the rest of the year.”

Garden in the Woods has 26 trillium species—the largest collection north of Delaware. That fact, and the serene beauty of these early-spring risers, are celebrated

during annual Trillium Week activities (May 5-11). Botanical tours and cultivation workshops, along with options to purchase plants from on-site propagation beds, culminate in a Friday evening of “Trilliums and Brews” with live music, craft beers, light fare, and strolls through the grounds. The flowers range from white to pinks, yellows, and a deep, maroon red; the leaves appear in matte, mottled, and variegated forms.

## ALL IN A DAY: Peak Experiences

**You don’t have to go *Free Solo*** to enjoy outdoor rock climbing near Boston. From bouldering to traditional and sport climbing, diverse routes challenge anyone, from novices to advanced athletes, according to Harvard Mountaineering Club president Vladislav Sevostianov ’19.

South of Boston, the former granite quarries in Quincy offer about 100 climbs, some as high as 80 feet, with scenic views, as well as great bouldering. Unlike sport and “trad” climbing, which require ropes and anchors, bouldering is a free-hand activity involving horizontal and vertical acrobatic maneuvering along rocks up to 20 feet off the ground, Sevostianov explains. Prepare for weekend crowds in Quincy, or head to the fewer trad and sport routes at Rattlesnake Rocks, in the Braintree section of the Blue Hills Reservation. Or, for hundreds of unique bouldering scrambles, go to Lincoln Woods State Park, north of Providence, Rhode Island: clusters of rock are scattered amid hiking trails, picnic areas, and a swimming pond.

One of Sevostianov’s favorite spots is the Red Rocks Conservation Area, in Gloucester. The trad and sport routes, and a few for top-rope—when climbers ascend the rock using a rope they have

already secured at the top—center around a wall with a vertical crack known as “The Zipper,” he reports. There are also plenty of enjoyable “slabby” routes: easier clambering across rocks at lower, non-vertical angles that relies more heavily on one’s balance, foot strength, and traction. Eat lunch with views of Gloucester Harbor from the Red Rocks cliff top, or end the day at Captain Dusty’s Ice Cream, in nearby Manchester-by-the-Sea.

Sevostianov also recommends Hopkinton’s College Rock Park: the eponymous rock is 35 feet high with alternate front and back routes, offering one of the eas-



**Clockwise from top:** Red Rocks, in Gloucester; mountainous Rumney, New Hampshire; bouldering in Lincoln Woods, Rhode Island; and scaling granite walls, in Quincy

iest ascents around. Or, he adds, try the Crow Hill Ledges in Leominster State Forest, off Route 2. After tackling towering hunks of gneiss there, climbers can cool off in Crow Hill Pond.

An exciting weekend trip leads to climbing meccas in New Hampshire. Around Rumney, at the southern edge of the White Mountain National Forest, world-renowned routes spread across Rattlesnake Mountain. Another choice, Sevostianov says, is to head deeper into the range, near North Conway, and check out the 700-foot-high Cathedral Ledge: “an amazing trad-climbing destination.” Inexperienced climbers can hire mountain guides—or just start small and learn locally. “We do clinics and skill sessions, and are a resource for anyone who wants to climb, find partners, or meet people in this community,” Sevostianov says of the Harvard club, founded in 1924. “The big thing in climbing culture is mentorship. It can be incredibly daunting, otherwise, to learn the ropes, not to mention unsafe. This is also how lifelong friendships develop.”—N.P.B.

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## HARVARD SQUARED



**The sanctuary offers season-long botanical splendor, and lots of ideas for backyard landscaping with native plants.**

The star of the show might be *Trillium grandiflorum*, a pristine white bloom that turns pink post-peak; Jaffe says scientists think this signals to pollinators, "The job's been done; go find another flower."

It's likely that the double-flowered white trillium (*Trillium grandiflorum* 'multiplex') was originally planted at Garden in the Woods by its founder, Will C. Curtis. In 1931 the landscape architect and lifelong plant collector bought 30 acres of the current Framingham site from the Old Colony Railroad, which had used it for mining gravel. The region was rural, and the property, with its topography and landscape of glacier-carved ridges, gullies, and brooks, captured his imagination. According to a 1991 *American Horticulturist* feature, Curtis was "eccentric and crusty"; although creating the garden became the focus of his life, "his abrasive personality alienated a series of volunteer helpers until he hired Howard O. 'Dick' Stiles." Stiles had lost his job in the Depression, and "he too almost left, but Curtis—soft-hearted under that gruff exterior—persuaded him to stay, and the two became partners" in creating and maintaining the site.

They opened it to the public in the early 1930s as Garden in the Woods, a showcase for Curtis's professional talents, naturalistic landscaping, and prized North American species. As Curtis aged, and encroaching postwar development brought new housing and the nation's first mall, which opened nearby in 1951, he and concerned friends and garden-lovers mounted a nationwide campaign to raise money for an endowment. In 1965, Curtis donated the property to the then Wild Flower Preservation Society. He stayed on as director until he died, in 1969, at the age of 86, *American Horticulturist*

reported; "his ashes were scattered among his beloved plants."

In 2017, Native Plant Trust razed Curtis's deteriorating cottage home on the property. But care was taken, Edelstein notes, to keep the foundation, two walls, a stone floor, and the skeleton of the old greenhouse. A small "cottage garden," a work-in-progress this season, will creatively incorporate the "ruins." Those features are part of the larger, revitalized Curtis Woodland Garden,

where 20,000 new plants have been added during the last three years. As a tribute, the space spotlights some of Curtis's favorite plants, and, therefore, "is the one place where we expand the plant palette to include species from the Piedmont and southern Appalachia regions," notes Edelstein, along with a host of New England natives.

Among the new plants to watch for in the emerging cottage garden are maple-leaf viburnums and small-scale sourwood trees. The latter are "absolutely beautiful trees that bloom in mid-to-late summer," Jaffe says, "with a series of dangling, long, bell-shaped flowers arranged almost like spikes." In the fall, he adds, the "whole structure is covered with this shining bright red." Sourwoods are also an ideal alternative to the highly invasive burning bush plants, which are illegal to sell in most New England states; Edelstein notes, "We want people to take it out of their gardens."

Also of note this season is the garden's "Kill Your Lawn" campaign, which highlights the cost of Americans' lawn obsession—the use of pesticides and other chemicals, fossil-fueled maintenance machines, excessive water requirements, and destruction of healthy habitats—and offers alternatives. Jaffe enjoys the "native strawberry" solution. "Imagine a lawn, or come see ours, that requires no watering, mowing, or fertilizing," he says. "Yet it still offers food for bees, butterflies, and humans while being capable of growing in some of the crappiest soils New England has to offer."

Similar principles are in play at the meadow. Native annuals and a range of short- and long-life perennials enable the meadow gardens to change and grow over time, Jaffe points out. The woodland garden offers peak blooms in spring and early summer, but the meadow has more mid-to-late season appeal. Bee balm, Culver's root, lobelia, and black-eyed Susan, among scores



of other native species, bloom across the landscape, and in the fall, native grasses shine. The asters and goldenrods are the last to bloom, toward the end of the summer. “The rich darker colors come out—the oranges, bronzes, and browns,” he says. “There are rich hues of walnut and cherry. Brown has a bad reputation, and I’m trying to change that.”

THE ORGANIZATION’S programs, meanwhile, explore native flora, micro-environments, and regional ecology. This season includes: “Orchids of New England,” with trust botanist Neela de Zoysa (Garden in the Woods, May 23); a landscape study of the Radcliffe Sunken Garden, (Cambridge, May 31); and “Citizen Science with the Beecology Project,” with the effort’s co-leader, Worcester Polytechnic Institute research assistant professor Robert Gegear (Nasami Farm, June 23; for more about bees, see page 16R).

Nasami Farm, near Northampton, opens for the season on April 27. It’s a fun day trip for those seeking to buy native plants from its nursery. But the trust’s other sanctuaries offer much more for visitors to explore. Edelstein recommends looking for “gorgeous ‘showy lady’s-slippers,’ wild orchids, and bog plants” this June at the 40-acre Eschqua Bog Natural Area, near Woodstock, Vermont, an area saved from development

**Some Native Plant Trust preserves offer** *Diplazium pycnocarpon* (above), and the rarer lady’s slipper *Cypripedium reginae*.



and owned jointly with the Vermont chapter of The Nature Conservancy. The much larger Hobbs Fern Sanctuary, in Lyman, New Hampshire, is home to more than 40 varieties of these lush, moisture-loving plants.

In Woolwich, Maine, the Robert P. Tristram Coffin Wildlife Reserve encompasses 177 acres of sandy shores and tidal marshes—prime wetland-species habitat and a



refuge for migratory and other shore birds, along with endangered pink lady’s-slippers. And this summer, farther up the Maine coast, stop into the Harvey Butler Rhododendron Sanctuary to explore these hardy

New England flowering shrubs. Its grand, five-acre stand of great rosebay (*Rhododendron maximum*), Edelstein adds, typically explodes into bloom by mid July.



### WHY I JOINED THE HARVARD CLUB OF BOSTON

There are many different reasons to join the Harvard Club of Boston. Amy Norton is a graduate of the Divinity School at Harvard, and here’s why she joined.

“ I joined the Harvard Club as a graduate student to meet new people and network. While I was job-searching after graduation, I was on a tight budget, yet I maintained my membership because the Club had become a place where I felt like I belonged. I met people at the Club who would become my closest friends, and who helped sustain me through that challenging year. I’m giving back by serving on the Member Engagement Committee, and co-chairing the Young Member Committee.

**The Harvard Club has become my community.** ”

— Amy Norton dv’16

For more information regarding membership, please call 617-450-8406 or visit [harvardclub.com](http://harvardclub.com).

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# All Abuzz

Native and honey bees at work around Greater Boston

by JESSICA LAU

**T**HE HARVARD MUSEUM of Natural History is home to all sorts of intriguing preserved specimens, from dinosaur skeletons to animals from around the world. But in one corner of the arthropod gallery, amid beetles and butterflies pinned to displays behind glass, the thousands of honeybees swarming in and out of a hive are very much alive.

The observation beehive, a project of the Harvard Undergraduate Beekeepers, is on display during the spring and summer, when the bees are most active.

It looks like a window set perpendicular to the wall, with a transparent plastic tube linking the hive to the outdoors. Visitors can try to identify female worker bees carrying out various duties, like foraging, constructing or guarding cells, or converting nectar, or look for the colony's queen; she's usually bigger than the male drones, and has been marked with a dot of paint by the beekeepers. Look for "tail-wagging" bees at the bottom of the hive, says Greg Morrow, a technical manager of multimedia projects at Harvard who advises the student group. The showy "figure-eight dance" is how a foraging bee communicates her discovery of new flowers, he explains: the longer she performs, the more bees she'll recruit to go raid nearby treasure troves of pollen and nectar.

Even within Greater Boston's dense urban environment, opportunities exist to watch bees work and learn not only about their essential contributions to food production, but about the practicalities of beekeeping as well. Honeybees are a focus at the museum, at the Harvard Square shop *Follow the Honey*, and at Mass Audubon's Drumlin Farm Wildlife Sanctuary, in Lincoln, which produces and sells honey from its own hives



**Busy bees thrive at the Harvard Museum of Natural History (above); hexagonal habitats attract native bees that pollinate crops at South Street Farm (right); and log-based cavities host nesting bees at the Arnold Arboretum.**

and offers beekeeping classes and programs. Lesser-known but equally important native bee species are at the center of innovative endeavors at Harvard's Arnold Arboretum and at nonprofit Groundwork Somerville's urban South Street Farm.

The European honeybee, *Apis mellifera*, is a domesticated species imported to North America, which counts, in addition, some 4,000 native bee species. Roughly 400 of those species inhabit New England; yet with habitat loss and widespread pesticide use, these populations are increasingly threatened. The Beecology Project, spearheaded by a team that includes Worcester Polytechnic Institute associate professor Elizabeth F. Ryder, M.S. '85, Ph.D. '93, is helping to address that problem, in part by gathering data from citizen-scientists who use a mobile app to track native pollinators.

At the Arnold Arboretum, gardener Brendan P. Keegan last year helped build



and now oversees six native-bee habitats across the 281-acre botanical oasis in Boston's Jamaica Plain neighborhood—to boost the local bee population and “educate people about the diversity of pollinators that we have.”

The largest habitat, in the Leventritt Garden, is a wooden box stuffed with hollow reeds and logs with holes drilled into them to form pencil-sized cavities where individual bees make nests. It attracts mason bees and leafcutter bees. “Each female lays an egg at the far end, adds a small ball of pollen and nectar as a meal for the future larva, and then uses a plug of mud or specially cut leaves to wall off the egg, creating



a cell,” Keegan explains: there are multiple cells per cavity, each holding one egg. “No-mow” zones are also left fallow among the arboretum’s beautiful specimen trees and ornate gardens, he says, in part to foster habitat-building for invertebrates. Most native bees, including sweat bees (named for their attraction to human perspiration), nest in the ground.

The Arboretum benefits, Keegan points out, because many native bees are more efficient pollinators than *A. mellifera*. “Honeybees have pollen sacks on the backs of their legs” and must wet the pollen to attach it, “whereas most of our native bees carry [more dry, loose] pollen on their abdomens,” he says. “When they’re going into a flower, they’re actually more efficient because they’re basically covered with pollen” and can distribute it more easily.

Many farmers are taking advantage of that efficiency, including the operators of South Street Farm, which relies on mason and leafcutter bees to pollinate crops. The quarter-acre Somerville site is an experiment in urban agriculture, and supplies produce to the community. Because local bee habitats were sparse, the organization built them: wooden poles in a corner of the farm hold boxes filled with hollow reeds where native pollinators nest. Anyone interested in learning more can stop by, or even join the farm’s volunteer ranks.

For those eager to support apiculturists, Follow the Honey sells small-batch honeys and beeswax products made in Massachusetts and around the world. Flavors and types of honey depend on the source of the nectar—whether wildflowers in Tanzania, ulmo trees in Patagonia, or tupelo trees in the Atchafalaya River basin of Louisiana. The store helps connect “unseen beekeepers to markets,” says chief of operations Brian Wornner, but its mission is also to share information: on how honey is made, on the challenges bees and beekeepers face, and on the environmental importance of these insects.

At the Harvard museum, bees in the observation hive do produce honey—but just enough for themselves. The exhibit invites close examination of these unique creatures that work so hard in a vital aspect of human food production. Morrow admires the intricacies of bee biology: “The more you observe,” he says, “the more incredible it becomes.” ▢

*Jessica Lau is earning a master’s in journalism at the Extension School.*

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# The Week's Events



## Harvard University's 368th Commencement Exercises

Thursday, May 30, 2019

[commencement.harvard.edu](https://commencement.harvard.edu)

**SINCE 1642**, with just nine graduating students, Harvard's Commencement Exercises have brought together the community unlike any other tradition still observed in the University. Degree candidates with family and friends, faculty and administrators who supported them, and alumni from around the world are anticipated to participate in our 368th Commencement Exercises this spring. To accommodate the increasing number of people planning to attend, we ask that any interested readers carefully review the guidelines governing ticketing, regalia, security precautions, and other important details, which are available online at <https://commencement.harvard.edu/ticket-information>.

### Commencement Day Overview

**THE MORNING EXERCISES** begin when the academic procession is seated in Tercentenary Theatre. Three student orators deliver addresses, and the dean of each School introduces the candidates for their respective degrees, which the president then confers. Toward the conclusion of the ceremony the graduating seniors are asked to rise, and their degrees are conferred on them as a group by the president. Honorary Degrees are then conferred before the Exercises are adjourned.

**DIPLOMA-GRANTING CEREMONIES AND LUNCHEONS:** Graduates and their guests return to their respective undergraduate Houses or graduate and professional Schools. Harvard and Radcliffe College alumni/ae who have celebrated their 50th Reunion are invited to join the Tree Spread luncheon, Harvard and Radcliffe Reunions gather for class-based luncheons, while all other alumni may pre-purchase tickets for boxed lunches at the Alumni Spread in Harvard Yard.

**THE AFTERNOON PROGRAM** features an address by Harvard President Lawrence S. Bacow and the Commencement speaker, Chancellor Angela Merkel. Officially called the Annual Meeting of the Harvard Alumni Association, this program includes the Overseer and HAA director election results, presentations of the Harvard Medals, and remarks by the HAA president.

— *The Harvard Commencement Office and The Harvard Alumni Association*

**C**OMMENCEMENT WEEK includes addresses by President Lawrence S. Bacow and Chancellor Angela D. Merkel of Germany. For details and updates on event speakers, visit [harvardmagazine.com/commencement](https://harvardmagazine.com/commencement).  
\*\*\*

### TUESDAY, MAY 28

Phi Beta Kappa Exercises, at 11, with a guest poet and orator. Memorial Hall.

Baccalaureate Service for the Class of 2019, at 2, Memorial Church, followed by class photo, at 3:30, Tercentenary Theatre.

Class of 2019 Family Reception, at 5. Tickets required. Science Center plaza.

Harvard Extension School Annual Commencement Banquet, 6-9:30. Tickets required. Annenberg Hall.

### WEDNESDAY, MAY 29

ROTC Commissioning Ceremony, at 10:30, with President Bacow and General Mark A. Milley, Chief of Staff of the U.S. Army, and nominated chairman of the Joint Chiefs of Staff. Tercentenary Theatre.

Harvard T.H. Chan School of Public Health Convocation at 11, with Cecile Richards, former president of the Planned Parenthood Federation of America, and author of *Make Trouble*. HMS Quad.

Senior Class Day Picnic, at noon. Tickets required. The Old Yard.

Senior Class Day Exercises, at 2, with the Harvard and Ivy Orations, remarks by incoming Harvard Alumni Association president Alice Hill '81, Ph.D. '91, and a guest speaker. Tickets required. Tercentenary Theatre.

Harvard Kennedy School Graduation



Address, at 2, by Juan Manuel Santos, former president of the Republic of Colombia and Nobel peace laureate. JFK Memorial Park.

Law School Class Day, 2:30, with Roberta A. Kaplan '88, founding partner at Kaplan Hecker & Fink and author of *Then Comes Marriage: United States v. Windsor and the Defeat of DOMA*. Holmes Field.

Business School Class Day Ceremony,

2:30, with former New York City mayor Michael R. Bloomberg, M.B.A. '66, LL.D. '14, founder of Bloomberg LP and Bloomberg Philanthropies. Baker Lawn.

Graduate School of Design Class Day, at 3:30, with Vidal professor of the practice of creative writing Teju Cole. Gund Hall lawn.

Divinity School Multireligious Commencement Service for the Class of 2019 at 3:30. Memorial Church.

Graduate School of Arts and Sciences Dudley House Faculty Deans' Reception, 4-6. Lehman Hall.

Faculty Deans' Receptions for seniors and guests, at 5. Undergraduate Houses.

Harvard University Band, Harvard Glee Club, and Radcliffe Choral Society Concert, at 8. Tercentenary Theatre.

#### THURSDAY, MAY 30

Commencement Day. Gates open at 6:45.

Academic Procession, 8:50. The Old Yard.

The 368th Commencement Exercises, 9:45 (concluding at 11:30). Tickets required. Tercentenary Theatre.

All Alumni Spread, 11:30. Tickets re-

quired. The Old Yard.

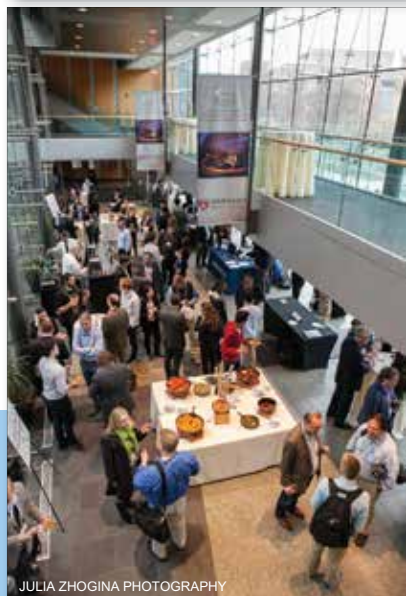
The Tree Spread, for the College classes through 1968, 11:30. Tickets required. Holden Quadrangle.

Graduate Schools Diploma Ceremonies, from 11:30. GSAS Luncheon and Reception, 12 to 3. Tickets required. Behind Perkins Hall.

College Diploma Presentation Ceremonies and Luncheons, at noon. Undergraduate Houses.

Alumni Procession, 1:45. The Old Yard.

The Annual Meeting of the Harvard Alumni Association (HAA): The Commencement Afternoon Program, 2:30 (concluding at 4:15), includes remarks by HAA president Margaret M. Wang '09, President Bacow, and Commencement speaker Angela D. Merkel; Overseer and HAA director elec-



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Angela D. Merkel

388/BALAMY STOCK PHOTO

tion results; and Harvard Medal presentations. Tercentenary Theatre.

**Medical and Dental Schools Class Day Ceremony.** Ticketed luncheon at noon, followed by a speech, at 2, by pediatrician Mona Hanna-Attisha, founder and director of the Michigan State University and Hurley Children's Hospital Pediatric Public Health Initiative. HMS Quad.

### FRIDAY, MAY 31

Radcliffe Day 10 A.M. panel discussion, "Nourishing America: Exploring the Intersection of Food and Justice," moderated by journalist Soledad O'Brien '88, with Sara Bleich, professor of public health policy and

Pforzheimer professor of the Radcliffe Institute for Advanced Study; Jennifer Gordon '87, J.D. '92, professor of law at Fordham University School of Law; Frances Moore Lappé, writer and activist; Daniel A. Sumner, Buck Distinguished Professor of agricultural and resource economics at UC, Davis; and Alice Waters, the chef, food activist, and founder/owner of Chez Panisse.

During the subsequent luncheon (12:30-2), the civil rights activist Dolores Huerta, who with Cesar Chavez founded what became the United Farm Workers of America, is to receive the 2019 Radcliffe Medal. Tickets are required;

events will also be webcast live at [radcliffe.harvard.edu](http://radcliffe.harvard.edu).

For updates on Commencement week and related activities, visit [commencement.harvard.edu](http://commencement.harvard.edu).



## 2019 Commencement & Reunion Guide

Go to: [harvardmagazine.com/commencement](http://harvardmagazine.com/commencement) for a complete schedule and live coverage of events.

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# When Forced to Choose...

*An eclectic list of favored Greater Boston restaurants*  
by NELL PORTER BROWN



**S**EEKING fresh perspectives, we asked *Harvard Magazine* staffers and friends to name some of their favorite restaurants in Greater Boston. The resulting list ranged from fancy to casual spots, with high marks given for inventive food, comfort, personable servers, and ease of conversation (low noise levels). A hodge-podge selection of these top picks follows.

Opened last year, the tiny, white-walled Celeste, in Somerville's Union Square, is a joyful, relaxed place with refined Peruvian

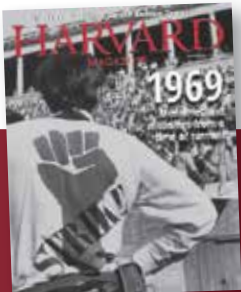
cuisine. There's an open kitchen and a bar with six seats, along with eight tables. Latin-American-style salsa and jazz float through the air, adding to Celeste's cosmopolitan ambience. It also feels homey, as if a group of friends hanging for the evening just happen to be running a restaurant. The bartender mixes tangy

**Clockwise from top right: The new Peruvian restaurant Celeste, and its seafood ceviche; La Bodega's intimate interior, and Uryguan-inspired food; OAK Long Bar + Kitchen's plush digs and towering burger; Venetian-style seafood pasta, at the polished SRV**



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## HARVARD SQUARED



People crave Little Big Diner’s fresh ramen, with pork, ajitama egg, and bean sprouts—and its “Hawaiian-style burger.”

pisco sours and margaritas, and pitchers of non-alcoholic *chicha morada*. That refreshing Peruvian drink, made from brewed purple corn flavored with apple, pineapple, cinnamon, cloves, limes, and sugar, tastes of grapes and watermelon. Bubble-gum-sweet and faintly lemony, the carbonated Inca Kola is consumed as a symbol of national pride (never mind its vaguely radioactive-looking neon-yellow color).

That authenticity and care have led to numerous accolades and to Celeste’s semi-finalist designation for this year’s James Beard Foundation “best new restaurant” award. Start with a limey ceviche, or try a Lima staple: cold boiled potatoes dressed in *huancaína*, a cream sauce spiced with fruity *aji amarillo* peppers. Everywhere in Lima, too, are restaurants serving a distinctive Chinese-Peruvian cuisine, *chifa*. Celeste’s rich *lomo saltado* features Chinese stir-fried beef, combined with tomatoes, onions, peppers, soy sauce, and potatoes. We also loved the comforting classic *aji de gallina*: chicken stew with garlic, turmeric, walnuts, and more yellow peppers, served over rice and slabs of potato. End the meal with mousse *lucuma*, an Andean valley native fruit that somehow melds mango and lemon with butterscotch. (\$8-\$27)

For Cuban-style Latin American food,





head to the lively Gus-tazo, in Waltham. Try the fresh-baked *empanadas* and yuca fries with cilantro aioli, peppers stuffed with cod and béchamel, or the heftier dishes: slow-roasted pork on tostones, and *mariscada* (seafood stew with coconut milk). The bold, sophisticated food in a cozy, colorful spot draws crowds, although diners who want more elbow room might also appreciate Gus-tazo's larger, new second location north of Porter Square in Cambridge. (\$7-\$32)

Uruguayan-inspired cuisine prevails at the artful La Bodega, in east Watertown. Highlights of the tapas menu include paper-thin Ibérico salami, salmon with green chermoula, and saffron-flecked seafood in a nest of toasted, vermicelli-like *fideos*—or leave room for the *chivito al pan*, a beef slider topped with ham, bacon, cheese, and a fried egg. The sparkling bar holds creative bouquets, and dark, theatrical lighting gives the dining room and the attached, charming vintage train car an air of romance. (\$5-\$27)

Glamour on a grand scale prevails at the plush OAK Long Bar + Kitchen, in Boston's Back Bay. Ornate chandeliers, leather bar stools, and upholstered nooks abound amid polished wood and mirrors. That—and expert barmen proffering ample martinis and classic sidecars—make this a terrific “feel-good” place for after-work gatherings, impressive dinner dates, or any excuse for a celebration. Choose from small or big plates of loosely French-style food, like charcuterie and steak *frites*, a juicy burger, and loads of fresh seafood. (\$15-\$49)

Springtime smells of lilacs and green grass. But to *taste* the season, order the artichoke crudité at the South End Venetian-fare hotspot SRV, in Boston. Marinated slivers of raw artichoke hearts are topped with bright-green whole and puréed fava beans,

**The Belmont mainstay Savinos offers Italian-style fare, like pan-roasted chicken with spring vegetables, and live jazz on Thursday nights.**



greens, and a mild truffle-infused cheese. Or try the stalks of tannin-rich rhubarb paired with almond crema, spicy plump raisins, bits of almonds—and speck, a cured ham with a juniper kick. SRV's huge, elegant space with high white ceilings is grounded by maroon banquettes, small marble-topped tables, and a gleaming old-wood floor. (\$11-\$38)

For less rarified Italian food in a more neighborly setting, try Savinos, in Belmont. The ravioli and porcini-sage cream, a beet salad with pistachios and goat cheese, and a balsamic-laced duck breast with polenta top the menu. What's more, chef/owner Thomas Cutrone offers specials for “Wednesday Girls Night Out” and keeps the place on the quieter side—“no crazy bar scene”—with Thursdays reserved for live jazz. (\$8-\$32)

In Harvard Square, Harvest was praised for its professional waitstaff and consistently “outstanding” locally sourced dishes—especially the fish. Also coveted are seats on its pretty and secluded patio, or at its intimate bar. Start with raw-bar specials and artisanal cheeses, then move on to entrées like brown-butter hake and beef strip loin with Béarnaise and potato-mushroom *pavé*—or equally good vegetarian dishes, like mushroom agnolotti with pecorino. (\$12-\$46)

For a magic show of cocktails—flasks and secret messages tucked in hollowed-out books, dry-ice “fog” wafting from clay vessels, and glasses sporting flowers and “good luck” bits of fake money—head farther afield, to The Baldwin Bar, inside a former Woburn mansion. The place is also a James Beard award semi-finalist, for “outstanding bar program,” thanks to showrun-

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## HARVARD SQUARED

ner Ran Duan, who has transformed half of his parents' Chinese restaurant. Tasty Sichuan dishes still reign across the dining areas, from dan dan noodles with pork and spinach and tofu-stuffed crepes with mushrooms to a whole fish with chili-miso sauce. Ask the wizard mixologists what dishes pair best with that night's tantalizing potions. (\$7.50-\$22.95)

For umami-packed Asian ramen and brown-rice bowls—and the addictive “Hawaiian-style burger” (a flat patty with crispy, salty onions, spicy mayo, and pineapple relish)—run to Little Big Diner, in Newton. With only 15 seats, and a no-reservations policy, show up to get on the wait list, and then browse in Newtonville Books, across the way, until the restaurant calls you (by phone) to a table. (\$8-\$18)

Watertown's beloved and historic Deluxe Town Diner serves the traditional all-day breakfast—the scrambled-eggs burrito, challah French toast, and sour-cream flapjacks are the best around—along with beef and veggie burgers (with fresh-cut fries) and a carb-rich turkey dinner. But there are plenty of lighter, wholesome items as well, like spinach and mushroom salad, sautéed quinoa and vegetables, and a Middle Eastern sampler platter fit for two. (\$5.25-\$14.95)

Hummus, tabouli, and stuffed grape leaves are served with warm pita bread at the Middle Eastern-style Andala Coffee House, in Cambridge's Central Square. It's relaxed and quiet. It also offers hookahs and sidewalk tables shaded by a trellis of grape vines. We like the “foole plate” (short for *ful mudammas*) of saucy fava beans perked up with lemon juice, garlic, and jalapeños, and the housemade merguez sausages and chicken kebabs. Strong teas and Turkish coffee cap a meal. Or reenergize with the “wake-up call” banana-and-peanut-butter smoothie. (\$5.99-\$19.99)

What stands out among all these prized restaurants is the authentic food, served without pretense. That, and no booming soundtracks, earn our top vote any time. ♡



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# 72 Hours in Harvard Square

A Harvard<sup>2</sup> local business roundup



BY GABRIELLA CO



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ERIC JACOBS PHOTOGRAPHIC



**Clockwise from top right: Out of Town News; a shopper browses the racks at Mint Julep; a bowl of Benedetto's bolognese at the Charles Hotel; assorted toys at Black Ink; Tatte Bakery's pastry counter**

**I**t's Commencement season, which means Cambridge is bustling with families, eager imminent graduates, and visiting alumni heading back to the old—or new, given all the exciting changes in the Square—neighborhood.

Check into the Charles Hotel and enjoy plenty of goodies right outside your door: get a hot-stone massage at Corbu Salon & Spa, sip an al fresco cocktail at Noir, or eat handmade pasta at Benedetto. It's the latest from chef Michael Pagliarini, known for his cult-favorite Italian restaurant, Giulia, in

Porter Square. Speaking of Porter Square: if you'd prefer to channel Paris, visit the Porter Square Hotel. It's home to the brand-new French bistro Colette, serving vegetable tarts and steak frites. For a more intimate stay, check into the Irving House bed and breakfast, where owner Rachael Solom offers morning treats like egg-and-cheese popovers and local jams.

After fortifying yourself, start browsing. Forty Winks has some of the best customer service in the city—pop in for super-soft loungewear, robes, and PJs. At Black Ink,

stock up on goodies you never thought you needed, from brightly patterned *omakase* plates to Cambridge totes to cheeky greeting cards to send back home. If you're looking for something to wear out on the town, slip into Mint Julep, known for fashion-forward finds. Splash out with a patterned jacket from Orla Kiely or a pastel A-line from Gal Meets Glam.

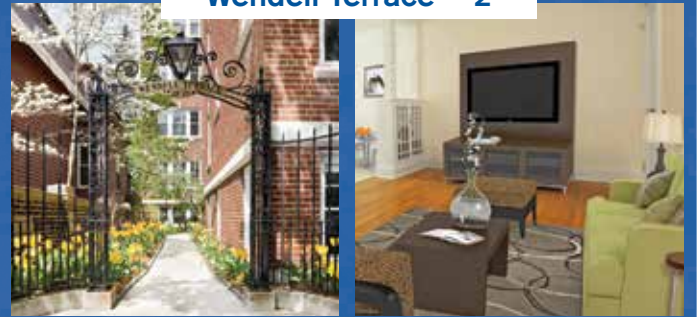


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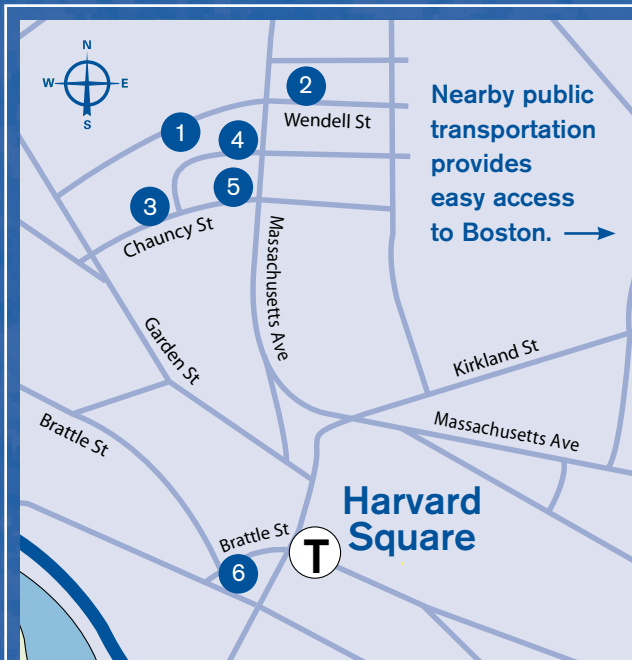
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Got kids in tow? Stop first at the World's Only Curious George Store, an indie shop jammed with toys, stuffed animals, and plenty of classic kiddie lit. Bonus: T-shirts in child and adult sizes depicting beloved storybook characters, including everyone's favorite monkey. And don't forget to duck into the Harvard Shop or the Coop for some on-brand regalia.

For a family-friendly lunch, visit the brand-new Milk Bar and &pizza—if the lines aren't too long, that is. Crowds flock to this New York export for cereal milk ice cream. The adjacent Washington, D.C.-based &pizza is a kid's dream, too. Top your pie with everything from ranch sauce to honey to eggs and bacon, cooked right in front of you, paired with plenty of house-made sodas.

Craving something healthier or quieter? The Maharaja, on the second floor of the Crimson Galeria, serves an extensive lunch buffet with beautiful neighborhood views. Grab a seat next to a floor-to-ceiling window and relax. For Mediterranean bites, pop into Saloniki, inside the newly refurbished Richard A. and Susan F. Smith Campus Center. This fast-casual hideaway is new from Jody Adams, a neighborhood legend thanks to her beloved, sadly now closed, Rialto restaurant. This is a chance to try her food in a more casual setting—don't miss the pita with pomegranate-glazed eggplant.

If you're in need of midday R&R, browse the Harvard Bookstore, grab a cup of coffee from Tatte Bakery and Café and lounge on Cambridge Common (tip: they've got lots of gluten-free baked goods), or visit Pyara, an Aveda salon, for a detoxifying seaweed body wrap or an aromatherapy massage.

If you crave culture, visit two new exhibits at the Harvard Art Museums marking the Bauhaus centennial. "The Bauhaus and Harvard" showcases nearly 200 works by more than 70 artists, drawn almost entirely from the Busch-Reisinger Museum's own extensive Bauhaus collection. The complementary exhibition "Hans Arp's Constellations II" features a newly restored, room-sized wall relief commissioned by Walter Gropius for the Harvard Graduate Center—the work's first public viewing in 15 years.

As the sun sets, try Pammy's, a *Bon Appétit* nominee for Best New Restaurant last year. It feels like a big, raucous dinner party, with long tables, friendly service, and succulent pasta—try the bucatini with shrimp and chili oil. Chef Chris Willis is a local, known for

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## HARVARD SQUARED

his work at Rialto. If you miss it there, you'll feel right at home here.

For a group meal, head to Waypoint or Alden & Harlow. Both specialize in creative small plates from chef Michael Scelfo; Alden & Harlow's savory corn pancake and burger are neighborhood mainstays. Then pop into Longfellow Bar, his remake of the Café Algiers space. It's sad to lose a landmark, but Longfellow's unusual snackable bites—crab Rangoon nachos, buttermilk fried sweetbreads—soften the blow, especially when paired with orange wine.

Finally, close out the night with a show at the American Repertory Theater or with live music at the Sinclair. This spring, the A.R.T. stages the premiere of *We Live in Cairo*, a musical inspired by the young Egyptians who overthrew Hosni Mubarak in 2011 (see page 16I). The Sinclair, meanwhile, hosts artists including KT Tunstall and Eli “Paperboy” Reed. They're also known for kid-friendly noontime events. Bring your littles to a miniature dance party, sound-tracked by hits from the Beatles and the Grateful Dead. It's never too early to prepare them for Cambridge fun.

~ KARA BASKIN

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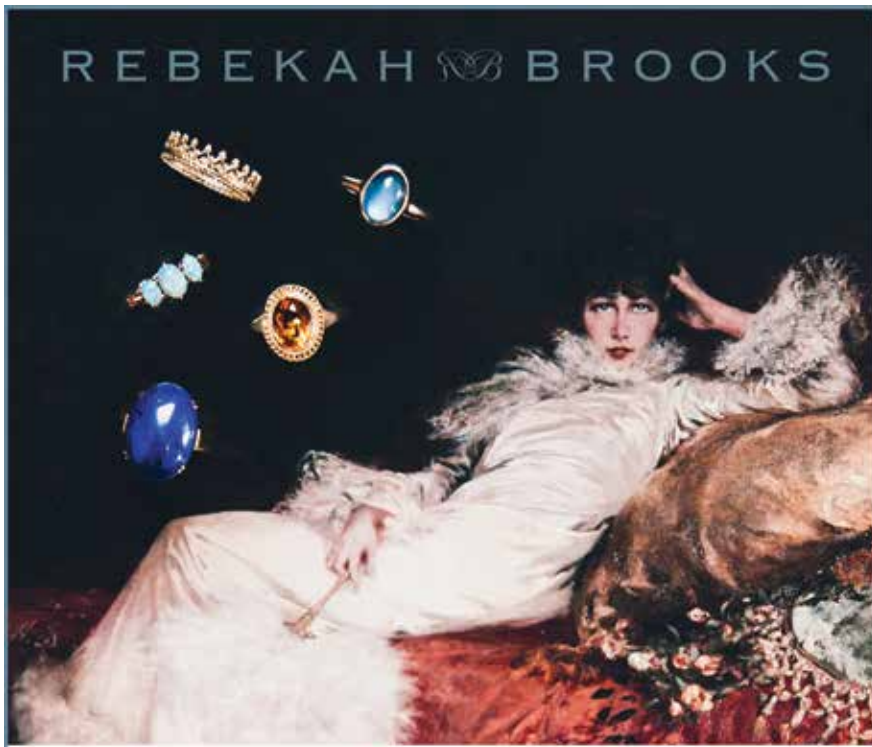
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- 5/4-6/29 The Donkey Show, Oberon
- 5/24-5/26 Boston Calling, Harvard Stadium
- 5/30 368<sup>th</sup> Harvard Commencement
- 5/31 Patios in Bloom Kickoff
- 6/3-8 Jose Mateo Dance for World Community
- 6/7 Yoko Miwa Trio, Regattabar, Charles Hotel
- 6/22 12th Annual Make Music Harvard Square/Fete de la Musique
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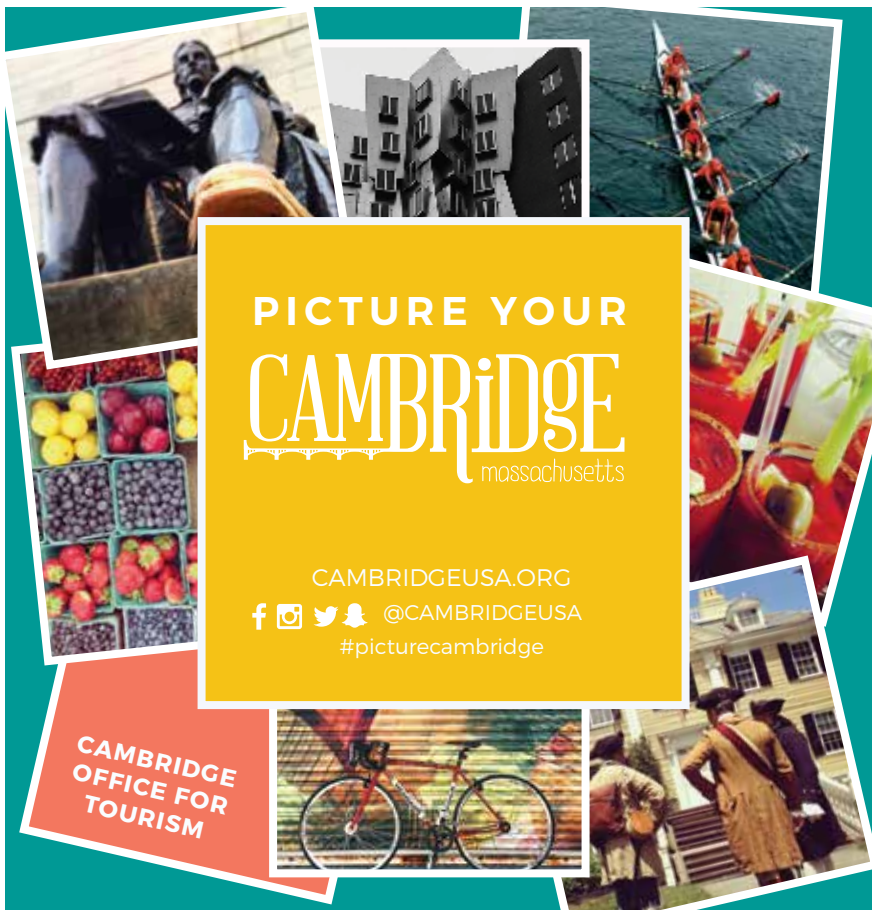
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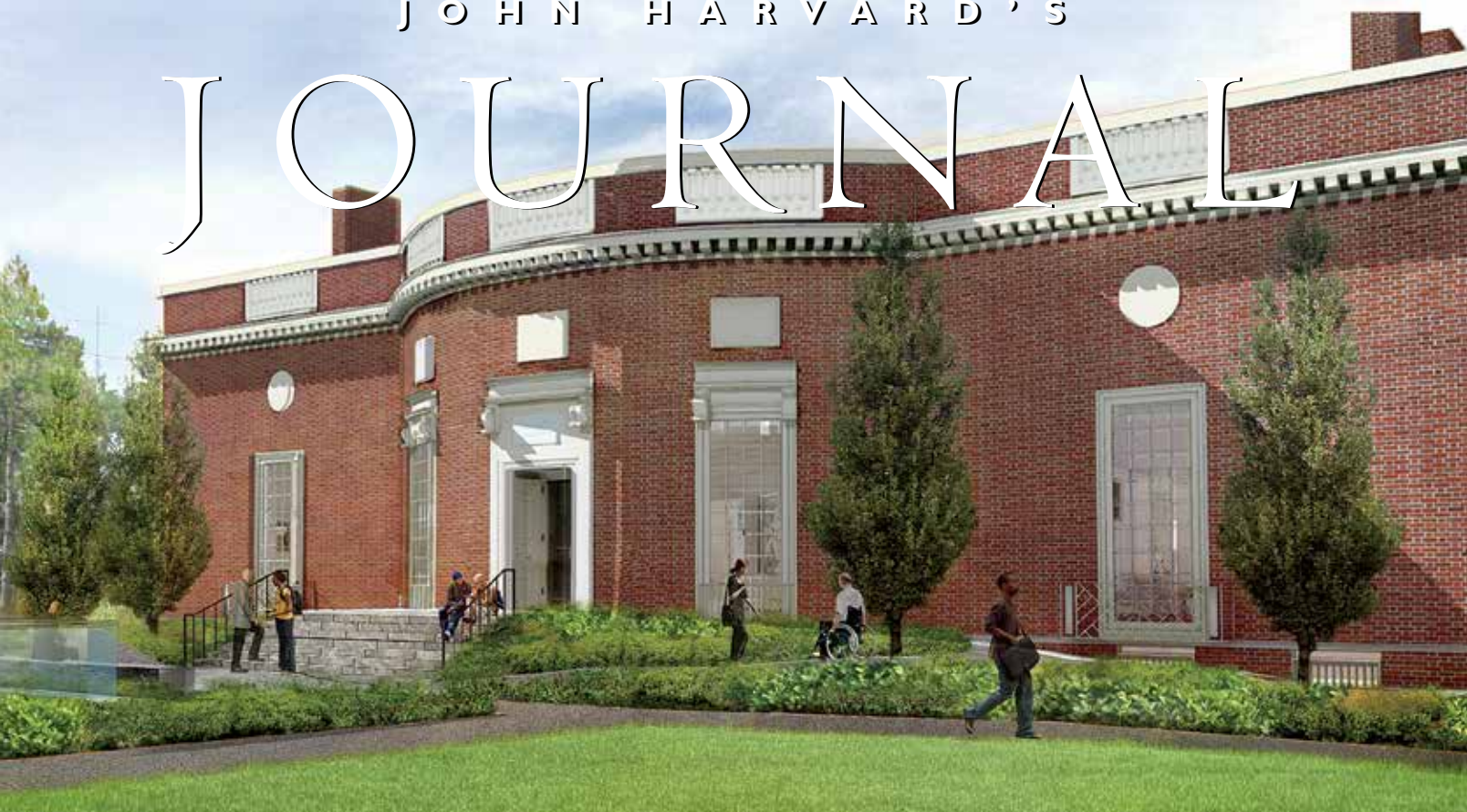
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# JOHN HARVARD'S JOURNAL



## “A Sense of Belonging”

*A renovation to make  
Houghton Library “open to all”*

TWO YEARS after commemorating its seventy-fifth anniversary, Houghton Library will have something else to celebrate before its eightieth: the largest renovation project in its history.

Though a plan to revamp the library—Harvard’s principal repository for rare books and manuscripts (see “An ‘Enchanted Place,’” March-April 2017, page 36, on the anniversary exhibition)—has long been simmering, the project’s timing was spurred by a donation of both books and money from Peter J. Solomon

’60, M.B.A. ’63, chairman and founder of the eponymous investment-banking firm. The proposed construction centers around the idea of accessibility, both literally and figuratively. Solomon and Thomas Hyry, Fearrington librarian of Houghton Library, hope the changes will draw more people into a space that often feels underused.

Solomon said that as students, he and his classmates frequently walked past Houghton to get meals in the former Freshman Union. “We all used Lamont and Widener, but nobody ever went to Houghton.”

When deciding where to donate his collection of children’s literature, manuscripts, and illustrations, he considered Princeton’s Costen Children’s Library, the Morgan Li-

**Houghton Library’s redesigned exterior will feature a fully accessible entrance with ramped walkways.**

brary & Museum, and the Metropolitan Museum of Art—but as a former Harvard Overseer, he always suspected the collection would end up in Houghton. In 2017 he committed to donating it, but with a caveat: that Harvard make some changes to open Houghton up to more people. Solomon said Houghton sits on “prime real estate,” but often doesn’t seem like it.

He was a big fan of the plans the library drew up in response, and when Harvard asked for help in completing the project, he and his wife decided to donate a majority of the funds required for its completion. “And the reason I’m not only giving them my collection but giving them a good deal of money is I didn’t want this to be posthumous,” he said, laughing. “I have no plans to leave this earth, but I don’t do the planning. You know what they say, ‘Plans are worthless; planning is essential.’”

Houghton’s brick façade will not change,

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but the landscape directly in front will undergo a facelift. When researching the building, Ann Beha Architects noticed that the original drawings of Houghton's entry differed from what was actually built. This, Ann Beha said, gave them the feeling that they could re-develop the area. Where there's now a small staircase and podium—typical of Georgian architecture—her firm has designed a fully accessible entrance with softly graded symmetrical walkways that meet at the entry door. The plans also include a small gathering place in front of the library and a central staircase.

"My bet is that everyone will feel that they can use the inclined walkways," Beha said in an interview, "because it's going to be a natural way of coming up to the building."

Today, wheelchair users must enter Houghton through Lamont or Widener, accompanied by a Harvard staff member, via an underground tunnel and a staff elevator. This issue was a key driver of the project. "We want to comply with both ethical and legal components of accessibility," Hyry said. "But more than that, we want to be a library that's open to all. And if you can't navigate a set of stairs, that's a very difficult thing."

Houghton's interior spiral staircase will remain the same, but the building gains a new elevator, its first for non-staff use. Anne-Marie Eze, director of scholarly and public programs, said librarians expected that finding space for a new elevator would be tough. It turned out, happily, that an elevator shaft was part of the original pre-World War II design, making installation surprisingly easy.

The library's lobby, which has remained roughly the same since its inception, will also undergo some changes with the goal of "enlivening" the space. Its eight encircling bookcases will be replaced by exhibitions displaying some of Houghton's holdings, with the objects changing throughout the year. And removing two of the existing bookcases, Hyry said, will let daylight shine through the lobby's two large windows. Currently, most of the light illuminates a locker room on one side, and an office on the other. "Research libraries have a sense of being very dark, and that's dramatic, but at times, with our weather in New England, you want to bring a little light in," Beha said. "Conservation standards have kept us very focused on managing light, but I think we're going to be able, as we study the options, to introduce a little more daylight into the spaces."

Future visitors will also notice a new se-

## HARVARD PORTRAIT



### Jason Luke

**After graduation,** Jason Luke '94 supervised Dorm Crew—the trash-disposing, bathroom-cleaning student employment program he'd worked for in college—as a stopgap before graduate school. Soon he was offered a full-time position in "Special Services." "What that really meant was doing anything anyone else did not want to do," he says. He cleaned carpets, refinished floors, and moved furniture, often overnight—assembling teams from nothing. Graduate school would wait. When former Commencement superintendent Allan Powers asked him to take over another team, Luke said sure, unclear on the expectations. The job: supervising 250 staffers and setting up for more than 1,000 events during Commencement week, Harvard's busiest of the year. No written instructions existed; the responsibilities, to be met alongside his regular duties, were merely explained to him. "I'd be at meetings with people about things that I was supposed to be doing, and I had no idea what they were referring to," he recalls. More than two decades later, Luke, now associate director of campus services, approaches his Commencement role with both excitement and exacting standards. "The students who are there, they're only going to graduate once. People only have one fiftieth reunion, one twenty-fifth reunion, one tenth reunion," he says. For Luke, life is all about relationships. In his office, a class of 1994 photo sits beside a shot of his daughter's basketball team—which he coaches—and souvenirs his staff have brought him from their home countries. Relationships are why he's co-chaired all his class reunions, and how he became one of nine classmates nominated for this year's Commencement chief marshal. "You can have bad days, you can have good days, you can have things that go well, don't go well," he says. But relationships, "that's the one thing that can be a constant in your life." —JACOB SWEET



curity system. Now, a guard sits at a desk in the lobby, responsible for welcoming and orienting guests and ensuring that the collections stay safe—a combination of duties Hyry acknowledges is not ideal. In the new plan, visitors will be greeted by a designated staff member—a new position—and will interact with security only on their way out, through a separate exit door.

“We want you to come into this library and think, ‘I’m somewhere special. This place is beautiful, it’s ornate. Something really important goes on here,’” Hyry said. “We don’t want you to think, ‘Oh, do I belong here?’ We want it to convey a sense of belonging.”

Outside the lobby, perhaps the biggest change will come to the reading room—the only place researchers can spend time with items from the collection. Staff sit toward the front of the room, monitoring it and assisting researchers. But as it stands, it’s a little too one-size-fits-all.

“A very specific point needs to be made,” Hyry says during a tour, whispering so as not to disturb the dozen or so people doing research. “This room is too loud....We want spaces to enable interaction, and we want some places to be *quiet*. Because if you’re



coming from France for a week to study things you can only get here, then you want an optimal study environment.”

The new plan breaks the room into three sections, allowing groups to work together without disturbing those who would prefer to do their research in silence. Staff will continue to monitor and work with guests, but there will be a separate sound-proof entry and help-desk area.

A floor below all this, Houghton’s bathrooms will be expanded and made code-compliant. Its stacks, located in the basement and sub-basement, will have to be re-arranged during the construction (those

**An aerial view shows the redesigned walkways and new landscaping in front of the library, giving Houghton more presence within the Yard.**

under the bathrooms in particular), with all books carefully tracked and moved.

Fortunately, nearly all the collection will be available for use in a temporary home in Widener’s periodicals room. It’s not an unfamiliar place for these holdings: before Houghton was built, Harvard stored them in this same venue, once called the “Treasure Room.”

“There’s something that we take some satisfaction from in this plan,” Hyry said. “It’s something of a homecoming.”

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WHEN Keyes Dewitt Metcalf arrived as director of the Harvard University Library and librarian of the Harvard College Library in September 1937, he quickly realized three things about the University’s collections: they were vast, varied, and not particularly well-preserved. Widener (completed in 1915) lacked air conditioning. This created a sticky situation—sometimes literally—for the rare books housed within. Librarians struggled to keep their collections protected from the dry heat of the winter, humidity of the summer, and increasingly pervasive pollution from the city.

Within months of his appointment, Metcalf put three proposals in front of the Harvard Corporation. The first was for a separate rare-book library, connected to Widener by tunnel. The second was for an adjacent library for undergraduates. The third was for a storage facility to be shared with other libraries. The three plans were quickly approved, and aided by a donation from Arthur A. Houghton Jr. '29—himself a book collector. Houghton and Lamont arrived in short order; the depository didn’t come along until 1986.

The torrid pace of plan approval and

CLOCKWISE FROM TOP LEFT: YI WANG/HARVARD CENTER SHANGHAI; HARVARD MAGAZINE/JC; PETER COONHART

funding was matched by the pace of designing and engineering. Houghton chose William G. Perry, most famous for his meticulous restoration of Colonial Williamsburg, as the chief architect. Construction got under way almost immediately, which proved a major blessing: the library was completed shortly before the attack on Pearl Harbor.

“Houghton Library was built at about the last moment in which it was possible to do such work,” wrote Bainbridge Bunting, Ph.D. ’52, in *Harvard: An Architectural History*. “A few months later shortages of materials occasioned by the war would have made construction impossible; after the war the cost of materials and labor would have precluded such an undertaking for financial reasons alone.” Lamont Library, completed just *after* the war, shows how big an architectural difference a half-decade could make.

To complete the first project so quickly required a major commitment from the former Treasure Room’s small staff. In A

*Houghton Library Chronicle: 1942-1992*, former Houghton librarian William H. Bond called the movement of books from Widener to their new location “a do-it-yourself operation,” in which staff was often charged with moving books at night and on weekends:

This “home industry” aspect of the move into the new library and the preparations for its dedication, necessitated by budgetary limitations on the size of the staff, placed considerable burdens on those involved. At the same time it created a sense of involvement and the *esprit de corps* that have pervaded the Houghton Library during most of its history.

Houghton’s *esprit de corps* remains. When asked how, logistically, the books will be moved, Hyry looked helplessly to the sky. “I’m smiling because I think it’s very likely that almost every member of the staff is going to have to move something at some point,” he said with a laugh. “And when I speak about

it publicly, for good reason, I talk about how exciting it is, because it’s kind of literally a once-in-a-lifetime opportunity to do something great in this building....But it’s not a small project and it’s incredibly disruptive to our staff, and they’re being heroic about it.”

“It’s definitely all hands on deck,” Eze added.

In an ideal world, the library wouldn’t have to close at all, but the scope of the renovation all but necessitates shutting the building for a year, beginning in September 2019. For Hyry and Solomon, though, the wait will be worth it. Houghton is already planning for many more visitors after the renovation is complete, and Solomon said he’s received emails from alumni expressing enthusiasm about the project and the future of the library.

“I think it’s just heightening the interest in and teaching and use of books,” Solomon said. “And it will please my wife because now my collection is going someplace, and she can get rid of the clutter.” ~JACOB SWEET

## Debating Diversity

THE Students for Fair Admissions (SFFA) lawsuit alleging Harvard College bias against Asian-American applicants is now in the hands of federal judge Allison D. Burroughs in Boston; final arguments were heard on February 13. In the meantime, SFFA’s suit against the University of North Carolina, challenging its use of race as a factor in admissions and alleging discrimination against white applicants, is also proceeding (UNC makes its case at [admissionslawsuit.unc.edu](https://admissionslawsuit.unc.edu)). Amid these current challenges to affirmative action in admissions—continuing litigation that now extends back more than four decades—Princeton University Press has released a twentieth-anniversary edition of the landmark *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions*. It stands as a comprehensive assessment of the data by the two preeminent research-university presidents emeriti perhaps most associated with the policy then: Princeton’s William G. Bowen and Harvard’s Derek C. Bok. Separately, President Lawrence S. Bacow, who has been immersed in these issues himself, advanced a new formulation of the issue



**Allan Bakke’s admissions suit began four decades-plus of protests and litigation.**

aimed at casting it in a different, more productive light.

• *The closing arguments.* In their pre-Valentine’s Day reprise of their arguments before Burroughs, counsel for SFFA and for Harvard presented anew their statistical arguments—the core facts—in the case (see “Admissions on Trial,” January-February, page 15, for a review of the trial). Burroughs highlighted an issue in each side’s presentation that might

weigh on her deliberations.

In SFFA’s case, that is the “no-victim problem”: relying entirely on the statistical data, without presenting testimony from an Asian-American applicant who was rejected by Harvard and claimed harm from its admissions policies. In all prior cases on this subject (*Bakke*, *Grutter*, *Fisher*), there has been an individual plaintiff suing to right a perceived, deliberate harm.

In Harvard’s, it is the “personal-rating problem”: that SFFA shows a pattern of lower personal ratings assigned to Asian-American applicants than to whites, blacks, or Hispanics with seemingly similar aca-



BETTMANN/GETTY IMAGES ©



demographic qualifications. The University has maintained that SFFA's finding is a statistical artifice, erroneously derived from its misinterpretation of the applicant pool. Also in question is whether such a skew in assessments of personal qualities reflects unconscious bias or deliberate intent—and if the former, its legal and practical weight.

Burroughs, who heard the case directly, will now craft her opinion and issue her ruling—a process expected to take several months.

• *The bigger picture.* The SFFA case turns in part on the judge's interpretation of the data and assessment of how Harvard implements its admissions policies. It also involves fine

points of constitutional law and the antidiscrimination language of the Civil Rights Act of 1964 (which applies to institutions, like the University, which receive federal funding). Her ruling, and subsequent appeals, may thus appear highly technical, turning on what rules for the use of race in admissions are permissible (SFFA hopes there are

## Coming to Terms with Sexual Harassment

**Following** the January news that Winthrop House faculty dean Ronald S. Sullivan Jr. would represent movie producer Harvey Weinstein against multiple charges of sexual assault, student residents, and other undergraduates, called for him to step down from House leadership—perhaps because the University's data show a significant number of internal cases of sexual harassment or assault, many emanating from the College (see [harvardmag.com/title9&odr-report-18](http://harvardmag.com/title9&odr-report-18)). Sullivan, clinical professor of law and Johnston lecturer on law (he directs the Harvard Criminal Justice Institute and the Harvard Trial Advocacy Workshop) and a practicing trial attorney with a penchant for hard cases, made the argument that everyone is entitled to counsel—an argument strongly endorsed subsequently by many of his Law School colleagues in a letter to *The Boston Globe*. (A separate House officer is designated as students' contact person for discussing sexual-assault issues.)

Cutting much closer to home, Sullivan was subsequently quoted by Stuart Taylor Jr., J.D. '77, in a long report for RealClearInvestigations, as sharply critical of Harvard's conduct and processes in its widely reported investigation of Lee professor of economics and professor of education Roland G. Fryer Jr. for allegedly sexually harassing his research staff.

Faculty of Arts and Sciences dean Claudine Gay told *The Harvard Crimson* that Sullivan's response to students, centering on the argument about legal representation, did not fully address continuing concerns about the faculty dean's role, academically and pastorally, within the House. Harvard College dean Rakesh Khurana, who defended Sullivan's academic freedom to pursue his work, in late February asked former dean of freshmen Tom Dingman to conduct a confidential review of the "climate" in Winthrop. Khurana cited concerns by residents about the "support that students can expect to receive," given Sullivan's legal work. (Data-gathering for the House survey concluded March 15, as the College headed into spring break.)

The intramural tensions escalated considerably from there, as the *Crimson* reported that Sullivan had emailed House residents criticizing the paper's coverage of his legal work for Weinstein; he also granted an interview to *The New Yorker* in which he acknowledged that "some students are concerned that people will be less inclined to speak about sexual assault in the House"; noted his own past representation of women who were victims of sexual assault; and said, in response to a question about whether criticisms of him had been "racially motivated," that they were—and specifically "this climate survey. It's absolutely never happened before, and I

do not believe that it would happen again to any non-minority dean." He observed, "This is all some vicarious association with a client whom several in our community don't like. If that becomes the new standard...then we're going to see continued threat" to academic freedom and robust exchanges of ideas.

Obviously, that wraps many issues into a charged environment for coming to terms with local allegations of sexual harassment or assault. Harvard's professional-school faculty members routinely pursue outside engagements, to keep current on developments within their fields. Little discussed in this instance is whether the demands of Sullivan's involvement in complex criminal trials might raise questions about his (or any similar faculty dean's) time commitment to a House's resident undergraduates—perhaps an issue for another, calmer day. Further muddying this situation is Sullivan's possible engagement with a faculty member (Fryer) being investigated through campus protocols, pitting various members of the community in difficult, cross-cutting positions toward one another.

Results of the climate survey and further developments were pending as this issue went to press in early April.

This uproar quickly superseded news of the government department's "Climate Survey Report," released February 6, following the retirement last year of longtime professor Jorge Domínguez in the wake of allegations of persistent sexual harassment (see [harvardmag.com/dominguez-18](http://harvardmag.com/dominguez-18))—which remain under investigation. The survey of faculty members, graduate students, undergraduate concentrators, and staff members found 35 percent of female graduate students dissatisfied with the department—more than twice the rate among male peers. Some 12 percent of respondents reported harassment or discrimination, with women and graduate students more likely to report harassment. One-quarter of respondents (and 34 percent of graduate students, and 47 percent of women) disagreed, or strongly disagreed, that their mentors, teachers, and advisers are "sufficiently sensitive to diversity and inclusion."

In disseminating the report (<https://gov.harvard.edu/government-department-climate-survey>), chair Jennifer Hochschild, Jayne professor of government and professor of African and African American studies, wrote, "We are dismayed" by the reports of "harassment, discrimination, or other impediments to success," and expressed her hope that the survey and other work undertaken by the department's Climate Change Committee "will facilitate improvement in what is inevitably a work in progress."

—JOHN S. ROSENBERG

none), and their application in practice.

From the public perspective, the issues may appear in much starker terms. Hence the timeliness of reissuing *The Shape of the River*. When Bowen and Bok collaborated, they acknowledged that both brought to their research on “race-sensitive admissions...a history of having worked hard, over more than three decades, to enroll and educate more diverse student bodies” at their institutions and were, accordingly, “strongly identified with what we regard as responsible efforts to improve educational opportunities for well-qualified minority students.” They wrote as it became likely that the U.S. Supreme Court would hear further challenges to the admissions processes it upheld in the 1978 *Bakke* decision. And indeed, *Grutter* (2003) and *Fisher* (2013, 2016) ensued, to be followed by SFFA’s current challenges to the use of race as a factor in holistic admissions processes.

In his review for *Harvard Magazine*’s centennial edition (“Affirmative Admissions,” November–December 1998, page 27), Daniel Steiner, who had served as vice president and general counsel in the Bok administration, found that *The Shape of the River* made two basic claims for “supporting race consciousness” in selective institutions’ review of applicants:

First, such a policy helps prepare qualified minority students for the many opportunities they will have to contribute to a society that is still trying to solve its racial problems within a population that will soon be one-third black and Hispanic. Second, the policy provides a racially diverse environment that can help prepare *all* students to live and work in our increasingly multiracial society.

Steiner cited two shortcomings in the book. He wished for more human texture, from interviews for example, to augment the data. And he called for further evidence—along the lines of President Neil L. Rudenstine’s argument, in “Diversity and Learning,” his *President’s Report, 1993–1995*—that student diversity “contribute[s] powerfully to the process of learning.” Steiner nonetheless concluded that Bowen and Bok provided considerable support for their claims that “the policy is achieving these objectives.”

In his afterword to the new edition, Bok finds the book vindicated. He recalls a 1998 finding that still resonates: “From almost every point of view...minority students had



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been helped, not harmed, by their admission to selective colleges,” rebutting a canard that deploying a “plus factor” would subject minorities to withering competition from better prepared, more able classmates. And research since then has showed, with a nod to Rudenstine’s theme, that “The interaction of white and minority undergraduates turns out to do much more than create greater understanding and reduce racial bias. A diverse student body also appears to

ect two pertinent books (*The Promised Land: The Great Black Migration and How It Changed America*, and *The Big Test: The Secret History of the American Meritocracy*), and experience as a dean (see “The Press Professor,” September–October 2005, page 78).

He places *The Shape of the River* in the context of its times, in the mid to late 1990s, when further legal and political challenges were pending. That had to be profoundly troubling to Bowen, Bok, and many of their

**Although diversity in admissions is a core value within university communities, it is “never a winner in electoral politics.”**

help undergraduates make progress toward a remarkably broad array of other educational goals,” such as critical thinking, civic engagement, and empathy. Such attributes extend far beyond the benefits the Supreme Court knew about when it sanctioned race-sensitive admissions in *Bakke*.

Given the nation’s prevalent residential segregation by race today, Bok notes, “many students attending selective colleges will be experiencing their first opportunities to live in a racially diverse environment.” That reality underscores efforts at assembling undergraduate cohorts that “are richly diverse, not only racially but in other respects as well,” and then working to be sure those students interact and thrive in inclusive campus communities.

The 2019 edition begins with a productive and thought-provoking foreword by Nicholas Lemann ’76, who brings to the proj-

peers because, as he puts it, “If you work in a university, you’ll know that the value of diversity in admissions—meaning, foremost, racial diversity—is a core value of the community,” even as affirmative action is “never a winner in electoral politics.”

(This point is not even close. A Pew Research Center report released in late February found that 73 percent of Americans opposed considering race or ethnicity in admissions—and although the share of respondents varied, strong majorities of white, black, Hispanic, and Asian respondents, and of Republicans and Democrats, agreed with this position. Majorities favored relying on high-school grades and standardized test scores as the major criteria for admissions; majorities opposed considering athletic ability, first-generation or legacy status, or gender in making admissions decisions.)

Universities found their path narrow and



## Yesterday's News

From the pages of the *Harvard Alumni Bulletin* and *Harvard Magazine*

**1929** The Law School's Institute of Criminal Law opens, to study practical ways—including consultations with psychiatrists, social workers, and doctors—to deal with criminals, as “mere punishment...does not yield adequate results.”

**1954** Half a year after defending Harvard against Senator Joseph McCarthy, President Nathan Pusey draws more than 500 people to the National Press Club's luncheon in his honor; his speech on “Freedom, Loyalty, and the American University” and his willingness to answer all questions earn a “remarkable ovation.”

**1969** Eighteen students have signed up to concentrate in the newly created field of Afro-American studies.

A representative of Students for a Democratic Society receives last-minute permission to speak at the Morning Exercises [see page 4], and attacks Harvard, calling the Commencement ceremony “an obscenity” and “an atrocity.” Subsequently, he,

about 30 seniors, and some hundred others walk out to hold a brief counter-Commencement and listen to an address by philosophy professor Hilary Putnam.

**1974** About 125 Radcliffe seniors organize a demonstration during Commencement week, wearing armbands, placards on their backs sporting equal signs, and bright yellow ribbons atop their caps. Their four demands are: equal admissions; equal job opportunities; equal facilities and finances for athletics; equal distribution of fellowship funds.

**1979** The success of National Lampoon's *Animal House* prompts Universal Pictures to offer \$500 to sponsor a toga party in South [Cabot] House. Dean of students Archie Epps vetoes the proposal.

**1989** South African archbishop Desmond Tutu, LL.D. '79, running as a petition candidate for Harvard-Radcliffe Alumni Against Apartheid, gains a seat on Harvard's Board of Overseers.

tricky, Lemann writes, as they navigated the law laid down by *Bakke*; their desire to increase enrollment of underrepresented black students; and the dictates of the academic, meritocratic admissions hurdles represented by the universal adoption of SATs and similar metrics (see *The Big Test*).

Integrating elite schools, and the leadership cohort whom they educate, “has been a success,” he finds. “It would be a mistake, though, to assume that affirmative action is now safe.” Lemann notes the current litigation, recent Department of Justice actions opposing affirmative action in admissions, and the populist politics of the present moment. More enduringly, “Applicants and their families see an admissions slot as a golden ticket that universities should be duty-bound to offer to those who deserve it most. Universities see admissions as an exercise in institutional curation, requiring the subtle balancing of subjective cultural, political, and economic factors.” Even if they end up enrolling at *another* elite school, for students rejected from their first choice, he continues, “that doesn't mean it's possible to achieve comity between applicants and admissions offices. It isn't. Many people are going to wind up feeling wronged.”

That is a formula for continued disputes over admissions—particularly given that “the value of racial diversity is assumed” on elite campuses, where the principal question is how to achieve *more* and more effective (inclusive) diversity. From other perspectives—in litigation, initiative campaigns—“another set of questions emerges. Why should it be permissible to consider race in the operation of institutions, even as a positive factor? Why should a black applicant from an economically privileged background get a place that might have gone to a poor white applicant?”

Such questions, Lemann warns, “will surely reappear.” Given the persistent effects of centuries of racial discrimination in the United States, and selective universities' commitment to lessening those effects on their campuses and in the wider society, “no one should make the mistake of believing that the battles over affirmative action have ended.” That is true no matter what Judge Burroughs rules, or the ultimate disposition of SFFA's Harvard and UNC cases: if current admissions practices are prohibited, universities will assuredly pursue alternatives, even as they maintain that such workarounds are inferior and socially counterproductive.



Illustration by Mark Steele

• *Reframing the question.* President Bacow has left no doubt about his commitment to Harvard's use of race as a plus factor in holistic admissions reviews: he attended the closing arguments on February 13, lending his personal and presidential support to the University's case.

As Lemann has noted, opponents of affirmative action, and disappointed applicants, like to cite students' quantitative, seemingly meritocratic qualifications: grades, test scores. If universities are academic enterprises, shouldn't objective, academic criteria govern admissions? Take the students with the highest GPAs and SATs and declare victory.

Universities, of course, point out that they are broad intellectual communities. They seek to enroll not report cards, but undergraduates who might study diverse fields ranging from literature or foreign languages to microeconomics or bioengineering—and whose activities encompass athletics, artistic performance, public service, and more. As Bacow has pointed out, it would be a dull place if everyone at the College concentrated in one thing. (In

fact, if that one thing were, say, computer science, a liberal-arts institution would become a sort of trade school.) More technically, admissions officers sometimes point out that scores on standardized tests have very limited predictive value about a high-school student's ultimate performance in college.

During the winter, he advanced another formulation, perhaps with practical appeal for the broader society. This February, for example, at an American Enterprise Institute-Brookings Institution higher-education forum, he asked audience members how many had ever hired anyone. Hands flew up. And then he asked how many had done so *solely* on the basis of metrics like past grades and test scores, *without* checking an applicant's references or work product.

For a society deeply divided about the propriety of vetting applicants along a spectrum of diverse criteria, it was a vivid illustration of the daily use, and clear worth, of holistic evaluations. Might it even point toward a way out of conflicts over high-stakes university admissions that have, for

half a century, supported a good chunk of the country's legal talent?

Perhaps—but other issues might well arise: in February, New America, a think tank, responding to several Democratic senators' request for ideas on how to narrow gaps in access to higher education, suggested, among other ideas, "ending federal financial aid for schools that use legacy admissions," one of Harvard's practices publicized during the course of the SFFA trial. Without noting that such schools are among those that offer need-blind admissions, New America defined its target as "those highly-resourced and highly-selective institutions that engage in legacy admissions and other preferential admissions treatments that overwhelming favor wealthy and white families, including early decision programs."

The tickets remain golden, more so than ever (see application data for the class of 2023 on page 30)—and so the selective colleges should fully expect their policies for distributing them to remain hotly contested.

—JOHN S. ROSENBERG

## New Faculty Faces

HARVARD'S faculty ranks have, gradually, become increasingly diverse. The intersection of lifetime tenured appointments; no mandatory retirement age; a decade of very constrained growth; and the long time it takes students to progress from studying a discipline through completing doctoral work and proceeding into academia necessarily combine to make the pace of change evolutionary, not revolutionary. But comparing the census totals

from late in the presidencies of Lawrence H. Summers (which ended in 2006) and Drew Gilpin Faust (2018) provides clarity. In the fall of 2006, the Faculty of Arts and Sciences (FAS, the largest Harvard faculty) had 702 tenured and tenure-track members, of whom 172 were women and 116 minorities; in the fall of 2017, of 738 members, 222 were women (an increase from 24.5 percent to 30.0 percent) and 162 minorities (from 16.5 percent to 22.0 percent).

The data come from the annual report of the office of faculty development and diversity; its director, senior vice provost Judith D. Singer, points to an accelerating pace of

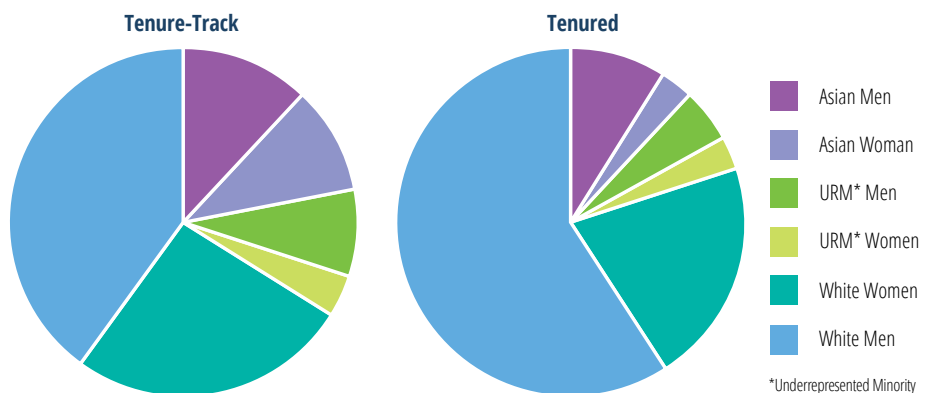
change. Across the University, from calendar year 2006 through last year (when there were about 1,100 tenured professors), 582 offers of tenure were accepted—half by women and/or minorities, and 39 percent by women and/or members of underrepresented minorities. Of the 170 tenured appointments made during the latest four calendar years (2015 through 2018), 57 percent were women and/or minorities, and 45 percent women and/or underrepresented minorities.

Singer points to varying indicators to explain the change in the faculties' composition. During those four latest years, 61 percent of the tenured appointments were

*internal* promotions. Harvard's schools have, during the past decade plus, adopted a tenure-track system: bringing a cohort of junior faculty members to campus to be mentored, offered opportunities to develop, and then be considered for promotion. That system favors recruiting young scholars, who tend to be more diverse, reflecting today's more diverse university enrollments. (Past Harvard practice expected junior faculty members to leave after several years, and made tenured appointments only at the senior, full professor level—a less diverse cohort, given prior decades' academic population.)

Of course who is recruited matters, at any

Faculty Demographics in 2019





level of appointment. Among the underrepresented minorities (Hispanic, black, and Native American) who accepted tenured appointments from 2006 through 2018, more than half were from outside the University, Singer says, indicating that the searches succeeded in identifying a diverse pool of candidates.

It has taken real, sustained effort to achieve these results, she says, given the strongly competitive market for faculty among a few dozen leading research universities for the best candidates in any given discipline.

Harvard's tenured faculty ranks have grown at a compound annual rate of slightly more than 1 percent since the middle of the previous decade (Singer calls it a "period of incredible stasis"), reflecting tepid endowment returns and the pressure on budgets imposed since the 2007-2008 financial crisis and recession. The most robust growth has been concentrated in engineering and applied sciences (which became a school in

the fall of 2007, and has ridden the flood tide of interest in computer sciences and allied fields)—disciplines historically lacking in women and underrepresented minorities.

## Deans, department chairs, and search committees came to ensure that candidate pools reflect the breadth of possible applicants.

As a result, much of the aggregate diversification of the University's faculties has been effected by filling vacancies arising from retirements and departures for other institutions. Increasingly, of course, those positions are filled by promotions from within.

Much of the change dates to the end of the Summers administration, when the president's controversial remarks on women in the quantitative disciplines resulted in his appointment of task forces on women faculty and women in science and engineer-

ing, both overseen by Faust, then Radcliffe Institute dean. Their reports, in May 2005 (see "Engineering Equity," July-August 2005, page 55), "made faculty diversity a priority

at the University," Singer says—and resulted in the creation of the office she now runs. Faust's appointment as Harvard's first female president, in 2007, embodied the issue in the institution's leadership.

In ensuing years, the adoption of a tenure track (partly a response to peer practices putting Harvard at a disadvantage in recruiting younger scholars) pushed search committees toward new kinds of candidate pools. The culture changed, too, Singer stresses. Senior faculty members took to

## University People

### General Counsel Transitions

Senior vice president and general counsel Robert W. Iuliano '83 has been appointed president of Gettysburg College, effective July 1. He joined Harvard's legal staff in 1994.



**Robert W. Iuliano**

As general counsel and adviser to the president, he has been involved in issues such as the return of ROTC to campus and the University's response to challenges to its affirmative-action and diversity policies, including the current litigation alleging discrimination against Asian-American applicants to the College (see page 21).

Diane E. Lopez—a Harvard attorney since 1994 and deputy general counsel since 2011—has been appointed vice president and general counsel, effective June 1. Announcing her appointment, President Lawrence S. Bacow said, "Diane is an outstanding lawyer and colleague, admired across Harvard for her excellent judgment, her exemplary professionalism, her collaborative style, and her strong academic values."



**Diane Lopez**

### Librarian in Chief

Martha Whitehead—librarian of Queen's University, Ontario, since 2011, and vice provost there since 2014—has been appointed University librarian, vice president for the Harvard Library, and Larsen librarian for the Faculty of Arts and Sciences, effective in June. She succeeds Sarah Thomas, who retired at the end of 2018. Read more at [harvardmag.com/whitehead-18](http://harvardmag.com/whitehead-18).



**Martha Whitehead**

### Land Lords

The Allston Land Company, unveiled last November to focus on developing the University's commercial "enterprise research campus" (see [harvardmag.com/allston-landco-18](http://harvardmag.com/allston-landco-18)), has unveiled its board members, joining the previously announced chair, HBS dean Nitin Nohria, and CEO, Thomas P. Glynn, former leader of the Massachusetts Port Authority. They are Katie Lapp, executive vice president, who has long overseen Allston planning, and two Corporation members with business and development backgrounds: Karen Gordon Mills, a former venture capital-

ist and administrator of the U.S. Small Business Administration; and Penny S. Pritzker, former U.S. Secretary of Commerce, whose family enterprises have included Hyatt Hotels and diverse real-estate interests.

### Endowment Board Member

William M. Lewis Jr. '78, M.B.A. '82, has been elected to the Harvard Management Company board of directors. Co-chair of investment banking at Lazard Ltd., he was previously at Morgan Stanley, where he was the firm's first African-American managing director.

### Honorands

Dillon research professor of the civilization of France and of comparative literature Susan R. Suleiman has been awarded the *Légion d'honneur*; the ceremony took place in February at the French consul general's residence on Brattle Street, in Cambridge.... Michael S. Dosmann, keeper of the living collections at the Arnold Arboretum, has been awarded the National Tropical Botanical Garden's David Fairchild Medal for Plant Exploration; his work in the field, during a recent collecting expedition in central China, was featured in "Botanizing in the 'Mother of Gardens'" (January-February 2018, page 32).

retirement incentives (offered during the financial crisis, and then standardized) and also paid more attention to intellectual renewal of their fields. Deans, department chairs, and search committees internalized the value of ensuring that candidate pools reflect the breadth of possible applicants. And as critical masses of formerly underrepresented professors arose, other candidates became more comfortable with the idea that Harvard could be a good place for them, too. “It’s a long process,” Singer allows.

Tangible interventions have helped. Summers committed \$50 million of central funds to further diversity, and Faust added \$10 million when the inclusion task force she appointed reported last year (see [harvardmag.com/diversity-report-18](http://harvardmag.com/diversity-report-18)). Faculties and deans decide what appointments to make and how to pay for them—but Singer says that these supplemental funds have been invaluable in dozens of cases in closing deals that attract or retain scholars whose work requires expensive investments for space (refitting buildings, equipping laboratories), or for research support, summer salaries, or transitional housing. It’s a “hot market,” she sums up, with competing institutions in “a bit of an arms race.”

Harvard has also invested tens of millions of dollars in renovating and augmenting its childcare facilities, and, beginning in 2009, offering childcare scholarships (the latter totaling more than \$10 million in the decade since). For the past two years, Singer reports, all eligible faculty members who applied for an open slot in a campus facility were offered at least one. And although Harvard does not create jobs for spouses or partners as part of recruiting, it provides meaningful assistance in such situations; Singer says she and her team regularly work with faculty partners and spouses, engaging peers at other area institutions to look for leads, pass on CVs, and broker important introductions.

The diversity processes are still not frictionless. At the February FAS faculty meeting, Robinson professor of mathematics Wilfried Schmid asked dean Claudine Gay why that department’s current search, for two prospective appointments, announced by advertising soliciting applicants broadly, had been conducted by a search committee, rather than by the department as a whole—and why administrators had monitored the process ex officio, through the dean of science’s office. (Mathematics talent has been understood to develop rapidly, on a different trajectory

than in other disciplines; the department has typically operated without a tenure track, and has therefore made its appointments idiosyncratically compared to the new norm. It has, in its history, appointed just two women to tenured professorships, of whom one remains at Harvard.) Gay responded levelly that this was the first departmental search conducted in full accord with FAS policies; that there could naturally be “confusion” and “growing pains” associated with following such procedures; and that the participants might have to “struggle” to come to terms with them.

Gay is herself a representative of a new generation of academic leaders, whose presence broadens the understanding of what a Harvard scholar can be: she is one of four African-American women deans. Their presence, Singer notes, embodies the value the University’s places on searching for talent everywhere—and ensuring that that value is made manifest in appointing the next generation of professors.

Looking ahead, she sees a new kind of challenge emerging, for *all* Harvard faculty members, driven by “the dramatic shift” in student interest toward computer science, applied math, statistics, and related fields, “in numbers we can barely cope with” currently as far as staffing classrooms with suitable faculty. Harvard and a few dozen other major universities, she continues, create the faculties of the future, but many undergraduates in these fields are attracted to richly compensated positions in business and finance. “Are people drawn to taking that skill set and going into markets,” she asks, “or are they drawn to the life of a faculty member”—with rewards including the degree of autonomy involved, the pleasure associated with the life of the mind, and the renewing chance to work with young learners. In a word, Singer says, professors have an opportunity and obligation to convey, alongside their knowledge, the reality that their work can be so fulfilling, and sufficiently supported, that it is “fun, 24/7.”—J.S.R.



A toehold for the arts in Allston

## News Briefs

### Putting the A(RT) in Allston

ON FEBRUARY 25, the University announced that the \$12.5-million ArtLab, an interdisciplinary art-making and performance space, was preparing to open, and that curator and arts professional Bree Edwards, formerly director of Northeastern University’s Center for the Arts, had been appointed inaugural director of the 9,000-square-foot facility. A temporary structure that can be relocated from North Harvard Street and repurposed after a decade or so, it represents an initial academic arts commitment in Allston—complementing the community programs operated by the Harvard Ed Portal nearby, on Western Avenue. As such, it is a tangible sign of Allston ambitions broader than those associated with the billion-dollar engineer-

ing and applied sciences complex now under construction on Western Avenue and expected to open for the 2020-2021 academic year. (A fuller report on the ArtLab appears at [harvardmag.com/artlab-preview-19](http://harvardmag.com/artlab-preview-19)).

Much more news in this vein issued three days later, when Harvard disclosed that the affiliated American Repertory Theater (ART), based at the Loeb Drama Center on Brattle Street, in Cambridge, since 1980, would relocate to a new Allston theater/performing-arts venue, catalyzed by a \$100-million gift from David E. Goel ’93 and Stacey L. Goel.

Although the University announced that the ART would continue to present performances at the Loeb “for several years while plans develop”—including further fundraising, project design, and regulatory approval—the Goels’ philanthropy enabled President Lawrence S. Bacow to announce “one



of our most exciting projects to advance the arts at Harvard.” He noted that “the new space we envision will be a magnet for artists and audiences, as well as students, faculty, and staff....We are so grateful to the Goels for their commitment to nurturing and connecting knowledge through one of humanity’s most enduring mediums.”

David Goel, co-founder and managing general partner of Matrix Capital Management Company LP, a hedge fund, described a “versatile theater space that can be reshaped as appropriate to express and share the abundant ideas originated by the College, the American Repertory Theater, and Harvard’s community already at home in Allston—and connect them through music, dance, theater, debate, lectures, conferences, and dialogue in any format.” Part of

ulty and student housing appears likely elsewhere on Harvard’s Allston holdings. But given the convenient site and ability to construct multistory facilities there, a multiuse complex incorporating the new ART theater probably should not be ruled out.

Read a complete report at [harvardmag.com/art-allston-19](http://harvardmag.com/art-allston-19). ~J.S.R.

## A College Path to Dual Degrees

WHEN THE FACULTY OF ARTS AND SCIENCES (FAS) voted in February 2018 to eliminate undergraduate advanced standing on the basis of Advanced Placement and similar tests (see News Briefs, March–April 2018, page 22) for the classes enrolling in the fall of

2020 and thereafter, it struck blows for educational equity and quality. Students from lower-income communities and under-resourced high schools often lack access to AP classes, effectively putting advanced standing at Harvard out of reach, and faculty members have also become aware that AP courses differ in intent and rigor from introductory College offerings—so they determined not to grant Harvard

credit for such work. A student enrolled in the College, the reasoning went, ought to get the full benefit of a Harvard liberal-arts education.

But that decision appeared to foreclose an option that appeals to some of Harvard’s best applicants and students: making use of advanced standing to bypass some requirements and redeploy that time to enroll in graduate-level courses and complete a master’s degree alongside the A.B. Professors from physics and computer science have cited that option as particularly attractive to some of the most promising potential matriculants in their own and related fields—where a faster track to advanced academic work, or an associated career, is a powerful lure. Several sciences-related programs per-

mit undergraduates to apply for the concurrent A.M./S.M. option (ranging from applied math to physics and statistics), as do five fields in the humanities (from comparative literature through German and linguistics) and one in social science (history of science).

At its February 5 meeting, FAS heard a follow-up committee report proposing a mechanism for concurrent degrees, absent advanced standing. It would enable students “capable of very advanced work” to apply to earn a master’s as they completed their full bachelor’s degree curriculum, within the four years in residence. Committee chair Karen Thornber, professor of comparative literature and of East Asian languages and civilizations, outlined a mechanism whereby qualifying students would be permitted to double-count *three* of the eight four-credit classes required for the master’s degree. Thus, to earn both, a student would pursue the typical College curriculum of four four-credit courses per term (for eight semesters), while also completing a fifth, graduate, course in five of those semesters—presumably beginning in the second semester of sophomore year, after committing to a concentration.

Critics said that five semesters of five courses would encourage, or even require, students to game the system, managing their academic load by seeking out easier undergraduate offerings, or denying themselves valuable research or laboratory experiences. Others suggested that the proposed course-counting ignored the fact that graduate-level offerings are, by design, more demanding, so students *should* be allowed to take their master’s degree requirements and double-count them all for undergraduate credit.

When the motion came back to the faculty on March 5 for a decision, Thornber advanced an amendment—Solomonic or pragmatic—reflecting some of the prior debate: it creates a procedure for concurrent bachelor’s and master’s degrees in which *four* of the rigorous courses required for the latter degree could be double-counted for bachelor’s credit—meaning dual-degree candidates would have to shoulder five courses during just four semesters. She also presented data showing that nearly half of undergraduates during the past five academic years have taken more than the required number of courses. The faculty was satisfied, and in its collective wisdom enacted the new program for ambitious students who wish to apply to earn concurrent Harvard degrees. ~J.S.R.



**The buildings and parking lot at 175 North Harvard Street, between the Stadium and the Continuum apartment/retail development, could house a theater and multiuse complex.**

the gift will also support updating the Loeb (built in 1960) and helping accommodate the Faculty of Arts and Sciences’ need for enhanced performance spaces.

Perhaps the likeliest site for the new theater is 175 North Harvard Street, across from the ArtsLab’s temporary location and now home to low-rise buildings and a parking lot. It lies between the outdoor track (south of the Stadium) and the Continuum apartment and retail complex, developed on Harvard property, at Western Avenue. In the 2012 University master plan approved by Boston, the area was slated for a proposed new basketball arena and mixed-use structure that might accommodate graduate-student housing. The existing arena, Lavietes Pavilion, has since been renovated, and fac-

## Philanthropy Sweepstakes

According to the Council for Advancement and Support of Education's Voluntary Support of Education survey, charitable giving to higher education totaled \$46.7 billion in fiscal year 2018, up 7.2 percent from the prior year. Harvard, Stanford, and Columbia each realized more than \$1 billion. In total, they and the seven other most successful fundraising institutions (UCLA, University of California San Francisco, Johns Hopkins, Penn, the University of Washington, USC, and Yale) received more than \$8.4 billion: about 18 percent of total giving that year, derived from reports from 929 respondent institutions....

Emulating their U.S. peers, international universities that recently received landmark gifts include McGill, in Montréal (\$151 million for full master's and professional-degree scholarships), and Cambridge, in the United Kingdom (\$130.5 million, for graduate and undergraduate scholarships).... And Johns Hopkins, fresh off a \$1.8-billion gift from Michael R. Bloomberg, M.B.A. '66, LL.D. '14 (not in the tallies above; see Brevia, January-February, page 27), has agreed to buy the Newseum site, near the U.S. Capitol, in Washington, D.C., for a reported \$372.5 million, to house its School of Advanced International Studies and other nearby graduate programs. Bloomberg was reported to have helped support the purchase and planned renovations into 400,000 square feet of academic space.

## More Bricks and Mortar

The University's 2018 *Town Gown Report*, to Cambridge, released in January, envisions further campus construction, beyond such mega-projects as the continuing House renewal and completion of the engineering and applied sciences complex in Allston. Among the jobs wrapping up are renova-

# Brevia



**CORPORATION AND OVERSEER COHORT:** Timothy R. Barakett '87, M.B.A. '93, and Mariano-Florentino (Tino) Cuéllar '93 have been elected fellows of the Harvard Corporation, effective July 1. Barakett, a native of Canada who founded and led a large hedge fund for 15 years, is now a private investor and philanthropist. He held leadership roles in The Harvard Campaign, focusing particularly on undergraduate financial aid. Cuéllar, a native of Mexico, moved with his family to California at age 14. He earned an M.A. in political science from Stanford; a J.D. (Yale); and a Ph.D. in political science (Stanford). He is a member of the Board of Overseers, and has served as a justice of the Supreme Court of California since 2015. Details are available at [harvard-mag.com/barakett-cuellar-19](http://harvard-mag.com/barakett-cuellar-19).

As they succeed Susan L. Graham '64 and Jessica Tuchman Mathews '67, the Corporation loses some gender diversity, but gains international representation. And Barakett replenishes some of the fundraising prowess that departed last year when Joseph J. O'Donnell '67, M.B.A. '71, concluded his service.

Separately, City Year co-founder and CEO Michael Brown '83, J.D. '88, and Lesley Friedman Rosenthal '86, J.D. '89, The Julliard School's chief operating officer, will be the Board of Overseers' president and vice chair of the executive committee in academic year 2019-2020.

tion of the Sackler Building, formerly part of the art museums, for the history of art and architecture department, the Graduate School of Design, and new art-maker spaces; and the Radcliffe Institute's Schlesinger Library renovation. Notable new work includes renovating and expanding (outward and upward, with a new fifth floor) the Law School's Lewis International Law Center; renovating Harvard Hall, to upgrade classrooms and restore the exterior;

and overhauling the Divinity School's Andover Hall, including an addition, scheduled to begin this summer.

## Medical School Money Matters

California's Kaiser Permanente healthcare system is launching a medical school aimed at training doctors for integrated-care teams (the model it practices); it will waive tuition for the first five student cohorts.... New York University, which raised aid funds to make its medical school tuition-free last year, is inaugurating a second school, on Long Island, to train primary-care physicians—again, with full-tuition schol-

arships.... Yale School of Medicine announced that its "unit loan" (the amount students are expected to borrow *before* receiving need-based scholarships) will be reduced from \$23,000 to \$15,000 per year for all students attending in the 2019-2020 academic year and thereafter; the new debt expectation is half the level required two years ago. Harvard Medical School's posted unit loan this year was \$33,950 for current students; those who graduated in 2018 had an average medical debt of \$110,548. On March 1, HMS dean George Q. Daley announced a new aid formula that does away with the unit loan, subtracts the expected family contribution from tuition and

fees, and should, over time, reduce entering students' debt upon graduation by \$16,000 from the prior \$110,000-plus. The new formula will apply to all students receiving aid, effective in the fall term, with funding guaranteed for their four years of study.

## Gender Equity: The University

On April 2, as this issue went to press, the University held its first "Harvard Hears You: The 2019 Summit for Gender Eq-



uity,” coinciding with the beginning of a new iteration of the Association of American Universities’ sexual-conduct climate survey. University officials spoke during events at Smith Campus Center. A celebrity panel at Memorial Church—focusing on popular culture, advertising, and consumerism, according to a University announcement—featured actress and transgender-awareness advocate Laverne Cox.

### Equity, Diversity, Inclusion: The College

The College announced that it has merged its office of equity, diversity, and inclusion with the Harvard Foundation for Intercultural and Race Relations (long led by the late S. Allen Counter). The new unit will report to an associate dean for inclusion and belonging who is “charged with ensuring that our programs and services are responsive to the changing demographics and needs” of undergraduates, once that vacancy is filled. That officer will also oversee the Title IX office, office of BGLTQ student life, and women’s center....The foundation’s artist of the year, recognized at the Cultural Rhythms festival in March, was writer and transgender activist Janet Mock....The College has also organized a Working Group on Symbols and Spaces of Engagement, under professor of Indo-Muslim and Islamic religion and cultures Ali Asani; it will examine campus spaces, symbols, and pro-

gramming to “advance an inclusive learning environment,” according to its charge.

### Nota Bene

**APPLICATIONS—AND COSTS—INCREASE.** The College received 43,330 applications to the class of 2023, up 1.4 percent from the prior year, and admitted 1,950. *Before* taking financial aid into account, the hopefuls face a higher sticker price for the privilege: the term bill will be \$69,607, up 3 percent from \$67,580 in the current academic year. Peer schools reported receiving more applicants, too—and also breached the \$70,000 barrier with tuition, room, board, and fees for 2019-2020 reaching \$72,100 at Yale and comparable levels at Cornell and elsewhere. Details are available at [harvardmag.com/2023admits-19](http://harvardmag.com/2023admits-19).

**MIDDLEBURY DIVESTS.** In January, Middlebury College adopted its Energy2028 plan, envisioning a complete transition to renewable energy for campus electricity and thermal power by that year; a 25 percent reduction in campus energy consumption; progressive divestment of endowment fossil-fuel investments (eliminating them within 15 years, thus reversing the decision *not* to divest made in 2013); and enhanced educational opportunities for its entire community.

**BALANCING THE MEDICAL BOOKS.** Harvard Medical School dean George Q. Daley disclosed in his state of the school address that its sale of a long-term leasehold interest in 4 Blackfan Circle, effected last year for \$272.5 million (see News Briefs, September-October 2018, page 21), had enabled HMS to pay off more than half its debt, “improving cash flow and moving the school toward a balanced budget.” Details

(on debt remaining, other uses of the proceeds—to augment the endowment or support research, perhaps—or prospective improvements in operating results) have not yet been forthcoming.



George Q. Daley

**BEYOND A LIFETIME OF GIVING.** David Rockefeller ’36, G ’37, LL.D. ’69, a towering University citizen, launched the eponymous center for Latin American studies and, in 2008, made a \$100-million gift to fund study abroad and equip the Harvard Art Museums with student study centers (see [harvardmag.com/drclas-08](http://harvardmag.com/drclas-08)). His support for his most cherished institutions lasted beyond his death in 2017. The proceeds from the estate sale of his collections produced additional bequests, including \$200 million-plus to the Museum of Modern Art, which named its directorship in his honor. Harvard has received a further sum, too—likely benefiting undergraduate education and his other interests (details were not yet available at this issue went to press).

**DINING ON HIGH.** *The Heights*, the tenth-floor restaurant at the Smith Campus Center, began lunch service on March 4, followed by lounge/cocktail service (until midnight) as of March 26, with dinner service to follow.

**MISCELLANY.** Stipends for Graduate School of Arts and Sciences students will be increased 3 percent during the 2019-2020 academic year....Deerfield Management has committed \$100 million to invest in the commercial development of biomedical and life-sciences inventions from Harvard laboratories; the Office of Technology Development (see “Accelerating Innovation,” March-April, page 18) represented the University in organizing the partnership.



**RENEWING ADAMS HOUSE:** Plans for the renovation, shared with the community in February, point to better sleeping quarters and common rooms for the 450 resident undergraduates; enhanced student-activity spaces; better ways to connect the House’s six disparate buildings, trisected by city streets; enlarged dining areas; a fully functional, modernized Pool Theater (at left); and a proposed “loft,” subject to Cambridge approval, created by raising the roof over the dining hall, yielding a flexible, multipurpose facility for student and House use. Given the complex program and tight quarters, construction will be in three phases, extending from this June through the summer of 2023. More information, and further plans, appear at [harvardmag.com/adams-redo-19](http://harvardmag.com/adams-redo-19).



## Campuses' Culture

AMERICAN COLLEGES AND UNIVERSITIES are often seen as islands of political correctness, wallowing in self-indulgent identity politics. They are riven by racial and ethnic tension, and seemingly epidemic levels of sexual assault. The institutions skew left, to the point of hushing conservative voices. The students are snowflakes, too fragile to hear (let alone engage with) challenging ideas—and often emerge from their schooling ill-prepared for employment. And don't even get going on the sector's runaway costs.

This is a parody of external perceptions of higher education (although in some quarters, not *much* of a parody). Might it be instructive to probe the reality within?

That sort of question had not occurred to Hobbs professor of cognition and education Howard E. Gardner '65, Ph.D. '71, who has spent most of his life within Harvard (doing pioneering work on multiple intelligences and the ethical architecture of work and the professions)—pursuing and championing the liberal arts and comfortable in the assumption that that vision of education was at the least widely shared. Having noticed that the discourse had shifted in recent decades, beginning with parents' and students' increasingly careerist concerns, he changed the focus of his research to higher education proper. Rather than add to the tiresome literature of *opinion* about conditions on campuses, he resorted to old-fashioned, social-science habits of collecting and analyzing *data*.

The result, perhaps the largest study of its kind, has begun to yield discoveries pertinent to the national conversation about higher education, and to the ways places like Harvard might understand themselves. They range from a sobering take on the primacy of liberal arts per se—and internal priorities that differ significantly from public perceptions of campus culture—to surprisingly convergent concerns among students enrolled at very different kinds of schools, and a new way of thinking about types of undergraduates and their aims.

Beginning in 2012, Gardner, senior adviser Richard J. Light (Pforzheimer professor of teaching and learning), senior project manager Wendy Fischman, and their Graduate School of Education team launched what became a seven-year program to take stock of what they then conceived of as “Liberal Arts and Sciences in the 21st Century.” On each of 10 campuses (too few to represent the thou-

sands of U.S. institutions, but carefully chosen to mix types: highly selective or not, large or small, public or private), they conducted 200 in-depth interviews, with entering and graduating students, faculty members, administrators, trustees, recent alumni, parents, and even a few job recruiters.

Their data-gathering spanned 2,000 hours of interviewing, twice that investment in transcription and coding, and days of observing the 10 schools: the Borough of Manhattan Community College, Cal State University Northridge, DePaul, Duke, Kenyon, The Ohio State University, Queens College (part of City University of New York), Tufts, and the University of New Hampshire. As a kind of comparison, the researchers included Olin College of Engineering, a vocational school which also values the liberal arts. (None of the others is explicitly vocational.) As Gardner put it in a series of talks in January, when he began sharing some data and nascent impressions, the researchers sought to understand ways in which the institutions' constituencies were aligned or misaligned, internally and across campuses; and new ways of thinking about higher education broadly.

Almost immediately, Gardner found his own thinking misaligned with present perceptions of the “liberal arts.” That term lives at the center of Harvard College's expressed educational purpose, but the interviews showed that very few informants had any idea of what the liberal arts comprise—nor any sense that they are engaged in liberal-arts education. To the extent the concept had meaning, it was largely partisan and negative: “liberal” in the political sense, or “anything goes,” or soft courses prescribed to get a degree—a diversion from the serious task of preparing for a job. Of necessity, the Gardner team has reflagged their research as a more anodyne study of “higher education in the 21st century.”

And are the members of campus communi-

ties consumed by free-speech controversies, or racial tensions, or sexual assault? Not by their own account. Nor are they focused on pedagogical issues such as online learning, the impact of social media, the role of the arts, or instruction in ethics. Instead, two themes emerged almost universally: *belonging*, and *mental health*. Gardner is loath to offer explanations, pending deeper analyses. (But one might speculate that in a society increasingly divided socioeconomically and racially, any academic institutions that actively aim

to construct diverse communities may create the first such experience their students have ever encountered, causing them to examine and question their own and others' identities, and whether they feel included in such new circumstances—academically, socially, and institutionally; see “Adjacent but Unequal,” March-April, page 26.) The heightened focus on mental well-being tracks with reports of rising demand nationwide for campus counseling and mental healthcare services.

Gardner's presentation suggested that there are differences between students matriculating at selective colleges or research universities and those attending community colleges in acquisition of “HED capital” (the team's acronym for higher-education, as opposed to “liberal-arts,” intellectual capital—knowledge skills, critical thinking, the ability to ask questions and make connections, and so on).

But perhaps more interesting is a typology for thinking about students' own narrative about why they enroll and what they seek.

Gardner sorted out undergraduates who are:

- inertial (you go to high school, then you go to college, on autopilot);
- transactional (you do what's required to get a degree, then go to work or graduate school);
- exploratory (you go to college for a one-time opportunity to try something new or



Howard Gardner and Wendy Fischman, now analyzing interviews from 10 campuses

COURTESY OF HOWARD GARDNER



to dabble in a new field); or

- transformational (you go to college to examine your fundamental beliefs and values).

The latter category accounts for a small minority of the students interviewed (fewer than one-fifth). Probably every college or university has at least *some* of each kind of students. The mix does vary with an institution's selectivity and mission, but the larger finding raises all sorts of interesting questions about how professors might accommodate their young charges, to expand their horizons and perhaps enlarge their aims and accomplishments, and how varying institutions succeed—or could do better—in encouraging such gains. Gardner's team found upperclassmen *more* likely to be transactional, and *less* likely to be exploratory, than entering students, perhaps as life after graduation looms; but they also detected an uptick in the small cohort who conceived of their higher education in transformational terms.

The typology is also a useful framework for thinking about alignment. At one point, Gardner reflected on Amherst College (he was a trustee). Some of its doctorally trained, liberal-arts faculty members, whose own career goals focused on academia, found themselves severely challenged in recent decades as members of a newly diverse student body, with different preparation and expectations, came to campus. Restoring alignment required pedagogical adaptations that achieved important educational gains. He also sketched other interesting examples of alignment, such as DePaul's "city as a classroom" fall-semester class for entering freshmen, a structured curricular commitment to service and civic engagement across most disciplines, consistent with that Catholic institution's Vincentian mission.

In the best social-science tradition, the research also points to some counterintuitive findings. Students' relative lack of expressed interest in details about the curriculum or pedagogy, Gardner noted, means that the experts—faculty members and administrators—are relatively free to make changes that might improve alignment within their communities and enhance the education they provide. And even though an academic community obviously must ensure that its members feel that they belong and can comfortably and safely pursue their work together, some degree of alienation is functional—to stimulate speaking out, prompting change, and pursuing intellectual growth.

Although much of the project's data analysis and publication of results lie ahead, Gardner underscored the importance for any school's leaders of knowing and enunciating its mission—and then investing accordingly. Public perceptions of luxe student centers and climbing walls to the contrary, the research suggests strongly that

such investments should focus much more on teachers, informed advisers, and skilled support personnel than on facilities or the latest technology.

Gardner and his colleagues are sharing their findings at <https://howardgardner.com/category/life-long-learning-a-blog-in-education>. ~J.S.R.

## SPORTS

# All Instincts

*For speedy center fielder Ben Skinner, slowing down is key.*

by JACOB SWEET

**T**HE THOUGHT of stealing makes Ben Skinner '19 smile. On the baseball diamond, speed is his biggest asset. But to steal second base, he needs to get to first, the only one that can't be stolen. To reach it, he can draw a walk or get hit by a pitch, but mostly he hits a ball into play and beats any throw to the bag.

Skinner is often looking to drive the ball up the middle, out of reach of the shortstop

and second-baseman. If he's ahead in the count—the pitcher has thrown more balls than strikes—he may swing for more power, slightly increasing the upward angle of his swing. If he's behind, he'll shorten his motion and just try to swipe the ball into play. He is known as a contact hitter, but making contact isn't easy. A baseball is less than 3 inches in diameter, and most Ivy League pitchers throw into the high-80s-miles-per-hour range, minimum. Almost every pitch reaches the plate in less than half a second.

Hitting was simpler in high school. Most pitchers, even around Moraga, California—

**After missing the first few games of the 2019 season with a concussion, Skinner has been among the Ivy League leaders in on-base percentage.**



Skinner's baseball-happy hometown—stuck to fastballs. Four-seam fastballs, the most common breed, depend on velocity and don't have much lateral movement in the air. Curveballs, sliders, and sinkers—off-speed or “breaking” pitches—curve, slide, and sink in mid-air, often leaving a batter off-balance and confused. Breaking pitches are notoriously hard to control, however. In high school, he could “sit on” a fastball, anticipating the ubiquitous pitch and swinging at just the correct moment.

Not anymore. Nearly every Ivy League pitcher has command of at least two, usually three pitches, and can throw them on any count. A first-pitch curveball, a high-school rarity, must weigh on Skinner's mind. If he expects a fastball and gets a curveball, his swing may be done before the ball reaches the plate. College pitchers are sharper, nestling the balls into the corners of the strike zone, where hitters are lucky just to make contact.

“In college, you'll typically have one pitch in the entire at bat where you have a chance to square it up,” Skinner explained recently. “If you don't swing at that pitch or you foul it off, you're typically out of luck.”

His freshman and sophomore years, he was “out of luck” more than he wanted to be. He hit for a .215 average his first year, followed by a .250—both below the team average. His on-base percentage, the most important statistic for a base-stealing threat, hovered just below and then barely above the team average. Skinner usually hit last in the batting order, guaranteeing the fewest at-bats each game among starters.

THE INITIAL STRUGGLES didn't discourage him. He had long before embraced a slow-burning, fundamentals-focused approach. He joined his high-school team as a freshman, gunning for the starting shortstop or second-baseman slot, where he had played all his life. In his first game on the team, however, the team's junior second-baseman (now playing professionally in the minor leagues) hit two home runs. “I remember talking to my dad on the phone and being like, ‘Yeah, I don't think I'm gonna play much this year,’” he recalled.

He considered his situation. He was a

couple years younger and less physically developed than his competition. If he wanted to become a starter, he'd need more strength. He touched weights for the first time his freshman year, focusing mostly on leg, core, and oblique work—crucial for baseball, for which throwing and swinging require quick and forceful rotations. His team, skilled in the middle infield, was weaker in the outfield. Middle infielders need speed, but center fielders cover the most ground.

While center field was an adjustment, he followed the approach of his older teammates, many of

whom would go on to play baseball at the top collegiate level. He could get there too in a couple of years if he focused on improving his fundamentals every day. Tracking a fly ball, hitting for contact, reading a pitcher's windup before stealing a base—all are skills based on razor-thin margins and built through focused repetition. Skinner said there's nothing unusual about his style of preparation then or now; he just concentrates in practice as he would in a game. When the starting center spot opened his junior year, he excelled immediately and got recruited by and committed to Harvard within months.

When standing in center at O'Donnell Field, Skinner has a simple goal: “Just run down the baseball and catch it.” “If you go out there and just be a good athlete,” he added, “you're typically going to have success.”

But there are plenty of reasons why Usain Bolt or LeBron James couldn't just get out there and mimic Willie Mays. Before a pitch is thrown, Skinner positions himself where he thinks the ball, if hit, will end up. If he knows a right-handed batter is a pull hitter, he'll move a few steps to his right, alerting the other outfielders to do the same. If a lefty is swinging late, he'll slide the same way. If the batter is the four-hitter—typically the team's most powerful—he'll take five or so steps back. But if the four-hitter has two strikes, he'll take a few steps in and to the batter's opposite side, knowing the swing may be short and late. The adjustments are near constant and

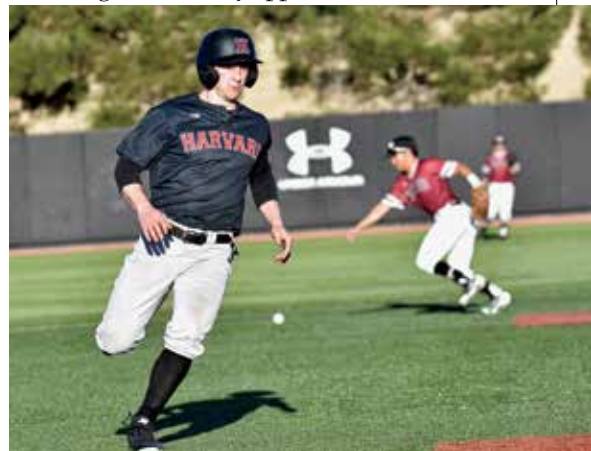
depend not only on the pitcher and batter, but on the stadium's size, the inning, and even the temperature.

By the time the ball is hit, Skinner hopes to be leaning in the correct direction, ready to run. Evaluating its trajectory is a matter of practice, and every ball he catches makes him minutely better. In most cases, the best route is a straight-line path to the ball, begun within half a second of contact. A routine running grab is anything but routine.

During the winter, he can't practice this skill as much as he'd like. Harvard's domed indoor training facility, The Bubble, within the Stadium, can't accommodate many high-arching fly balls, so much of the practice comes against actual opponents. And there's not much time to shake off rust. Harvard's 39 regular-season games are packed into a period of just over two months. When Skinner suffered a concussion this season after taking a pitch to the head, he missed a tenth of the team's games in just a couple days. Consistent with the Ivy League schedule, Harvard plays almost every game on the weekends. The last classic Major League Baseball double-header, in which two teams play each other back-to-back, took place in 2017. Harvard has 10 such double-headers this year, including one against each Ivy opponent. In the half-hour



**Ben Skinner**



**Any fielding mistake by an opponent can mean an extra base—or two—for Skinner.**

break between two three-hour games, he'll grab something to eat, then get back on the diamond, which may very well still be freezing in late March.

“I don't know if I'd grown up here how fond I'd be of baseball,” Skinner said, jokingly. “It's a different animal.”

STILL, the Northern California kid has adjusted well. His junior year, he moved from



ninth to first in the batting order, and at .416 had the highest on-base percentage among Harvard starters. One of two players to play all 42 games, he led the team with 55 hits, 13 doubles, and 17 stolen bases, recording a .325 batting average—to go with a .990 fielding percentage. After the season, in which Harvard went 22-20, he was one of three Crimson players voted First-Team All-Ivy.

"I think junior year was when everything started to slow down," Skinner said. "I don't

think there were any major physical adjustments I made per se, but all of a sudden I was just seeing the ball a lot better."

In the first couple hundred milliseconds after a pitcher throws a ball, Skinner might notice a dot-like pattern in the spinning seams, alerting him that the pitch is a slider. If he's preparing to steal second and notices a pitcher getting locked into a routine, he can take off at the moment the pitcher lifts his left foot. And though he is

the team's only engineering concentrator, he said his approach to baseball and engineering are separate. Engineering is about analysis; baseball is about instincts.

Sometimes it's no secret that Skinner will steal second. The pitcher knows, the catcher knows, everyone in the stadium knows. It is at times like these where everything slows down and his intuition kick in. Then, it's just a footrace.

"That's the most fun," he said, smiling.

## One Shoe, No Problem

BY THE TIME Kieran Tuntivate '20 gets on the line for a race, he's already run it countless times in his head. During warm-ups, throughout practice, at night before the meet, he's imagining how much it's going to hurt: his form stiffening, his legs overloaded with lactic acid that won't go away. He thinks about how fast the pace might be and which runner will challenge for the lead and when.



About two laps into the Ivy League Indoor Track and Field Championships 3,000-meter final, at Harvard's Gordon track, on February 23, Tuntivate's left shoe popped off. In the scenarios he had rehearsed, this one had not come up.

It wasn't a shoe-tying problem. Some 300 meters into the race, a runner from Columbia stepped on the back heel of his left shoe, pulling it under his foot like a slipper. For 100 meters his options—none ideal—raced through his head. His first thought was to slip the shoe on while running, but the maneuver wasn't possible. He thought about

moving to an outside lane and adjusting, but he had tightly tied his spikes beforehand and didn't know if he could slip it on without falling hopelessly behind. He then allowed himself a moment of annoyance at his unluckiness, subtly pointed out his shoe situation to Alex Gibby, associate head coach, and let the shoe fall away without breaking stride.

"And when the shoe came off, my fourth thought was just, 'Alright, whatever, relax,'" Tuntivate recalled. "I could almost feel some of the nervousness from some of my teammates and from Coach Gibby. It's weird, but their nervousness almost helped me relax."

Tuntivate makes relaxing seem easy, but it's not. Lost shoe aside, this was his biggest weekend of the indoor track season. He came into the race as the favorite, but there were 15 other competi-

**Kieran Tuntivate '20,  
shoeless and in the lead**

tors, and he had a target on his back. He was also hoping to race, and win, the 5,000-meter championship less than 24 hours later. The focus during the 3,000 was not just on winning, but doing so without any undue strain.

Injuries while running barefoot were also a concern. Harvard's indoor track, renovated right before this season, has a "tuned" layer of butyl rubber with embedded granules, giving runners more bounce and traction. "It's not sandpaper, but it's damn close," said Gibby. Indoor tracks generally stretch half the length of an outdoor track, so there are more frequent and tighter turns, placing an increased centripetal-force burden on his now-shoeless left foot. Continuing the race meant both coach and athlete accepted that the foot was going to be carved up by race's end.

Even more serious, every athlete was wearing track spikes: ultra-light, tightly-fitting running shoes equipped with metal spikes for increased traction. In a race of this caliber, no one would wear a bulkier, more supportive, spike-less running shoe. In a sea of spikes, one does not want to be barefoot. But Tuntivate continued. "Generally, I'm not going to drop out unless my coach literally pulls me off the track," he said. "It would've been nice, but it was never a really a serious option."

As the shoe slipped off, Gibby considered pulling his athlete out of the race, watching for any signs that he was losing control. "Kieran, in general, is somewhat of a stoic," the coach said. "You're looking for mechanical changes. You're looking for tension, frustration—things of that matter boiling up. And none of that was present." He was also thinking about the long-term consequences of the race. If the injuries were serious, Tuntivate could be hindered for weeks or months, jeopardizing his competitiveness in major outdoor meets. A dual-citizen of Thailand and the United States, Tuntivate has national-class ambitions. After dominat-

ing Delaware's distance scene in high school, he's continued his success at Harvard. In an interview, he did not bring up his 2019 Ivy League Cross Country Championship victory, nor did he mention his Thai national records in the indoor 3,000-meters and the outdoor 3,000- and 5,000-meters. Even if this race didn't derail his training, the 5,000-meter final the following day would be totally out of the question.

In the time that it took Gibby to process the situation, Tuntivate had already begun the process of "zoning out." Will Battershill, another Harvard junior, had jumped to second place and was running along his right shoulder. Though Battershill did not notice his teammate's bare foot, Tuntivate was confident he would give him space to run. With adequate spacing and the familiarity of a teammate, his comfort increased. He said he barely remembers anything from the middle third of the race. Maintaining a sense of calm while churning out laps well below a 4:30-minute-mile pace requires superb muscular and cardiovascular fitness, even for the dual-shoed.

With about a mile and a half to go, Battershill picked up the pace. Tuntivate realized the original race plan—which he had mentally scrapped—was still on. The two were supposed to start pushing the pace here, stringing out the field and leaving all but the most fit competitors behind. A lap later, two runners surged into the lead pack, with one passing him and one close enough to touch. He hoped that more runners weren't on the way and that no one would clip his foot. "The more people that pass you, the harder it's going to get to physically pass them back," he said. "And mentally, it would be really draining just to feel 15 people pass you."

The ungarded foot, uncomfortable but manageable for most of the race, began to worsen with each step as he accelerated. His thick callouses had worn away and he could feel skin clump beneath his foot. He compared the feeling to "running on a pebble." (Several news sites that published pictures of his post-race foot included a content warning.)

With 400 meters to go, Tuntivate bolted into the lead, in a final effort for the win. He remembers his brother once telling him that in a race like this, you get one, maybe two chances to make a move. This was it. If he got passed again, he didn't think he'd have the strength, mentally or physically, to come back. Brian Zabilski, Columbia's 2018 Ivy League

10,000-meter champion, was not going to let him off easy, running an arm's-length away.

Tuntivate doesn't remember how his foot felt until the final turn of the race, when he was running an under 4-minute-mile pace in a sprint to the finish and it was under maximum strain. From the roar of the crowd, he sensed that the race was not over, and that he could not relax in the final meters. He crossed the line about a half-second in front of Zabilski.

"And he did it without his left shoe at the end!" the announcer exclaimed. Neither he, nor almost anybody else watching, had realized the shoe had been gone for about 13 laps.

Tuntivate stood, hands-on-knees, at the edge of the track as the Harvard coaches gathered around him. Nicolas Benitez, the team's athletic trainer, cradled him like a small child and carried him to the trainer's table, and handled his foot. The award ceremony was delayed. He accepted his medal on crutches.

There was no question in anyone's mind that Tuntivate would not run the next the day. His foot looked like the victim of a cheese-grater ambush. Gibby remembered

estimating the chances at 0 percent. His brother, who had traveled to watch the race, got one look and texted his family that he'd be out the next day.

Tuntivate, for his part, prepared for the next day's race as if nothing had happened. He visualized the possibilities over and over again, this time factoring in the extra pain. The morning of the race, he asked his brother to get his pre-race coffee for him—a precaution to limit wear on his foot. Skeptical, his brother told him he'd do it if an hour before the race he actually looked ready. When it became clear he would actually race, his brother brought him a coffee.

Tuntivate won that 5,000-meter race, too, beating 22 competitors in his regular, spikeless training shoes, because it hurt too much to wear his track spikes.

"There's a lot of attention on the 3K and winning that with one shoe, and that was really impressive," Gibby said. "But honestly, what I think is far more impressive was him organizing and setting himself up mentally and emotionally to compete the next day."

Surely Tuntivate's pre-race visualizations now include one more scenario.

~JACOB SWEET

## A Cathedral of Sweat

*Basketball teams fall short of NCAAs again.*

MOMENTS AFTER Harvard lost to Yale 97-85 in the Ivy League tournament championship, Stemberg coach Tommy Amaker congratulated the Bulldogs on their victory while sitting in the Eli Trophy Room. Bulldog pawmarks were everywhere: the walls adorned with portraits of famous alumni (including baseball player George H.W. Bush), display cases filled with footballs celebrating the Harvard-Yale rivalry. There was even Yale-branded bottled water

**Noah Kirkwood '22, the Ivy League Rookie of the Year, emerged as one of Harvard's top offensive threats.**



SIDELINE PHOTOS BY THE IVY LEAGUE

in front of the coach and point guard Bryce Aiken '20, who looked downcast despite having scored 38 points to break his own single-game tournament scoring record. Amaker declared the Bulldogs "very deserving of the victory and representing our conference in the NCAA tournament."

The previous night, Friends coach Kathy Delaney-Smith had sat in the same spot, star-



ing forlornly at the box score from her team's 91-62 loss to Penn in the semifinals. The defeat stung because of the stakes, and its lopsidedness was bewildering: during the regular season, the Crimson had split two overtime contests against the Quakers. In her brief opening statement, Delaney-Smith called it "probably one of the most disappointing games I can remember in the last 37 years."

Although both teams qualified for the National Invitational Tournament (NIT) in late March, they fell far short of early lofty expectations, and coaches and players will spend the off-season trying to understand why.

LAST FALL, the Harvard men finished first in the Ivy pre-season media poll, and CBS identified the Crimson as a candidate to make a Cinderella run come March. Sensing this potential, Amaker announced that the theme for the year was sacrifice. "If we really embrace that," he said, "we think we have a chance to have a special year."

These predictions assumed that the team's best players—Aiken, the 2017 Ivy League Rookie of the Year, and Seth Towns '20, the 2018 Ivy League Player of the Year—would recover from last year's season-ending injuries. Instead, neither suited up for the season opener against MIT, when they were listed as out indefinitely.

Without them, the Crimson initially per-

formed unevenly. The highlight was a 74-68 win at St. Mary's, a perennial mid-major power that had throttled the Crimson 89-71 the previous year. But there was also a low point: Harvard's 81-63 setback at Dartmouth, the first time in 12 years that the Crimson lost its conference opener to the Big Green. The game signaled a serious problem: porous perimeter defense. Dartmouth shot above 60 percent from the field and more than 50 percent from three-point range—not the kind of defensive prowess that had suffocated Ivy League opponents in previous years.

Aiken returned in the next game, at Howard, and immediately made his presence felt, sinking a three-pointer to get Harvard on the board and pressuring the Bison defense. This created opportunities for his teammates, and with all five Harvard starters scoring in double figures for the only time this season, the Crimson cruised to an 84-71 victory.

That balance declined in Ivy play as Harvard became heavily dependent on Aiken's scoring and heroics. The guard led the Ivies with 22.2 points per contest in league games and hit many big shots, including a buzzer beater in an 88-86 victory at Yale and two threes in the final minute of regulation during an overtime win at Penn. Then there was the shot of the season: trailing Columbia by three at home, and with the clock winding down in overtime, Aiken hung in the air, ducked under a six-foot-ten defender, somehow kept his balance and squared his shoulders, and sank a deep three-pointer to force double overtime. The shot—which was ESPN SportsCenter's top play that night—accounted for three of Aiken's 44 points in a 98-96 triple-overtime victory. After the Crimson finished Ivy play 10-4, tied with Yale atop the standings, Amaker said of Aiken, "We don't win our league if he is anything less than spectacular."

But an offense so heavily reliant on one player was not enough to win the Ivy tournament, especially given the team's injuries (Towns announced in March that he would not play this year) and defensive lapses. In the

championship game, only one other Harvard player, Ivy League Rookie of the Year Noah Kirkwood '22, scored in double figures to go

with Aiken's 38 points. Five Yale players scored in double figures—and seven had eight or more points. That balance, paired with Harvard's difficulty defending the perimeter, enabled the Bulldogs to score 97 points (the most Harvard has given up since Amaker's very first game, a 111-56 Stanford blowout in 2007) and pull away from the Crimson for the victory.

Because they were the top seed in the Ivy League tournament, the Crimson received an automatic berth to the NIT, the second-most presti-

gious post-season tournament. Harvard upset Georgetown 71-68 before losing by one point to North Carolina State in the second round.

THE WOMEN'S TEAM finished third in the pre-season media poll, but Delaney-Smith had her sights set higher. "I don't know of a basketball component that we need that we don't have," she said in an interview then. The team's strengths showed clearly in December when the Crimson defeated then-fourteenth-ranked California, Harvard's first win over a ranked opponent since 1998, when the sixteenth-seeded Crimson knocked off Stanford, a one-seed, in the NCAA tournament.

But in conference play, the team performed inconsistently. The Crimson beat Penn (which shared the regular-season title with Princeton) in double overtime and played competitively in its other matchups with the Quakers and Tigers, but dropped contests at Columbia and Yale, two teams that failed to reach the Ivy tournament. This up-and-down play led to a 9-5 Ivy finish and earned the Crimson a three-seed in the conference tournament. In the semifinals against Penn, Harvard led 10-9 a little over halfway through the first quarter, but the Quakers finished the period on a 12-0 run and Harvard couldn't come back. Point guard Katie Benzan '20 lamented, "To me, at least, it seemed like we lost the game



**Coach Tommy Amaker and point guard Bryce Aiken '20, a first-team All-Ivy honoree, led Harvard to a share of the Ivy League championship.**

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Women's basketball coach Kathy Delaney-Smith reflects on

gender and sexuality in sports.

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in the first quarter.”

The women received an at-large bid to the NIT, including an opening-round matchup with Drexel at Laviestes Pavilion, the first home post-season basketball game in Harvard history. After the blowout loss to Penn, it seemed a bellwether for the program's future, and Harvard played with resolve, defeating the Dragons 69-56. Although the Crimson then fell to Georgetown 70-65 in the second round, its strong play in the tournament was encouraging. “I think it validates that we’re there,” Delaney-Smith said, “but it’s just one more step to being what we should have been this year.”

As DISAPPOINTINGLY as this year turned out, there is good news. In 2017 and 2018, the Ivy League tournaments were played at Penn’s Palestra, the “cathedral of college basketball.” This year, the competitions



**Next season, coach Kathy Delaney-Smith will have to replace a talented group of seniors, including guard Sydney Skinner '19.**

were held at Yale’s Lee Amphitheater, in Payne Whitney Gymnasium, the “cathedral of sweat.” Next year, the event will come to Laviestes. The Crimson’s 1,636-seat gym is no cathedral, but Harvard excels at home.

Then again, there will be added pressure.

The men’s team has seven rising seniors, whom ESPN rated as the country’s tenth-

best recruiting class in 2016. Basketball analysts predicted they might lead Harvard to the Sweet 16, but they have yet to reach the NAAs. The women’s team also boasts talented rising seniors, especially Katie Benzan, a three-time, first-team All-Ivy point guard, and Jeannie Boehm,

**Point guard Katie Benzan '20 was named to the All-Ivy first team for the third consecutive year.**

just the third McDonald’s All American in Ivy League history. Many thought they would return Harvard to the NAAs for the first time since 2007, but they have yet to do so. Next year represents a chance for both senior classes to realize these expectations on their home floor, but they will still be sweating the outcome—their window of opportunity is closing.

~DAVID L. TANNENWALD



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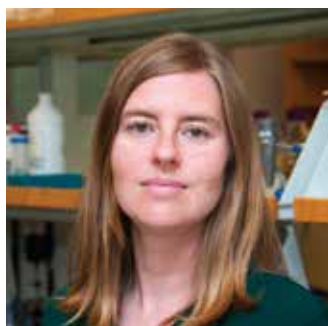
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# The Physician-Poet

Rafael Campo's compassionate care

**T**HE MOMENT that Rafael Campo, M.D. '92, still thinks about every day—when he enters an exam room where a patient is waiting, or sits at his desk to write a poem—came at the end of what had been the longest, hardest year of his life. These days he has a primary-care practice at Beth Israel Deaconess Medical Center, a teaching appointment at Harvard Medical School (HMS), and seven books of poetry to his name. But in June 1993, he was a 28-year-old just out of medical school who had spent the previous 12 months as an intern at the University of California, San Francisco Hospital, during the height of the AIDS epidemic. Nearly 40,000 Americans were dying every year from a virus that barely a decade earlier had had no official name;

in San Francisco, the epicenter of the crisis, roughly 4 percent of the population was infected with HIV. Campo remembers making rounds in the middle of the night during his 80-hour work weeks, admitting an endless stream of gravely ill patients to the emergency room: "It was like a nightmare."

He had seen sickness before. During medical school, he had accompanied doctors and residents on the wards, helping tend to people who were suffering, sometimes dying. And as a graduate student in creative writing during a year off from Harvard, he'd written hundreds of poems about those patients—their illnesses, their struggles, their courage "even when we didn't have the answers." But in San Francisco, everything was much worse. With so many patients

by LYDIALYLE GIBSON



dying so quickly, “There was no time for sharing stories—I mean, there was little we could do to help these people,” he says. “And the range of emotional responses to that kind of helplessness sometimes expressed itself in really hateful behavior toward the people who were dying.” Some doctors blamed AIDS patients for their own suffering; some simply wished for them to disappear. “Which was heartbreaking, and also heart-hardening,” Campo says. During his internship year, he stopped writing poems altogether. “I became very cynical during that first year. And really shared, to my shame now, some of the disgust.”

But something else was also at work. As the gay son of Cuban immigrants, Campo could not avoid seeing himself in the young patients dying in front of him. Most were brown-skinned, and nearly all were gay men. When he was a child he had imagined that a doctor’s white coat “might make up for, possibly even purify, my nonwhite skin,” he wrote in his 1997 memoir, *A Desire to Heal*. And after years of anguish over his sexuality, he had come out as gay to his parents only a year or so before moving to San Francisco. Amid this new, terrifying epidemic, he found himself inescapably bound to the patients he and his colleagues could not keep from dying.

And then in June 1993, he attended the San Francisco Gay Pride Parade, marching alongside other gay men who were insisting loudly on their humanity and demanding to be seen—fighting for their lives in the streets. “I remember feeling this physical embodiment of the slogans that activists from [AIDS coalition] ACT UP were chanting: ‘Silence equals death, silence equals death,’” he says. “I felt the power of community, how our voices join us, that we would not be erased.” For Campo, who had felt so isolated and alone—who had watched himself go silent—that day was tremendously renewing. It returned him to poetry. “It was empowering to know that my voice could be heard—that it was *essential* that it be heard. That changed my life.”

It changed the way he practiced medicine, too. When he sees patients now, it is without clinical distance or emotional remove. Campo is fully there, with what he calls his “authentic, complex self.” After the pride parade, it became a conscious part of his approach to be more vulnerable and open in clinical encounters. With patients, as with

everyone, he is the physician, but also the poet, the gay man, the Latino, the striving second-generation immigrant, a husband, a brother, a person possessed of all his memories and knowledge and feelings—imperfect, but fully human. Patients, he’s discovered, find comfort in that. They trust it: “There’s an empathetic understanding that allows us to get past the five or 10 throat-clearing questions that aren’t really why the person is here in my office at that moment,” he says. “That sense of, ‘We know each other, we’re together in this experience’—in some ways allows me to be a better listener, certainly, but also a better physician.”

What it means is that Campo doesn’t look away...from anything—not from the diagnosis or the disease, or from his patients’ pain, or his own. Rob Vlock, a patient for 25 years, recalls the day in 2015 when Campo phoned to tell him that the cancer he’d recently been diagnosed with, a rare ocular tumor, might have metastasized. That MRI finding later turned out to be a false positive, but “It was a deeply emotional time for my family,” Vlock says. Campo stayed on the phone for as long as Vlock needed. “I don’t even know how long we talked.... He couldn’t tell me it was going to be OK—he was looking at the radiologist’s report—but just to have him there was really meaningful to me.” Psychiatrist Elizabeth Gaufberg, a Harvard colleague, says that Campo “is accountable to all the same processes and procedures that can distance us as physicians from the rawest forms of human suffering.... But at the same time, he holds the complexity and beauty and the richness and tragedy of human experience all at once.”

### **“A wonderful factory for empathy”**

RECENTLY, Campo was named poetry editor for the *Journal of the American Medical Association*, which for more than three decades has published a poem in each issue, usually written by a medical professional (“A-fib: An Irregular Sonnet,” was the title of one recent contribution). It’s one of the journal’s most popular sections—which says a lot, he believes,

about the emotional connection doctors hunger for in their work. The editors receive thousands of submissions every year; about 50 are chosen for publication. “The largest overarching theme in the poems people submit is this notion of, how does one connect

## **THE CHART**

Says fifty-four-year-old obese Hispanic female – I wonder if they mean the one with long black braids, Peruvian, who sells tamales at the farmer’s market, tells me I’m too thin, I better eat; or is she the Dominican with too much rouge and almond eyes at the dry cleaners who must have been so beautiful in her youth; or maybe she’s the Cuban lady drunk on grief who I’ve seen half-asleep, alone as if that bench were only hers, the park her home at last; or else the Mexican who hoards the littered papers she collects and says they are her “documents”; if not, it could be the Colombian drug addict whose Spanish, even when she’s high, is perfect; or maybe it’s the one who never says exactly where she’s from, but who reminds me of my grandmother, poor but refined, lace handkerchief balled up in her plump hand, who died too young from a condition that some doctor, nose in her chart, overlooked.

empathetically with the person who is *in extremis*?" Campo says. "Poetry especially is such a wonderful factory for empathy....What I am looking for in the poems we publish are ones that establish that connection with the subject, but then also with the reader.

That's a good description of Campo's own poetry, much of which unfolds among patients and their problems. People arrive in his poems with failing hearts and bleeding infections and lumps that will turn out to be tumors; the doctors who care for them are achingly aware of the limits of their powers. "Forgive me, body before me, for this," begins the poem "Morbidity and Mortality Rounds," from Campo's 2018 collection, *Comfort Measures Only*. "Forgive me for my bumbling hands, unschooled / in how to touch: I meant to understand / what fever was, not love." And in another poem, "Quatrains from the Clinic," the echoing refrain "They wait for me"—picturing patients in wheelchairs and paper gowns, wracked with headaches and palpitations, anxiously hoping that "they might live longer, long enough at least"—finds its answer in the poem's last two lines: "Baring breasts / assessing wounds, I know that I'm too late."

Amid the catalog of symptoms and suffering, though, Campo's poems also listen. Patients' first-person stories—the particularities of who and how they are—shape his writing; his words are often theirs, quoted directly. This is intentional. For him, the impulse to write is partly a desire to give voice to patients whose voices are often silenced or dismissed in the therapeutic process. "We do this a lot in medicine, where we appropriate someone's story and rewrite it in medical terms that only we can understand," he says. "And that can be really harmful to patients, who need to have a sense of authority and authorship over what's happening to them." Campo's patients are perhaps especially at risk of this kind of loss; many of them are poor or LGBT, people who have HIV, or who don't speak English. Many are Latino. "Telling a story," he says, "is a way of honoring and hearing another person."

Sometimes Campo incorporates poetry even more explicitly into his practice. Several years ago, he began holding workshops with patients, convening a whole circle of people with cancer or HIV, leading them through writing exercises and close readings of poems. "One thing I see universally is how it breaks down the isolation that people feel in the experience of illness," he says. "As soon as that first poem gets read aloud, there is a sense of intense community, a shared

experience of voice. And in that, there is a potential for healing."

Campo often uses that word, "healing," always careful to contrast it with the narrower, more scientific "curing." Even when a cure cannot be found, he says, healing is still possible. Not long ago, he diagnosed one of his patients with metastatic pancreatic cancer. It was a shock. "He's a young person, and fit," Campo says, "and a lot of what he's trying to cope with is confronting mortality." The cancer isn't curable. "In those kinds of moments, I think, it's even more important to be able to sit quietly with him while he's crying. And to cry myself, because what he's facing is really tragic and really painful."

Sometimes, he will slip a few photocopied poems—something by Gertrude Stein, perhaps, or Marilyn Hacker—in among the pamphlets and printouts he gives to a patient. "I've thought a lot about him doing that," says Harvard professor of English Elisa New, a close friend and frequent collaborator. "Even if the patient doesn't read the poem... the fact that a patient would hear that their doctor was thinking about them, and in a way that made him want to give them a poem—that's really a literal gift, to anybody." But most patients do read the poems; often it's the first thing they want to discuss in follow-up appoint-

ments, and very sick patients, knowing they may not survive, have sometimes asked Campo to read a poem with them—"this ancient art form," he says, "that sustains us even when biomedicine can't." Poetry becomes a springboard, he believes, into deeper conversation. "It's hard to explain it. But I guess it's a kind of gesture that says, 'I want to know the whole story.'"

Embedded in that gesture is another, broader message that's woven throughout his poetry: you are not alone. None of us are—"We all get sick and die," Campo writes. Even physicians will someday become patients, an inevitability that promises not only pain and grief, but beauty and love. All this distills in a slight, subtle poem called "On Doctoring," which opens on an ordinary morning, with a physician examining a man's knee, sore and scarred from surgery ("I move the joint for him, a gentle sweep / through its full range of motion"). Then, midway through this half-distracted moment, a dawning perception takes hold, almost too big for the exam room to contain:

Marvelous,  
the body's workmanship, how perfect is

## HOSPITAL WRITING WORKSHOP

Arriving late, my clinic having run  
past six again, I realize I don't  
have cancer, don't have HIV, like them  
these students who are patients, who I lead  
in writing exercises, reading poems.  
For them, this isn't academic, it's  
reality: I ask that they describe  
an object right in front of them, to make  
it come alive, and one writes about death,  
her death, as if by just imagining  
the softness of its skin, its panting rush  
into her lap, that she might tame it; one  
observes instead the love he lost, he's there,  
beside him in his gown and wheelchair,  
together finally again. I take  
a good, long breath; we're quiet as newborns.  
The little conference room grows warm, and there  
before my eyes, I see that what I thought  
unspeakable was more than this, was hope.



its service to the soul it shelters, each  
soft hair along the shin enshrining touch,  
this way we're made to need each other's care.

### **"A kind of wound"**

CAMPO HAD ALWAYS understood poetry as a force for overcoming separation. When he was a boy, that meant Cuba. His paternal grandfather, having fled Franco in Spain, settled on the island and raised a family, but then was jailed during the Cuban revolution and the family was forced to flee again, this time to New Jersey. Campo was born there, growing up bilingual in a town with almost no other Latino children. "There was a kind of wound that we experienced as a family," he says, "in the loss of Cuba, our home." Poetry became a way to repair the fracture, and for his parents and grandparents to "keep Cuba alive" in Campo and his siblings. As a child, he read *Versos Sencillos* (Simple Verses), by the Cuban independence hero José Martí, and remembers "being amazed to learn that the father of the Cuban nation was a poet." The famous patriotic song "Guan-tanamera," which Campo's grandmother crooned in her candlelit bedroom, takes its lyrics from a Martí poem. One verse imagines poetry as "a wounded deer seeking refuge in a faraway mountain," Campo says—"an image of brokenness, but also healing."

He arrived at Amherst College in 1983, already planning to become a doctor. But poetry had drawn him there, too—Richard Wilbur, A.M.'47, JF '50, was then an Amherst professor, as Robert Frost, class of 1901, Litt.D. '37, had been earlier; Emily Dickinson's home stood half a mile away. Campo majored in neuroscience, but he also found, he says, "a kind of invitation to think about poetry and literature as an equally powerful way to make sense of the human condition and human suffering. That was wonderful, the idea that you could join science with poetry, these two ways of knowing about us."

Poetry also helped repair another fracture in his own life: one course he took was with Eve Sedgwick, a literary scholar who a few years later helped found the field of queer theory. Her effect on Campo was profound. For years, he'd wrestled with a growing awareness of himself as gay. "My earliest attractions were to men," he says, "and I desperately tried for years to exorcise it from myself." Studying with Sedgwick, he began writing poems as a way to give voice to his identity, to begin to come out. (He also found the man who would become his husband at Amherst, classmate Jorge Arroyo, M.P.H. '02, now an HMS associate professor of ophthalmology who also practices at

Beth Israel Deaconess Medical Center. The two have been together for more than 30 years.)

Medical school was an altogether different experience. Campo often jokes that when he came to HMS, what most perplexed professors and classmates wasn't that he was gay or Latino, but that he was a poet. "That really freaked everyone out," he says, laughing. But it wasn't a joke then—medical school was in many ways deeply dispiriting. He found no room there for the humanistic reflection he was used to; instead, the curriculum focused exclusively on science and biology. "My first year taking care of patients on the wards as a medical student was disastrous," he says. Professors discouraged emotional connections with patients. "Just the facts," he recalls. "We were taught that one had to maintain distance and not feel anything about what we were seeing—painful as it might be—in order to make appropriate clinical decisions." To Campo, this seemed wrong. "I didn't just want to be a technician. I wanted to be a healer in a broader sense."

After his third year, worried he'd made a mistake, he left medical school and enrolled in a creative-writing master's program at Boston University, where he spent a year studying with poets Derek Walcott and Robert Pinsky. "That was a watershed moment," he says. "All these poems, all these stories, just poured through me." Campo wrote about being Cuban and being gay; he wrote about erotic love and family and citizenship—and he wrote about his patients. "I think I drove my poetry classmates a little mad, because I

would come home and write, like, 20 sonnets in a night."

He returned to HMS renewed and reoriented, and after graduation headed to San Francisco, for the internship year that would become such a crucible. It sometimes feels odd to look back now, he says, at how hard the struggle was to balance medicine with poetry, how alone it made him feel. These days, "I can't imagine one without the other," he says. "They are so integrated for me in my experience of being a doctor and caring for people."

### **"Letting go of feelings they've bottled up"**

CAMPO BEGAN teaching at HMS in 1996. Some things have changed in the decades since. Medical schools now speak openly about the need to foster empathy in students, and around the coun-

try, doctors and scholars like Campo have been advocating with some success for what is sometimes called "narrative medicine," or the "medical humanities"—the idea that engagement in literature and the arts makes for better, more sensitive physicians. "We are our physical bodies, where diseases occur," Campo explained to

## **IMMUNOLOGY**

You died; what else is there to say? I could say AIDS,  
but that was what your blood kept saying, tubes  
of meaning that the lab deciphered. Days,  
I could say, passed not solving Rubik's Cube,  
as scrambled as your brain became. I could  
say love, but what fucking good would that do.  
I could say that I loved you like I should,  
but now I've built up a resistance too.  
I could say nothing. Or I could say why,  
but what is asking when I should be saying.  
I could say something lyrical or cry  
the way I wasn't capable of crying.  
I could say what I couldn't say back then:  
I don't know how to die, so you begin.

one recent audience of clinicians, “but we are also our words and language. And it’s incumbent on us as healers to think about how language shapes the experience of illness.” In 2015, HMS launched the Arts and Humanities Initiative, a program intended to cultivate empathy, reflection, and humanism among students, and to sharpen their ability to communicate and relate. Campo is its director of literature and writing programs.

Outside the formal courses and workshops he leads at HMS, Campo organizes a more casual gathering every month or so at his home. It’s intended for students, but anyone is welcome. Over homemade cookies and flan—or roast pork and rice and beans (“Cuban food is my specialty,” he says)—the group spends a few hours reading and discussing poems and writing their own reflections, often about a particular theme: death and dying, delivering bad news, renewal and resilience, the social determinants of disease. Campo’s reading list includes authors one might expect—William Carlos Williams, John Keats, both physician-poets—but also Walt Whitman, Mark Doty, Audre Lorde, Lucia Perillo, and Danez Smith.

The gatherings are extremely popular, and Campo has to limit attendance to 20 or so people. “The email goes out,” says fourth-year student Robert Weatherford, “and 10 minutes later it’s full.” The structure of the sessions allows people to open up, completely unguarded, he adds. Elisa New has attended a few times and says it’s not unusual for participants to cry. “Medical students are extremely stressed-out people,” she says. “They’re seeing things and participating in human joys and sorrows—especially sorrows—that they find shocking, and hard to assimilate.” At Campo’s seminars, “students leave with a text that they’ve understood with a bunch of other people, and that can continue to supply wisdom to them in their lives. It allows for a kind of letting go of feelings they’ve bottled up, but it also fills their tanks with ways of understanding what they’re going through.”

Campo knows that, too. As much as humanistic exploration can improve care for patients, it is also healing for physicians. It keeps them whole, especially as data and technology in medicine overshadow the doctor-patient relationship. “Right now, we’re in an epidemic of physician burnout,” he says. Soaring numbers of doctors and medical students report feeling depressed, fatigued, anxious, and suicidal; a survey released in January found more than 40 percent of physicians suffer from burnout. At the same time, research demonstrates the ameliorating effects of the humanities. A 2018 study in the *Journal of General Internal Medicine* found improvements in wisdom, empathy, emotional intelligence, and tolerance for ambiguity.

\* \* \*

ON A MONDAY in mid March, Campo was in a basement conference room in Beth Israel Deaconess’s infectious-disease division, a tiny space tucked behind a clinic, where he’d come to lead a lunchtime seminar on poetry about HIV and AIDS. At about 12:30, people

started trickling in—doctors mostly, but also a few residents and interns—until about a dozen were sitting in the chairs Campo had carefully arranged around the enormous table. He handed out copies of several poems and asked if anyone had encountered narrative

medicine before. Some tentative nods. “How do stories affect us?” he asked a few minutes later, circling back. “When a patient tells you a story, how does that change your view?...How might it help you?” By dispelling assumptions, one woman answered; by clarifying decisions, said another. Someone noted that telling a story can make both patient and caregiver feel better, closer. Then a white-haired doctor spoke the word Campo was looking for: empathy. “Having lived through the AIDS epidemic when there were no therapies,” he said, “I have never been able to get out

of my mind the last months of a very bright, productive young man, dying of AIDS, who had never been able to tell his parents that he was gay or had AIDS.” He stopped for a moment, remembering. “And just the anguish I thought that must be for him.”

All at once, the air in the room seemed to shift. A pause deepened. The group turned to the poems—Assoto Saint’s “Nuclear Lovers,” Thom Gunn’s “The J Car,” Marie Howe’s “What the Living Do”—reading them aloud and poring over images, emotions, things left unsaid. They talked about survivor guilt and the small meaningful moments—some traumatic, some beautiful, some ordinary—that unfolded every day in their jobs. They teased out metaphors and tragic ironies; they talked about how a poem’s orderliness works to contain uncontrollable grief, and how poetry’s physicality—the rhythm, rhyme, line breaks, the shape of words and stanzas—evokes the experiences of the body.

“What other thoughts?” Campo asked the group again and again, waiting as their shy silences turned to searching answers. Reading Howe’s poem, addressed to her brother, who died from AIDS, one doctor was reminded of encounters with surviving family members after a patient’s death. “That moment when you’re clearly not there to provide health care for the person who is lost, but as a moment of memory,” he said. “I think about the witness we can bear for the people left behind.”

And then suddenly it was 1:30. Campo looked up at the clock and smiled ruefully back at the table. Three poems remained unread. “And I’m sorry we didn’t have a chance to write together,” he said. As the group began to rise from their chairs, not quite shaking off the spell of the past hour, one doctor leaned toward Campo. “This was wonderful,” he said. “You’ll have to come back.” ◻

Associate editor Lydialyle Gibson wrote about opioids in the March-April issue. (An earlier article about Campo’s work, “Sestinas from the Clinic,” by professor of English Stephanie Burt, appeared in the January-February 2014 issue of this magazine.)

## HOSPICE ROUNDS

One looks at me as from a distance.  
Another does not cry; “It’s only pain,”  
she says, as if cancer were just a nuisance  
one looks at square, from a distance.  
Outside the window, sunshine, like persistence.  
Yet how Bach from the radio seems like rain.  
She looks at me. From this great distance  
I’m another who cannot cry. Or feel pain.



For a personal story about Campo’s influence, see [harvardmag.com/campo-student](http://harvardmag.com/campo-student).



# Harry Elkins Widener

Brief life of a theater-loving bibliophile: 1885-1912

by DANIEL BLANK

OF THE more than 3,000 books that Harry Elkins Widener, A.B. 1907, collected during his short lifetime, one is missing from his Memorial Library: a rare 1598 edition of Francis Bacon's *Essays*. Too special to ship home separately with the other items he had acquired during a London book-buying trip, the small volume was with him when he boarded the *Titanic* on April 10, 1912. After he perished in the shipwreck, a legend emerged about his attachment to the book. In one version, he refused to board a lifeboat because he had to retrieve it from his cabin; in another, he told his mother he had placed the volume in his pocket, declaring, "Little Bacon goes with me!"

From the outset, the Bacon anecdote was linked to Widener's tragic, untimely death. But the volume also speaks to his character in life, and many of its short treatises seem carefully calibrated to Widener's own pursuits. The first essay, "Of studie," would have resonated with his constant devotion to learning. According to Bacon, that process cannot take place in isolation: studies "perfect nature, and are perfected by experience."

Widener abided by this philosophy throughout his life. In high

school, he took part in almost every aspect of student life, including the tennis team, the Cadet Corps, and the debating club. Eventually, he hoped to build his own educational institution, uniting his great passions for books and scholarship. Meanwhile, though, he made plans to benefit one already in existence. "I want to be remembered in connection with a great library," he famously told a friend before departing for England in the spring of 1912—by which point he had already made arrangements for his collection one day to benefit the students and scholars of his most beloved institution, Harvard.

Though born to extreme wealth (amassed from railroads, steel, and tobacco, among other ventures), he often told his regular booksellers that he had taken on as much "debt" as he could carry. A convenient line, to be sure—Widener was as savvy as he was charming and amiable—but also a testament to his caution and inclination to follow another of Bacon's assertions: "Some books are to be tasted, others to be swallowed, and some few to be chewed and digested." Widener preferred to chew and digest a few books, rather than taste the lot. Books to him were personal friends. He "lived with his beloved volumes," a friend wrote, "for his library was his bedroom, his study, his workshop."

Yet he had difficulty resisting certain items. In February 1911 he was offered an extremely rare volume, *The Undergraduate Papers*, a short-lived nineteenth-century magazine, published by Oxford undergraduates, containing four essays by the future poet and playwright Algernon Charles Swinburne. This would have been a treasure for any bibliophile, but to Widener, it was also a window into the experience of a few students who would go on to make their marks on the literary world. He initially refused it, but in May he caved, with an urgent four-word telegram: "will take undergraduate papers."

It is not hard to see the volume's appeal. Its epigraph, "And gladly wolde we learn and gladly teach," slightly misquotes a passage from Chaucer's *Canterbury Tales*, describing an Oxford scholar who preferred 20 books at the head of his bed to rich robes or fancy musical instruments. Years later, Widener's classmates rephrased a similar quotation from Ecclesiasticus to commemorate him in his Memorial Library: "He la-



Photograph courtesy of the Hill School Archives



**Bibliophile behind the footlights:** Harry Widener (at right, around 1907) acted in high school in an English version of a French farce (at left; front row, far left) and played Abadia Burdock Butterworth (above), husband of a “masterful woman,” in the 1907 Hasty Pudding show, *The Lotos-Eaters*.

bored not for himself only, but for all those who seek learning.”

The volume also reflects Widener’s passion for theater. Swinburne’s first essay, “The Early English Dramatists,” discusses Shakespeare’s contemporaries Christopher Marlowe and John Webster. As a high-school senior, Widener had acted in a student production, *A Scrap of Paper*, playing a scientist whose most memorable moment came as he unknowingly used a crucial love letter to wrap a “rare beetle specimen.” That performance earned praise from the student newspaper: “special mention should be made of... Widener as the placid naturalist, very much taken up in his work.” Given his future endeavors, he was exceedingly well cast.

At Harvard, he joined the Hasty Pudding Club, performing in its 1907 production, *The Lotos-Eaters*. Observers often note that his Pudding involvement inspired his purchase of illustrated costume-

books, but his interest in theater ran even deeper, and he acquired valuable seventeenth-century collections of the playwrights Francis Beaumont, John Fletcher, and Ben Jonson, as well as all four folios of Shakespeare. To him, student theater encapsulated much of what was so special about academic experience: an opportunity to collaborate with his classmates in an activity deeply bound up with institutional tradition.

In a revised 1625 edition of the *Essays*, Francis Bacon included a new essay, “Of Masques and Triumphs,” which briefly discusses contemporary forms of theatrical entertainment. Such performances, it begins, “are but toys to come amongst such serious observations”: unworthy of being discussed alongside topics like “studies.” Widener could not have disagreed more. For him, *A Scrap of Paper* and *The Lotos-Eaters* were not separable from his more “serious” academic endeavors, but rather an integral part of them, the very essence of the student experience at the schools he so adored. As far as Bacon’s *Essays* went, he no doubt preferred the 1598 edition. ▢

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# Raw and Red-Hot

## Could inflammation be the cause of myriad chronic diseases?

**I**N 2007, associate professor of medicine Samia Mora and colleagues published a study of exercise that sought to understand why physical activity is salutary. They already knew that exercise reduces the risk of cardiovascular disease as much as cholesterol-lowering statin drugs do. By analyzing biomarkers in the blood of 27,055 women participating in a long-term study, and other objective measures, they hoped to tease out the source of this effect. How much of the benefit was attributable to improved blood pressure? To lower body weight? Or to something else? The women had donated blood in the 1990s when they entered the study. Eleven years later, the researchers analyzed this frozen blood to see if they could find anything that correlated with long-term cardiovascular outcomes such as heart attack and stroke. “We were actually surprised that reduced inflammation was the biggest explainer, the biggest contributor to the benefit of activity,” says Mora, “because we hadn’t hypothesized that. We knew that regular exercise does reduce inflammation over the long term, but we also knew that acute exercise transiently *increases* inflammatory biomarkers during and immediately after exertion.” About a third of the benefit of regu-

lar exercise, they found, is attributable to reduced inflammation.

The anti-inflammatory effect of exercise was much greater than most people had expected. That raised another question: whether inflammation might also play a dominant role in other lifestyle illnesses that have been linked to cardiovascular disease, such as diabetes and dementia.

In 2017, two cardiologists at Brigham and Women’s Hospital in Boston, who suspected such a link, published the results of a human clinical trial that will forever change the way people think about inflammation. The trial, which involved more than 10,000 patients in 39 countries, was primarily designed to determine whether an anti-inflammatory drug, by itself, could lower rates of cardiovascular disease in a large population, without simultaneously lowering levels of cholesterol, as statin drugs do. The answer was yes. But the researchers went a step further, building into the trial additional tests seeking to clarify what effect the same anti-inflammatory drug, canakinumab, might have on illnesses seemingly *unrelated* to cardiovascular disease: arthritis, gout, and cancer. Only the researchers themselves, and their scientific colleagues, were unsurprised by the outcome. Lung cancer mortality dropped by as much as

by **JONATHAN SHAW**

77 percent. Reports of arthritis and gout also fell significantly.

In medicine, believing something is true is not the same as being able to prove it. Because the idea that inflammation—constant, low-level, immune-system activation—could be at the root of many noncommunicable diseases is a startling claim, it requires *extraordinary* proof. Can seemingly unconnected illnesses of the brain, the vasculature, lungs, liver, and joints really share a deep biological link? Evidence has been mounting that these common chronic conditions—including Alzheimer's, cancer, arthritis, asthma, gout, psoriasis, anemia, Parkinson's disease, multiple sclerosis, diabetes, and depression among them—are indeed triggered by low-grade, long-term inflammation. But it took that large-scale human clinical trial to dispel any lingering doubt: the immune system's inflammatory response is killing people by degrees.

Now the pertinent question is why, and what can be done about it. The pharmaceutical industry is deeply interested in finding ways to stop inflammation with medicines like canakinumab, an orphan drug that blocks a specific pro-inflammatory pathway called IL-1beta. But some researchers suggest that the inflammatory process—a normal and necessary part of the natural immune response—has itself been misunderstood. Scientists know that the process can be turned on and off, but have only recently understood that this doesn't mean normal physiology will resume once the inflammation caused by infection, injury, or irritant has been shut down. Instead, the restoration of health is an *active phase* of the inflammatory process itself, facilitated by a little-known class of molecules called pro-resolving mediators—the protectins, resolvins, maresins, and lipoxins—brimming with marvelous, untapped, regenerative capacities.

### Origins of Atherosclerosis

THE 2017 clinical trial, called CANTOS (Canakinumab Anti-Inflammatory Thrombosis Outcomes Study), is the result of a long-term collaboration between Paul Ridker and Peter Libby, who suspected as long ago as the 1980s that inflammation played a role in cardiovascular disease. Ridker, an epidemiologist who is Braunwald professor of medicine, came to this conclusion through studies of cardiac patients. He is the physician-scientist who first demonstrated that a molecule called C-reactive protein (CRP), easily measured by a simple and now ubiquitous blood test, could be used like a thermometer to take the temperature of a patient's inflammation. Elevated CRP, he discovered years ago, predicts future cardiovascular events, including heart attacks. Although nobody knows what it does biologically, this marker is downstream from IL-1beta, and thus provides a reliable yardstick of that pro-inflammatory pathway's level of activation.

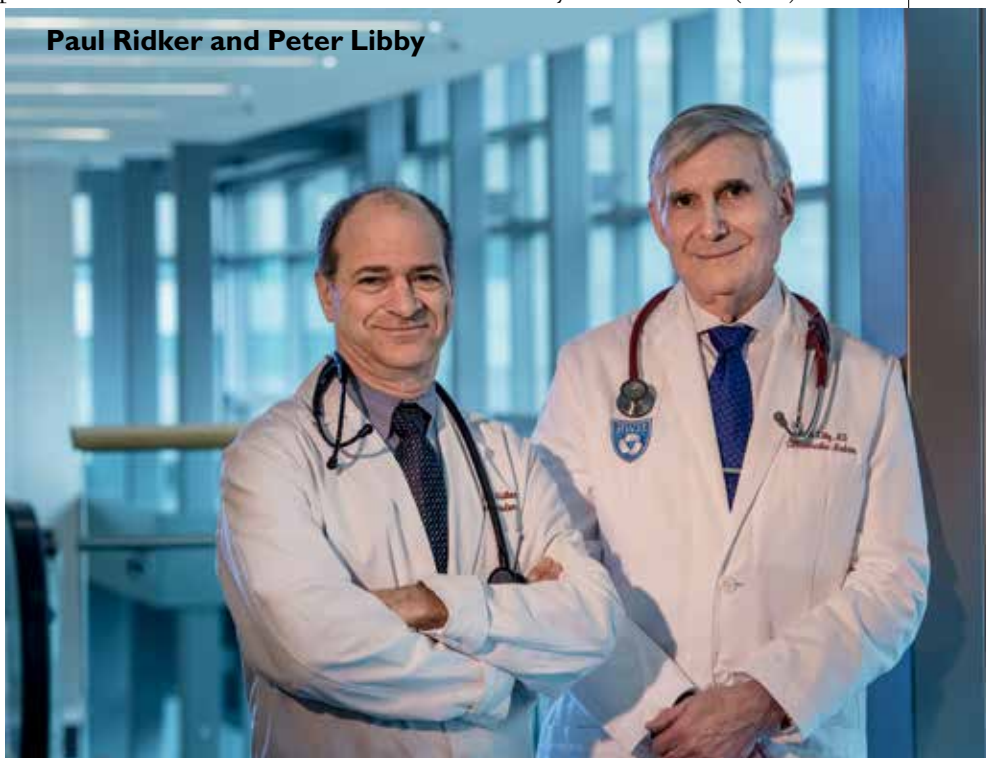
Libby, the Mallinckrodt professor of medicine, is a bench scientist and clinician with expertise in the study of heart disease. In the 1980s, orthodoxy within the cardiovascular establishment held that circulating fats (including cholesterol) build up in the arteries of patients with progressive cardiovascular disease. But no one knew why or how the plaques formed. It took work by some of the most distinguished cardiology researchers of the era to lay the ground-

work that eventually produced an understanding of the molecular mechanisms that drive deposition of those plaques.

Today, in his Harvard Medical School (HMS) office, Libby sketches the origins of atherosclerosis. The interior walls of blood vessels, he explains, are made from smooth muscle cells, lined in turn with endothelial cells that are in direct contact with circulating blood. When a problem arises, caused by anything from cholesterol to bacteria, the vascular system recruits white blood cells, the immune system's front-line guardians, to the site. Two Harvard professors of pathology, Michael Gimbrone Jr. and the late Ramzi Cotran, figured out that naturally occurring adhesion molecules could attract these white blood cells and get them to stick to the endothelium lining the arteries. Their experiments implicated a pro-inflammatory signal called interleukin-1 (IL-1), which is produced by both circulating and tissue-based immune cells.

Libby, then at Tufts, followed their work closely. IL-1 had been discovered in 1977 by one of his Tufts colleagues, Charles Dinarello, who had been focused on understanding what causes fever, one of the cardinal signs of inflammation. The others, described by Aulus Cornelius Celsus in the first century C.E., are redness (*rubor*), which

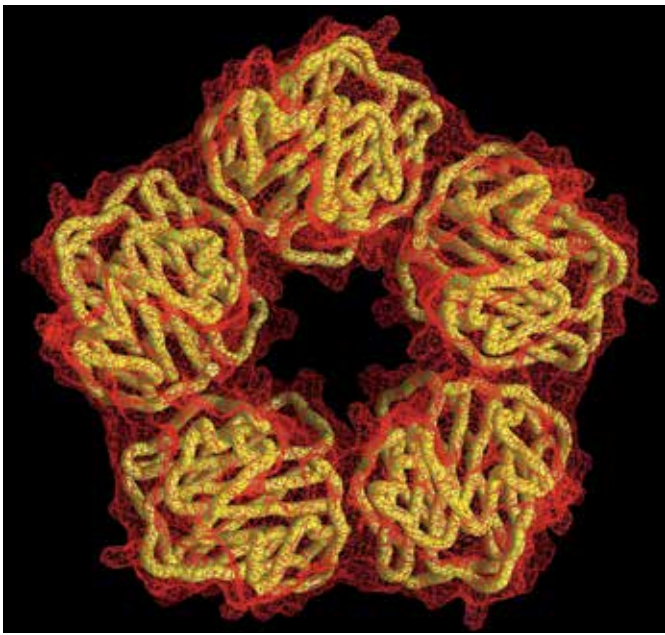
Paul Ridker and Peter Libby



occurs when the endothelial lining of arteries dilates to permit more blood flow; swelling (*tumor*), caused by endothelial cells leaking protein, which carries water; and pain (*dolor*). By measuring the factors in rabbits' blood, Dinarello was able to isolate and then clone the specific factor—called a pyrogen—that causes fever: interleukin-1.

But before this inflammatory pyrogen even had a name, Dinarello gave some to Libby, whose lab was down the hall. Libby discovered that arterial wall cells not only responded to IL-1, but could *secrete* it. This was heretical, he explains, because it was thought that only “a properly pedigreed immunological cell” could produce such signals. Now it was clear that the cells of the artery walls were capable of summoning an immune response. Libby further found that IL-1, by altering gene expression in local blood vessel cells, *amplifies* its signal





T. GREENHOUGH & A. SHRIVE/Wellcome Image

**The pentameric molecular structure of C-reactive protein, a biomarker of inflammation that circulates in the blood. Cardiologists use CRP to predict a person's future risk of heart attack.**

at the site of the disease. But, “No one in cardiology was interested in inflammation” then, Libby notes. In fact, none of his early work on IL-1 appears in the cardiology literature: “My papers were rejected,” he recalls; “my grants turned down.” In 1986, he published his first paper showing that the lining of the arteries could produce IL-1 in the *American Journal of Pathology*.

### The Evolution of Excessive Inflammation

TODAY, inflammation is a focus of intense research in many fields. Roni Nowarski, assistant professor of neurology and immunology, explains that inflammation is important across a range of seemingly distinct pathologies because immune cells are everywhere, even resident in organs, where they play an important role in monitoring and maintaining health. The paradigm that everyone knows—that the immune system's front line consists of circulating white blood cells that patrol the body to guard against infection and injury—is a bit misleading. An important arm of the immune system resides outside the blood vessels. Pac-Man-like macrophages occupy tissues, where they engulf and digest invading pathogens, debris, and dying cells. An invaluable role of these tissue macrophages is to “act as sensors,” Nowarski says. “They have hard-wired mechanisms to detect signals that are out of the ordinary,” and so play a critical role in maintaining a healthy equilibrium. “If there is any fluctuation,” he notes, “the role of these cells is to return the system to this point of homeostasis.”

These tissue-based white blood cells can also call for backup. When that happens, the heavy guns of the immune system, neutrophils, are first to arrive on the scene. These are “potent, aggressive cells” that can kill infectious agents, Nowarski explains, but “can also cause a lot of damage to healthy tissue.” That's why most neutrophils are short-lived, with a tightly regulated lifespan of just a few hours: unchecked, they would cause serious harm. Neutrophils, which originate in bone marrow, also play a role in relaxing the endothelial barrier that separates blood from tissue, so immune cells can cross that barrier to reach the site of attack. Other signals—like the IL-1beta protein

that Libby and Ridker blocked in their trial—promote adhesion, in order to capture circulating immune cells that reach the damaged tissue. This stickiness, though desirable in the short term, is also the basis of the process that can lead to atherosclerosis if it continues indefinitely. The endgame of a *healthy* immune response, on the other hand, involves cleanup, says Nowarski: even the death and uptake of neutrophils as they are gobbled by macrophages serve as signals to resolve inflammation.

Why inflammation sometimes *doesn't* resolve, and becomes chronic instead, is in some sense easily explained in evolutionary terms. “If I'm living 70,000 years ago at a time of food shortage,” says Ridker, “and there's a drought, the 5 to 10 percent of people who will survive that drought are likely to have insulin resistance”—a tendency to store more calories as fat. “They're going to live a little longer,” he continues. “When it finally rains, food comes, and that's the survivor group. In a modern world of too much food, [insulin resistance] leads to diabetes. But in prehistory, it's terribly important for survival.” While stored fat is beneficial during times of famine, it also harbors potentially damaging pro-inflammatory signaling molecules (see “Eating to Excess: Metabolic Inflammation,” below).

A second evolved factor is that prior to the development of antibiotics, disease “wiped out half the population before age five. So, people were under evolutionary pressure to have a hyperactive immune system.” Now, “most everybody survives childhood infections,” thanks in large part to vaccines. “But this hyperactive immune system remains, and adversely affects aging.”

“The third piece—beyond starvation and infection—is trauma,” Ridker says. “The saber-toothed tiger—or for women, bleeding to death during childbirth—selects on a genetic basis for hypercoagulable blood. So here we are, by definition all of us lucky enough to be alive today, with a consistent ancestry all the way back to the beginning. And we have all inherited a pro-inflammatory, insulin resistant, pro-coagulable state. Under the circumstances,” he continues, the fact that “we have an epidemic of diabetes and heart disease makes complete sense.” Evolutionary pressures have shaped a physiological system which is phenomenally well suited for surviving childhood infection, starvation, and predation. “But it contributes to many disorders of chronic aging, because from an evolutionary perspective, if you've had your kids, you're kind of done.”

Evolution also explains why the underlying biology appears so similar from one disease to the next. Kennedy professor of child neurology and mental retardation Rudy Tanzi studies Alzheimer's disease, which is well known for causing plaques and tangles in the brain. In 2008, Tanzi and his colleagues discovered a gene that clearly played a role in the development of the disease, but didn't know how it worked. Five years later, they discovered that the gene is the “on” switch for inflammation in the brain. Tanzi says the work that has most influenced his thinking is the body of resilience studies conducted by Teresa Gomez-Isla, an associate professor of neurology based at Massachusetts General Hospital, who has shown that “you can have a brain full of plaques and tangles, but if you don't have neuroinflammation, you don't get the disease”—a finding that neatly parallels the pathological interactions between plaques and inflammation in atherosclerosis. This basic research on inflammation thus underlies understanding of entire classes of human illness.

Such similarities among diseases of metabolism and inflammation suggest that they are indeed rooted far back in evolutionary history. Gökhan S. Hotamisligil, Simmons professor of genetics and

metabolism at the Harvard T.H. Chan School of Public Health, has constructed his research for the past 25 years on the premise that this shared history suggests shared *biological* mechanisms as well. The ailments that cluster most dramatically, he points out, are “chronic metabolic diseases” such as diabetes, cardiovascular disease, stroke, Alzheimer’s, nerve degeneration, and cancer. In general, a person who has any one of these illnesses is more likely to develop the others. “This is exactly the same cluster that emerges during aging,” he says. “All of the age-related pathologies exhibit as clusters of non-communicable diseases, except in a much shorter period of time, and earlier in the lifespan.”

“That tells us that these illnesses are part of our natural history, our biological heritage,” continues Hotamisligil, who directs the Sabri Ülküer Center for Metabolic Research. “If these two clusters emerge in two separate conditions in exactly the same way, that must come from deeply embedded evolutionary vulnerabilities.”

Critics might suggest that inflammation is just a symptom in these diseases, rather than a cause. But Hotamisligil says, unequivocally, “Chronic inflammation is uniformly damaging and is absolutely causal to the process, because if you interfere with it, you can reverse the pathology.” And this ability to control such diseases simply by reversing inflammation is a biological response, dating far back to the time of a common ancestor, that has been retained across diverse species of animals to the present day, he says, pointing to experimental evidence: “If you can make *Drosophila* [fruit fly] diabetic, and then block the inflammatory response systems, you can cure diabetes in *Drosophila*, the same way you can reverse it in the mouse, in primates, and in humans, provided that you do it with the right tools. Of course, the higher the organism, the more complex these pathways are, so it takes more effort to define the precise mechanisms to manipulate.”

### Eating to Excess: Metabolic Inflammation

SEEKING THE ORIGINS of inflammation, Hotamisligil asks, “What is the most primordial process in the emergence of life? Metabolism. Energy management. And then, of course, the next critical process to emerge within cells is the ability to defend. And so that brings in the immune system, which is younger than metabolism, but much older than many other systems.” In some of the simplest organisms, he points out, energy management and immune functions are packaged in the same organ, such as the fruit fly’s fat body. But even as these functions became specialized and divided among three or four organs in more complex organisms, they retained their evolutionary memory. “They share many tricks,” he says, because the “immune response is enormously expensive, energy-wise.” The intimate relationship between the metabolic and immune systems, he believes, has been maintained because it takes “tremendous energy to mount an effective immune response. While this link is essential to maintain health and homeostasis, abnormalities that develop over time, as in the case of obesity, carry a great risk of damage.”

The metabolic stress that is a hallmark of modern life, the stress that the body has *not* evolved to handle, is constant eating, he continues. When people eat, energy and nutrients enter the body rapidly, are processed, produce in turn a lot of by-products, and then need to be reduced to “functional substances that are distributed

throughout the body, and then disappear very quickly. Many cells and tissues actually undergo a huge amount of stress during this process,” he explains, “as they store appropriate nutrients and dispose of harmful intermediates.” Part of this process also involves mounting an immune response. “The pancreas, for example, must secrete four to five hundred milliliters of enzymes every day” to be able to manage the incoming energy load with every meal. “If you place these organs under constant stress, they start malfunctioning.” The consequence is that “right now, one out of every 10 individuals has diabetes. One out of every four individuals has fatty

**“Chronic inflammation is uniformly damaging and is absolutely causal to the process, because if you interfere with it, you can reverse the pathology.”**

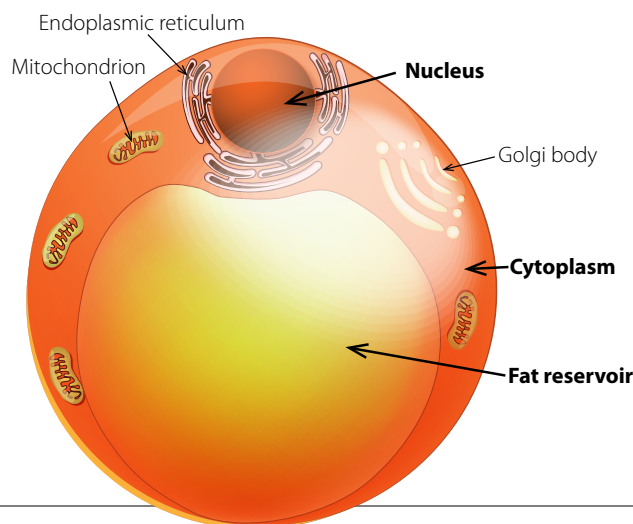
liver disease. And if you reach a certain age, one out of every three individuals will develop neurodegenerative disease.”

The metabolic stress that underlies these conditions comes from the daily imbalance between how much energy people consume and how much they need, and can process in a healthy manner. The long-term consequence of overconsumption, combined with lack of sufficient expenditure, is stored energy—the accumulation of fat. Excess body fat, especially in the wrong places, is an *additional* risk factor for inflammation.

Clinical studies implicating stored fat as a source of inflammation have been buttressed by basic research that shows that adipose tissue—body fat—is laced with immune cells, which become more abundant with weight gain, perhaps because fat cells can secrete alarm signals that summon white blood cells. “A fat cell is almost like a primitive immune cell,” says Hotamisligil. “It can request the assistance of immune cells when in trouble, but if the stress continues, and the immune cells remain, they start changing their character and behavior from helpful to harmful.”

And there is additional evidence that the *physical structure* of fat cells, or adipocytes, which have been described by Stephen O’Rahilly of the University of Cambridge as resembling a fried egg

**A fat cell, or adipocyte, is more than 90 percent triglyceride. If the thin cell wall enclosing this droplet of fat ruptures, an inflammatory response ensues.**



ISTOCK/ANDES





increases the risk of developing Type 2 diabetes.

But inflammation in muscle, he says, is “much more complicated.” In fact, “it is likely that you *require* inflammation in exercise,” and that the inflammatory response should not be suppressed—for example, by taking ibuprofen—because that signal is likely “telling the muscle to remodel.”

Together with Rasmussen professor of immunohematology Diane Mathis, Spiegelman is about to begin studying exercised muscle, a natural system that incorporates and manages inflammation on a regular basis. Mathis studies regulatory T-cells (Tregs), white blood cells that are actively involved in maintaining the internal stability (homeostasis) of tissues. Recently, she has sought to understand the role of Tregs in repairing muscle *injured* as a consequence of physical trauma or disease.

Now, by studying muscle that has been *exercised*, she and Spiegelman hope to gain a better understanding of how inflammation is “supposed to happen, and how it eventually *resolves*.”

The sequence, he says, occurs in four steps:

“There’s damage, inflammation, resolution of inflammation, and repair. These phases are very different.” He and Mathis hope to learn how these processes unfold—and ultimately, perhaps, to learn how to stimulate, support, or mimic the body’s natural mechanisms of resolution and repair.

### Controlling Inflammation, Boosting the Immune System

EPIDEMIOLOGICAL STUDIES have helped clarify the importance of lifestyle choices in controlling inflammation. Samia Mora’s 2007 research highlighted the role of exercise. In 2018, she and her colleagues published a study of the Mediterranean diet, which is known to improve cardiovascular health (and also thought to protect against neurodegenerative diseases such as Alzheimer’s and Parkinson’s). Mora examined the effect of this diet on the women

who previously participated in the exercise research, 20 years after they had entered the original study. They found that adherence to a diet rich in vegetables, fruit, nuts, legumes, and olive oil, that also includes fish and chicken, but that is very low in red and processed meat and sugary foods or drinks, led to a lower risk of adverse cardiovascular

events. As in the exercise study, they found that about a third of the benefit was due to reductions in inflammation.

But some of the diet’s benefit could not be explained, meaning that an untested factor was enhancing its healthful effect. Mora speculates that the diet (which includes probiotic foods such as Greek yogurt) might support the health of the gut microbiome, or might stimulate the parasympathetic nervous system, as exercise does, to help people relax. Alternatively, the diet might be protective against oxidative stress of the kind that comes from pollution or smoking. Perhaps unsurprisingly, each of these possibilities is linked to inflammation.

The great difficulty with interventions involving altered diet

atop a beach ball of fat—with a tiny rim of cytoplasm encircling the droplet of triglyceride—puts them at risk of rupture. Adipocytes are “cells at the edge under the best of circumstances,” explains Hotamisligil. Ninety percent or more of a fat cell’s volume is triglyceride, a substance chemically similar to diesel fuel. The remaining 10 percent is all the space it has for the organelles that perform the normal functions of cell biology. This bloated cell is thus vulnerable to stress, even to the point of bursting and death. When overloaded with stored lipid, fat cells begin to lose their functional and structural integrity and may start spilling their toxic cargo. When cells fail like this, the immune system kicks in, initially to assist in clean-up. Macrophages engorge themselves on the leaking fuel, and may die themselves during this process. But in the long run, what is meant to be a mutually beneficial interaction between the metabolic and immune systems turns into a very dangerous

“To treat excessive inflammation...we don’t want to block the inflammatory response. We want to stimulate the resolution pathways.”

and harmful relationship. Obese individuals thus live in a state of chronic stress and inflammation; in fact, many people do, because their energy intake vastly exceeds their needs. Hotamisligil calls this chronic energy overload, and the resulting abnormal immune response, *metaflammation*: metabolic inflammation.

“It is pretty clear that inflammation is a bad actor in obesity,” says Korsmeyer professor of cell biology and medicine Bruce Spiegelman. His lab was the first to establish the mechanism linking obesity to inflammation—in 1993, when he and Hotamisligil, then a doctoral student, discovered that fat cells produce an inflammatory signal that interferes with the body’s ability to regulate blood sugar. This, in turn,

and increased exercise is that these healthy habits aren't aligned with preferences evolved during millennia of food scarcity. People already know what they *should* be doing—but for most, that knowledge doesn't change behavior. Humans are hard-wired to conserve energy (see “Born to Rest,” September-October 2016, page 9), for example, and to prefer foods that are fatty, salty, and sugary.

This suggests that pharmaceutical interventions that block inflammation may be necessary to check the global epidemic of non-communicable disease. How to do that is not obvious, however. The intervention that Ridker and Libby devised, blocking a single inflammatory pathway with a drug, helped only a fraction of patients with cardiovascular disease. That is probably because a system as important to sustaining life as immune response has evolved redundancies: block one pathway and another will take over.

What the CANTOS study did establish was a biological principle, says Ridker: “Anti-inflammatory and immunosuppressive are not the same thing.” Suppressing an immune pathway like IL-1beta could have led to reactivation of tuberculosis infections or complications of HIV. But it didn't. There was a slight increase in the risk of viral and bacterial infections—but these were “run of the mill infections,” he says. “Had we known in advance, we could very easily have taken care of these with some very simple antibiotics.”

This kind of experiment is important, he continues, because it will change the way drugs like canakinumab, currently classified as an immunosuppressant, are categorized. That opens new areas to investigate, he says: “We can actually give high-risk patients this kind of anti-inflammatory without risking immunosuppression. And that's incredibly useful information for my infectious-disease colleagues.”

Some researchers believe, however, that to prevent certain inflammatory diseases, such as rheumatoid arthritis or lupus, *multiple* inflammatory pathways will need to be blocked to have a large effect. And blocking several of these signaling mechanisms simultaneously, they say, will almost surely suppress the immune system, exposing people to potentially fatal infections.

Hence scientists' interests in another possibility that doesn't include any risk of immunosuppression: resolving inflammation through a recently discovered class of molecules called specialized pro-resolving mediators.

### A Super Family of Resolving Molecules

GELMAN PROFESSOR OF anaesthesia Charles Serhan has been studying how inflammation ends for 25 years. He realized early on that after the immune system's soldiers have fought off an invader, the battlefield is littered with bodies: dead cells and scattered debris. The fact that infection has been defeated does not mean that the affected tissue will automatically, passively, return to normal function. There is another process at work, factors that clean up the mess, remove bodies, and repair systems so that the physiological balance within the tissue can be restored. Working with

other scientists around the world, he discovered a new class of molecules that actively resolve inflammation. “It turns out that there's a whole super family of these,” he explains, “and it's their collapse,” which occurs naturally with aging, that leads to chronic, unresolved immune-system stimulation. “These specialized pro-resolving mediators [SPMs] have been shown in many animal models to reverse inflammation.”

SPMs are unusual immune-signaling molecules, in the sense that they are fats (lipid-derived small molecules), not proteins. They can also mute pain. Their precursors—the substances the body needs in order to synthesize these potent resolving compounds—are the essential fatty acids, including the omega-3 fatty acids EPA and DHA, and arachidonic acid.

In experiments with animals deficient in SPMs, Serhan has shown that injecting SPMs amplifies the magnitude of the healing response, causing injuries to mend more quickly. He emphasizes that revers-

Charles Serhan

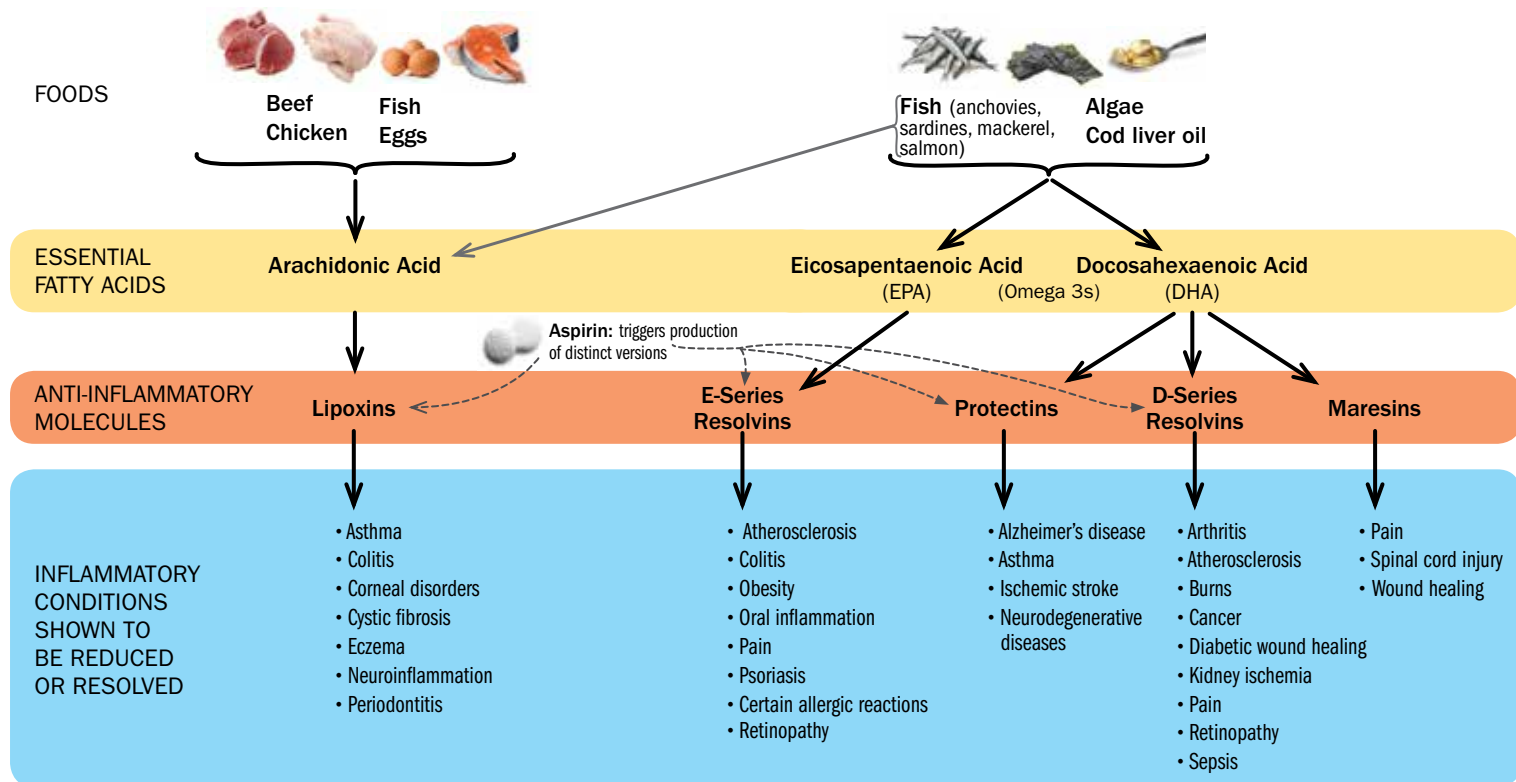


ing inflammation in this way is not the same as blocking it from occurring in the first place. When inflammatory pathways are turned off, there is always a risk that the immune response will be compromised, and that infection will ensue. The SPMs instead work in concert with the immune response by stimulating macrophages “to clear dead cells, debris, and bacteria,” he says. “Then they bring the system back to homeostasis, and begin to push the buttons to signal tissue regeneration.” (They even stimulate the Tregs that Diane Mathis studies to produce an anti-inflammatory signal called IL-10.)

Think about how over-the-counter anti-inflammatories such as ibuprofen and acetaminophen work. They *block* a particular signal. But Serhan discovered that aspirin works differently (and in a multifaceted way): rather than blocking inflammatory signals, it attenuates them. In addition, it has mild anti-coagulant properties that are beneficial in atherosclerosis. And perhaps most importantly, aspirin stimulates the production of at least two classes of health-promoting SPMs. In work published as this magazine went to press, Serhan



# Anti-inflammatory molecules and a sampling of their demonstrated benefits



and colleagues showed that aspirin stimulates the production of a distinct type of SPM that fights cancer tumors in mice, and another SPM that inhibits cancer tumor formation in the first place.

Serhan has recently developed a method for creating blood profiles of individuals that reveal whether they have sufficient levels of these circulating resolving molecules, which include classes of compounds called resolvins, protectins, maresins, and lipoxins. Resolvins, for example, have proven beneficial against periodontitis in rabbits and retinopathy and colitis in mice. Protectins have proven effective in preventing ischemic stroke in rats, and against Alzheimer's in humans. Lipoxins have attenuated pleurisy and cystic fibrosis in mice. And maresins have accelerated wound-healing in mice, and blocked the perception of pain.


More broadly, he has demonstrated the benefits of such SPMs in preventing neurodegeneration, and is beginning to study their use by professional football players, who suffer high rates of tissue injuries. Serhan has shown that SPMs can be used to control the inflammation that occurs when blood flow resumes to tissues that have been deprived of oxygen during surgery. And he has created an inflammation-resolving mouth rinse that has been tested in periodontal disease and shown to be safe. In earlier experiments, he demonstrated that pro-resolving eye drops can be used to control inflammation in the eye, which "naturally makes buckets of this stuff in tears, so you are bathing normally in pro-resolving mediators." SPMs are also abundant in the brain, he has found. These are places where avoiding acute inflammation is absolutely critical: infections of the brain can be fatal, and in the eye can lead to blindness.

Colleagues of Serhan's are using resolvins to control asthma and to stimulate surgical-wound healing. They are also investigating

their effects on the microbiome. Earlier animal studies showed that resolvins reduce rheumatoid arthritis.

Because these compounds have not yet been synthesized as pharmaceuticals, maintaining healthy levels of SPMs is best supported by foods rich in the essential fatty acids EPA, DHA, and arachidonic acid. "There's a reason they are called 'essential,'" says Serhan. "You can only get them from your diet." Fish contains all three, although arachidonic acid is also present in chicken, eggs, and beef, and EPA and DHA can be obtained from certain plant sources and algae. It's ironic, he points out, that veterinary science has ensured that lab animals (and even pets) in the United States eat better than most people do, because animal food is fortified with omega-3s. Most Americans, he believes, don't eat enough of them.

However illuminating Serhan's molecular work has proven, though, the conceptual contribution of his research may be his lasting legacy. "One of things that we are trying to teach people from what we are learning is that we don't want to knock anything out," he says. "We want to fine-tune it." Molecules such as IL-1 $\beta$ —the target of the CANTOS trial—are important in the innate immune response, he explains. "To treat excessive inflammation, whether it is chronic or the result of an acute tissue injury, we don't want to block the inflammatory response. We want to stimulate the resolution pathways."

The scientific study of inflammation has transformed human understanding of this innate biological response. What once were considered merely symptoms—redness, swelling, fever, and pain—are now implicated as the source of many afflictions. For healing, Serhan foresees, we should also look within. 

Jonathan Shaw '89 is managing editor of this magazine.





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**I**N THE SPRING of 1864, Oliver Wendell Holmes Jr. was fighting in the Civil War as a Union Army captain. He had enlisted three years earlier, soon after the war began, when he was 20 and in his last term at Harvard College, in the class of 1861. As an infantry officer in Virginia, he had received a near-fatal wound at Ball's Bluff in his first battle, where he was shot through the chest in a Union raid that backfired. He had proved his valor by rejoining his men after he was shot, defying an order to have his wound tended. At

Antietam a year later, where he was briefly left for dead on the bloodiest day in U.S. Army history, a bullet ripped through his neck. At Chancellorsville, in another eight months, an iron ball from cannon shot badly wounded him in the heel. Near there in winter, "Holmes lay in the hospital tent too weak even to stand as he suffered the agonies of bloody diarrhea," Stephen Budiansky, M.S. '79, writes in a new biography of Holmes: "The disease killed more men than enemy bullets over the course of the Civil War."

That spring, generals Ulysses S. Grant and Robert E. Lee met on the battlefield for the first time. Grant, the newly appointed commander of the Union Army, had shifted its main target from Richmond, the capital of the Confederacy, to Lee and his roving Army of Northern Virginia. The Battle of the Wilderness was the opening fight. In fierce encounters over two days, of 119,000 Union soldiers, one of seven died or was injured; one-sixth of Lee's 65,000 troops were casualties. Holmes filled a new role as an officer on horseback in the Wilderness. As Budiansky recounts, he faced "the most intense and nightmarish episode of the entire war for him, nine weeks of nonstop moving, fighting, and killing that would often find him falling asleep in the saddle from sheer fatigue, escaping death by inches, and witnessing carnage on a close-up scale that eclipsed even his own previous experiences."

It is impossible to imagine a current Supreme Court justice being forged in such

circumstances—with the survival of the nation, as well as of the multitudes fighting, so uncertain. In part because of changes that Holmes himself brought to the law, and ultimately to the Court, it is now a very different institution from the one he served on. The lives of the justices appear distant from the experiences of their fellow citizens. Yet there are important parallels between Holmes's era and the current one, and between the challenges for the Court in

his time and now. A century ago, as today, politics splintered the nation and inequality segregated it. The Court was subject to ideology, unchecked partisanship, and the kind of political warfare expected only in high-stakes campaigns.

In these circumstances, Budiansky's new *Oliver Wendell Holmes: A Life in War, Law, and Ideas*—coming during the centennial year of Holmes's most momentous opinion, which was a visionary dissent about free speech—is especially consequential. It's the latest in a considerable library of biographies and studies. Many scholars have recognized the war's critical influence on Holmes. Yet Budiansky, whose previous books include six on military history, renders Holmes's war, and how it lodged in his psyche, as no writer has before.

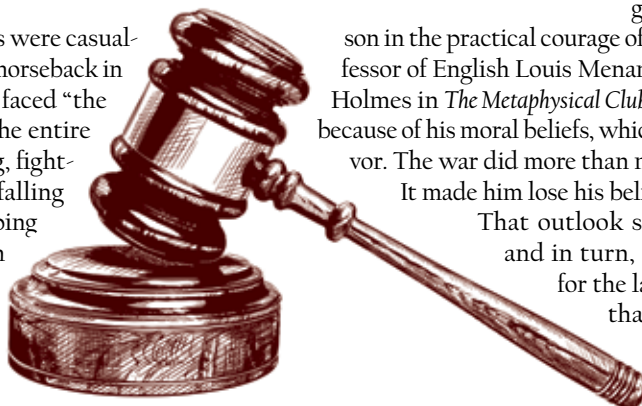
"In a war where romantic chivalry, high-minded zeal for a great cause, and even heroism in the conventional sense of the word had lost its meaning in an orgy of almost random death," he writes, "duty was one thing he could cling to." The war gave Holmes "a profound lesson in the practical courage of everyday life." As Bass professor of English Louis Menand wrote of the abolitionist Holmes in *The Metaphysical Club*, "He had gone off to fight because of his moral beliefs, which he held with singular fervor. The war did more than make him lose those beliefs. It made him lose his belief in beliefs."

That outlook shaped his legal thinking, and in turn, shaped a set of principles for the law and the Supreme Court that are now valuable to reconsider. More broadly, Budiansky's is now the

# America's Great Modern Justice

A new biography of  
Oliver Wendell Holmes Jr.  
illuminates the Supreme Court  
during the centennial of  
his most momentous dissent.

by LINCOLN CAPLAN



most engrossing of the major Holmes biographies. It vibrantly recounts the influence on his extraordinary public experiences of his extraordinary private ones. The result matters because, as Warren professor of legal history emeritus Morton J. Horwitz put it, Holmes was the “one great American legal thinker.” He was the first member of the Supreme Court to face up to the reality that, contrary to what nineteenth-century legal thinking held, justices were not oracles who divined principles of law. In applying law to facts, he made clear, they were law-makers, unconstrained by law itself—a role society would accept only if these law-makers were not tainted by partisanship.

For 40 years, from the end of the nineteenth century to the end of the Great Depression, including Holmes’s time on the Court, a conservative majority (it did not include him) repeatedly struck down federal and state laws regulating social and economic conditions intended to improve the lives of America’s have-nots. The conservatives did that because of their *policy* views: they objected to what they saw as unjustified government meddling in the market. Today’s Court continues on a similar, half-century-long move to the right. It’s unsurprising that, in the past two terms, Chief Justice John G. Roberts Jr. ’76, J.D. ’79, has joined a few times with the liberal justices to make five-vote majorities—about as often as he did in his first 12 terms on the Court. He has assumed its swing-vote seat as a result of its right-ward movement and his concern about its reputation for partisanship. The Court is widely seen as partisan in this way: the justices (five Republican-picked conservatives, four Democrat-picked liberals) have regularly voted in the most divisive cases as they would be expected to, based on what members of the party of the president who picked each justice likely want to happen.

As a justice, Holmes did what current justices seldom seem to: in dissent, he regularly voted to *uphold* laws whose policy impact

he despised. The approach he employed to justify his decisions and preserve their legitimacy was judicial restraint: except in rare instances, he believed, courts should uphold laws as long as they had a reasonable basis, because they reflected the will of the community enacted by elected legislators. Between his tenure and now, judicial restraint became a political slogan, invoked by conservatives who disliked the liberal judicial activism of the

Warren Court of the 1950s and ’60s, and by liberals who have disliked the conservative judicial activism of the Burger, Rehnquist, and Roberts courts since the 1970s.

For Holmes, judicial restraint was a professional imperative, the key to reconciling the role of the independent judge in assessing the lawfulness of democratically arrived-at laws in an undemocratic way. In taking that stance, he redefined the position of an American justice. He has bedeviled Holmes scholars who have struggled to reconcile his powerful analytic bent with his recognition that the world intrudes on ideals. Some have savagely faulted some of his opinions and prejudices. But in this centennial year of the 1919 Holmes judicial opinion that redefined the purpose of free speech in American life, it’s illuminating to recall how he became, with Chief Justice John Marshall, one of the two most illustrious justices

to serve on the Supreme Court.

## Skepticism

MANY SCHOLARS have contended that Holmes was a cynic—icy and aloof, mean-spirited and dark, and supremely self-centered. To Budiansky, the Civil War made Holmes a *skeptic*—doubting and fatalistic—but not a cynic: it made him question “the morally superior certainty that often went hand in hand with belief: he grew to distrust, and to detest, zealotry and causes of all kinds.” It also helped make him charming, exuberant, and very ambitious, searching, open-minded, and unquenchable. As he put it in a letter to a friend: “My old for-



**After graduating from the College in 1861, Holmes obtained a commission as first lieutenant in the Twentieth Massachusetts Volunteer Infantry, known as the “Harvard Regiment.”**



mula is that a man should be an enthusiast in the front of his head and a sceptic in the back. Do his damndest without believing that the cosmos would collapse if he failed.”

Holmes’s anti-exceptionalism helped define what made the United States exceptional in the twentieth century. In the decade after the Civil War, in the intellectual precincts of Brahmin Boston where he was born and bred an aristocrat, Holmes constructed ideas with other gifted thinkers, and helped shape pragmatism, the most American of America’s contributions to philosophy. It was “an idea about ideas,” Menand wrote, which “changed the way Americans thought” and “changed the way Americans live.” These thinkers believed, as he wrote, that ideas—“like forks and knives and microchips”—are tools that groups of people “devise to cope with the world” and that “their survival depends not on their immutability but on their adaptability.”

The test of an idea was its impact.

The Civil War preserved the Union, but turned America into a different country. Menand emphasized, “For the generation that lived through it, the Civil War was a terrible and traumatic experience. It tore a hole in their lives. To some of them, the war seemed not just a failure of democracy, but a failure of culture, a failure of ideas,” because those ideas had become ideologies, “either justifying the status quo” in the South or “dictating some transcendent imperative for renouncing it” in the North.

In 1864, when Holmes began Harvard Law School’s then-two-year program, Budiansky writes, he “applied himself to the work with an intensity not dampened by the intellectual incoherence of the subject as it was then presented to students.” In 1865, he began listing each book he read in a small leather-bound volume. When he died 70 years later, two days short of his ninety-fourth birthday, they numbered more than 4,000: Plato and Homer in Greek; Dante in Italian; Balzac, Proust, and Rousseau in French; literature, plays, and poetry; history, religion, science, philosophy, economics, and sociology, plus murder mysteries; and, most of all, law. (He also read German and Latin.)

After getting his degree in 1866, at 25, he took his first of many trips to Europe. At a dinner in London, he was invited to join a climb in the Swiss Alps. Soon after, he scaled the Balmhorn, a 12,000-foot peak first climbed only two years before. The few weeks he spent in the Alps were the only time in his life that he climbed, yet to Budiansky, Holmes’s climbing reinforced his view that “true skepticism meant recognizing that the universe cares nothing about our existence, and that man ought to return the favor, and get on with life.” As Budiansky summarized, “Before Holmes had even begun to think of developing a comprehensive philosophy of law, he had worked out a philosophy of life.”

In Boston, Holmes practiced law ably for 15 years. He argued maritime, insurance, and tax cases for businesses before the U.S. District Court and the Massachusetts Supreme Judicial Court and won an admiralty case in the U.S. Supreme Court. He became a con-

tributor to the newly launched *American Law Review* and, in a few years, its co-editor. With James B. Thayer, class of 1852, LL.B. ’56, a prominent Boston lawyer who became an influential professor at the law school, he undertook a revision of Kent’s *Commentaries on American Law*, spanning the scope of the law. He completed the work in 1874, when he turned 33.

In 1879, describing the scope of his ambition in a letter to an English legal colleague, he noted that the articles he had been writing for the *American Law Review*, “though fragmentary in form and accidental in order are part of what lies as a whole in my mind—my scheme being to analyze what seem to me the fundamental notions & principles of our substantive law.” He completed the job in the lectures that became a paradigm-shifting book.

*The Common Law*, published in 1881, was Holmes’s giant contribution to the literature of pragmatism. The prevailing view about this form of law in the late nineteenth century was that judges didn’t make law, they expertly applied it from legal precedents and customs. Christopher Columbus Langdell, the law school’s dean for 25 years beginning in 1870, was a leading proponent of this view. His appointment as dean marked the start of the school’s national influence in American law.

In contrast, Holmes famously began: “The life of the law has not been logic: it has been experience. The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow-men, have had a good deal more to do than the syllogism in determining the rules by which men

should be governed.” He lampooned Langdell as “the greatest living legal theologian.” He rejected the notion that the common law was “a brooding omnipresence in the sky” that judges apprehended. Instead, as Budiansky recounts, he “set out to study the history of the law for the same reason Darwin studied fossils: to elucidate the actual purpose and functions underlying its accumulated appendages and outer forms.” From research on what Budiansky describes as “the gamut of the law”—governing contracts, torts, property, wills, crime, and more—he reached conclusions that were “strikingly original, as well as a radical assault on legal tradition.”

The law evolved “in a way that tended to hide the fact, by continually inventing new explanations for old rules.” Judges made choices and, in doing so, made law and policy—“solutions that addressed actual problems and needs of society,” reflecting “efforts by courts to work out a balance between competing interests in society.” And “most shocking to conventional sensibilities, the law as it actually was applied had little concern with moral culpability: in all branches of the law, there had been an evolution away from trying to determine whether a man had acted with evil intent, substituting rules based on external standards of conduct that reflected social needs and norms of behavior.”

Budiansky calls *The Common Law* “the single most important book

“Though fragmentary,”  
Holmes’s articles  
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Review* ambitiously  
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principles of our  
substantive law.”



in the history of American legal scholarship,” as others have similarly praised it. The book inspired the movement known as Legal Realism, which focused on law’s concrete effects rather than its formalistic axioms, and it remade American law.

On the strength of the book, Holmes rose from a part-time lecturer at the law school to a full-time, very short-term, faculty member in a new professorship endowed for him. At the end of 1882, after only his first academic term of full-time teaching, the Massachusetts Republican governor, who was about to be replaced by a Democrat, offered Holmes a seat on the state’s Supreme Judicial Court—and gave him an hour and a half to make up his mind. He instantly accepted. In December 1882, at 41, Holmes became the court’s junior justice.

## In the Fray

HOLMES WAS ERECT, lean, and six foot three when he took the bench, with thick brown hair, radiant blue-gray eyes, and a thick brown handlebar moustache. He spent 20 years on the state court, the last three as chief justice. (Harvard awarded him an LL.D. in 1895.) In December 1902, when he was 61 and not widely known outside Massachusetts, President Theodore Roosevelt, 1880, LL.D. 1902, selected him for the U.S. Supreme Court, where he served for 29 years until he was almost 91. By his ninetieth birthday, he had become an American hero (“the great overlord of the law and its philosophy,” his successor Justice Benjamin Cardozo called him) and appeared on a special 30-minute national radio broadcast honoring him. His hair and moustache retained their thickness as he aged, but turned white. By the time he retired almost 50 years after becoming a justice, he embodied the role—he was the *Yankee from Olympus*, as the biographer Catherine Drinker Bowen dubbed him in her bestseller. His judicial career was Herculean, leading the Supreme Court to grapple with what Menand described as “the way of life we call ‘modern.’”

His reputation, however, is also stained. The most controversial evidence comes from the opinion Holmes wrote in 1927, at the age of

86, in *Buck v. Bell*. By 8-1, the Court upheld the decision of the Virginia State Colony for Epileptics and Feeble-minded to sterilize Carrie Buck, an 18-year-old woman placed there after she was raped and became pregnant, because she was “feeble-minded.” Buck’s mother was there

for the same reason. Buck gave birth to a baby girl considered feeble-minded, too. If the nation could call on its “best citizens” to sacrifice their lives in war, Holmes wrote, it could demand a “lesser” sacrifice of those who “sap the strength” of society because of their dependence on it. One blunt sentence of Holmes’s short opinion made it infamous, playing up the accepted term then for people later termed retarded and now called intellectually disabled: “Three generations of imbeciles are enough.”

*Imbeciles*, the 2016 book by Adam Cohen, ’84, J.D. ’87, a one-time president of the *Harvard Law Review*, uses Holmes’s role in the *Buck* case as the basis for a biting indictment of the eugenics movement and, more pointedly, of Holmes (see “Harvard’s Eugenics Era,” March-April 2016, page 48). “In Holmes’s view,” Cohen wrote, “life was naturally competitive and cruel, and he had little inclination to rein in its harsh injustices.” A crucial source of Cohen’s grievance is the chasm he perceived between the “true Holmes” and the justice with the reputation for “transcendent nobility.” Part of that was that Holmes was not “a progressive”—a liberal—despite being known as that. He had no sympathy for the downtrodden.

Budiansky calls the *Buck* case “the one that would cast the longest shadow over” Holmes’s name. For the justice, he says, the case was not difficult because the decision to sterilize Buck was based on

a Virginia statute authorizing that practice by state institutions on people who had “idiocy, imbecility, feeble-mindedness” or “hereditary forms of insanity,” and the law allowed an inmate or her guardian to contest a decision to sterilize, as a lawyer for Buck had done, futilely.

In defense of Holmes, Budiansky writes that he didn’t know Buck’s appeal “had been largely a sham” because of blatant conflicts of interest of the lawyer who represented her. He



**Holmes in his mid eighties: posing in 1926 with William Howard Taft, third of the four chief justices under whom he served (above), and strolling circa 1927-1928 with his friend and fellow associate justice Louis Brandeis**



did not challenge bogus testimony that Buck, her mother, and her seven-month-old daughter were feeble-minded. Had Holmes been aware of the collusive nature of the appeal, Budiansky thinks, “he might very well have taken a different view of the matter.” But more broadly, Holmes was *not* a liberal, and didn’t pretend to be one: he was willing, Budiansky writes, “to uphold the rights of unions, free speech for socialists, and regulation of the economy not from any ideological sympathy for liberal causes but often in spite of a magnificent contempt for them,” because he practiced restraint. His *Buck* opinion wrenchingly shows he was sometimes as captive of the era he lived in as he called out other judges for being: prejudices that judges share with others, he stressed, can override reason in court rulings. Providing the fullest measure of Holmes’s life yet, Budiansky makes a sympathetic-to-Holmes and convincing case that the justice should not be dismissed based on the worst opinion he wrote.

## The Court Made Modern

THE SUPREME COURT WAS a much less powerful institution in Holmes’s era than it is today. It was a forum of last resort, correcting lower-court mistakes, as it had done for 135 years, required to hear appeals about *all* federal cases.

That changed fundamentally with the Judiciary Act of 1925, which Chief Justice (and former president) William Howard Taft got passed to reduce the justices’ heavy workload. It drastically cut mandatory jurisdiction, gave the Court control over most of its docket, and redefined it as a co-equal branch of the federal government, symbolized by the majestic building that Taft got the government to construct for it, which opened in 1935.

As the legal scholar Robert Post ’69, Ph.D. ’80, has explained, “Supreme Court opinions both reflect and constitute the role of the Supreme Court itself.” In most of the days of the Taft Court, they were written for the litigants in the case and largely concerned private legal matters. The law was “fixed and certain” because 9-0 opinions were routine: 84 percent of that Court’s opinions were unanimous. Opinions were “relatively short and succinct.” Now, opinions are much longer, written for the American public and the legal academy, and largely concerned with developing American law. They are also generally splintered: last term, the justices were in total agreement in only 26 percent of the cases they decided.

Holmes wrote a record 873 signed opinions as a Supreme Court justice, plus 30 separate concurrence opinions and 72 dissents. His opinions averaged 3.3 pages, notably shorter than other justices’ in his era, reflecting his view, Post wrote, that “the point of an opinion was to solve the legal puzzle” crisply, like “an oral utterance,” not “like an essay with footnotes.” (That concision can make it hard to understand fully what he meant—a source of a lot of Holmes scholarship.)

The Judiciary Act sparked what Post called “a revolution in the practice of dissent,” reflecting the transformation of the Court’s mission to shaping law “to achieve social purposes.” The ratio of majority opinions to dissents Holmes wrote in almost three decades

on the Court was 12 to one. As Budiansky reports, he was “one of the justices most likely, in the interest of collegiality and unanimity, to go along with an opinion he had initially opposed.” Yet Holmes is properly known as the Great Dissenter. He wrote dissents that foresaw where American law would go. He was a modern justice on a bench that turned over completely after he retired, with nine new justices soon comprising a new—and modern—Court.

The most famous Holmes dissent—the one that best displays his pragmatic bent, and his commitment to restraint over ideology—came in *Lochner v. New York*, in 1905, during his third term on the Court. By 5-4, the Court struck down a New York State statute that regulated sanitary and working conditions in bakeries, limit-

ing work to 10 hours a day and 60 hours a week, on the grounds that the hour limits were “an illegal interference with the rights of individuals, both employers and employees, to make contracts regarding labor upon such terms as they may think best.” For decades, the conservative majority had struck down scores of state and federal laws they disagreed with, as the results of democracy run amok. They did so on grounds that the Constitution allowed no government regulation of the economy or private property except when that was essential to protect public health or safety, because of what they called liberty of contract. Holmes avowed that “a constitution is not intended to embody a particular economic theory, whether of paternalism and the organic relation of the citizen to the State or of *laissez faire*,” as in *Lochner*. High-profile subjects on which the Court came around to Holmes’s view included: upholding legislation regulating

the wages and hours of workers and banning child labor; restricting yellow-dog contracts, which required workers to quit or not to join unions, and restricting injunctions against workers; ensuring fair trials for unpopular defendants; and protecting consumers.

In 2019, Holmes’s most monumental dissent is in the spotlight, because of the centennial of *Abrams v. United States*. By 7-2 in 1919, the Supreme Court upheld the conviction of five Russian Jewish anarchists under the 1918 Sedition Act, for interfering with the U.S. effort in World War I and criticizing the form of the U.S. government. The five committed their crimes in Manhattan by distributing 5,000 copies of two leaflets, one in Yiddish, the other English. They called the president a liar for deceiving the American people about U.S. war efforts to crush the Russian Revolution, and called for a strike in factories making munitions. Three other justices took the unprecedented step of visiting Holmes at home to try in vain to talk him out of dissenting and, in their view, imperiling the safety of the nation.

Instead, he laid the groundwork for free speech as we know it. His dissent, Menand wrote, “helped to make tolerance an official virtue in modern America.” Justice Louis D. Brandeis, LL.B. 1877, joined Holmes in the dissent and, soon, in refashioning this area of law, with Brandeis emphasizing that America’s democracy depends on speech’s freedom. As the journalist Anthony Lewis ’48, Nieman

Three other justices took the unprecedented step of visiting Holmes at home to try in vain to talk him out of dissenting and, in their view, imperiling the safety of the nation.



Fellow '57, wrote, “Judges, serving for long terms and bound by their commissions to look beyond momentary partisan conflicts, are in the best position to give voice to the deeper values.” Holmes did that, he went on, “in words that forever changed American perceptions of freedom.”

The story about how, at 78, after 37 years on the bench, Holmes changed his mind about the meaning of free speech and the need for the Court to strengthen its protection deserves its own book. Thomas Healy, a legal scholar, published it in 2013, a wonderful history called *The Great Dissent*. He wrote that “with the country gripped by fear of the communist threat, Holmes was proposing something radical: an expansive interpretation of the First Amendment that would protect all but the most immediately dangerous speech.” Holmes had long supported the view that the government could punish speech that had no more than “a bad tendency”—the words might harm the public welfare at some point in the future, by inciting a crime or even just embarrassing a court.

But, now, he wrote that the government could *not* punish speech unless it produced or intended to produce “a clear and imminent danger that it will bring about forthwith certain substantive evils that the United States constitutionally may seek to prevent.” That did not include what Holmes, about one of the offending polemics, called “the surreptitious publishing of a silly leaflet by an unknown man”—both leaflets, he wrote, were “poor and puny anonymities.”

To Holmes, the defendants in the case “had as much right to publish as the Government has to publish the Constitution of the United States.” The touchstone of that radical view was the insight of John Stuart Mill that a suppressed opinion may contain an idea that society needs, even a false one, to confirm a truth. Holmes

wrote: “[W]hen men have realized that time has upset many fighting faiths, they may come to believe even more than they believe the very foundation of their own conduct that the ultimate good desired is better reached by free trade in ideas—that the best test of truth is the power of the thought to get itself accepted in the competition of the market, and that truth is the only ground upon which

their wishes safely can be carried out. That, at any rate, is the theory of our Constitution. It is an experiment, as all life is an experiment. Every year, if not every day, we have to wager our salvation upon some prophecy based on imperfect knowledge. While that experiment is part of our system, I think that we should be eternally vigilant against attempts to check the expression of opinions that we loathe and believe to be fraught with death, unless they so imminently threaten immediate interference with the lawful and pressing purposes of the law that an immediate check is required to save the country.”

A decade later in another celebrated dissent, Holmes distilled his understanding of freedom of expression to the tenet on which the law still centers: “[I]f there is any principle of the Constitution that more imperatively calls for attachment than any other, it is the principle of free thought—

not free thought for those who agree with us, but freedom for the thought that we hate.” Today, this tenet and every aspect of the freedom of speech are being contested, especially whether this prime right remains sacrosanct.

Scholars and others are arguing ardently about how best to protect American speech so it serves the function that Holmes defined, without irreparably dividing the country—especially through fiery, intolerant reaction on social media to hated thought.

Free-speech campaigns invariably extol individuals whose freedom to express hated speech is in jeopardy. But to Holmes, that



**A formal portrait taken around 1930, the year before Holmes turned 90. He served on the Supreme Court until January 1932, retiring as the oldest justice in its history.**



freedom is tied to the interests of society, not to an individual right: free speech is a *listener's* right as much as a *speaker's*. Democracy depends on deliberation and even, as Holmes demonstrated in the *Abrams* case, on doubting “one’s own first principles.” With that dissent, he helped launch a nation-defining movement. He tackled a decisive challenge for the twentieth century that is again decisive for the twenty-first: how to safeguard speech, for the sake of American democracy.

\* \* \*

FROM EARLY in his legal career, Holmes emphasized that the American Republic is an experiment in self-government. His skeptical side made him doubt that the American people would regularly make wise choices about the nation’s needs. But as a soldier, he had felt a duty to risk his life for the Union and the continuation of the experiment. As a justice, mindful of the mayhem that the Civil War unleashed, he believed that the contribution he could make, as the legal historian Robert W. Gordon ’67, J.D. ’71, explained, was to help maintain the experiment’s essential framework and fairness.

That meant protecting free speech so the strongest ideas would prevail in the marketplace, without government distortion of the competition or censorship of frightening ideas. That meant letting

As a justice, mindful of the mayhem the Civil War unleashed, he believed his role was to help maintain American self-governance.



big corporations, pushback against well-grounded economic and social regulation, and favoritism for haves over have-nots. What made Holmes the Great Dissenter a century ago would no doubt make him a Great Dissenter today. ▢

unions promote their interests and advocate for their members, the way capitalists could theirs. That meant encouraging evenhanded contests among all competing claims, even of unpopular defendants, and keeping entrenched interests from rigging the rules. In reconsidering Holmes’s invaluable life, Budiansky has performed the invaluable service of reminding Americans that the conservative Holmes insisted on the importance of those liberal principles.

Those principles of Holmes, for the sake of the Constitution, the American experiment, and basic fairness, remain eloquent and indispensable—including in challenging the current Court’s over-protection of

*Contributing editor and journalist Lincoln Caplan ’72, J.D. ’76, a senior research scholar at Yale Law School and the senior editor at the Knight First Amendment Institute of Columbia University, was a colleague of Stephen Budiansky at U.S. News & World Report. “The Political Solicitor General,” his feature about the role of the S.G. and the politicization of the Supreme Court, appeared in this magazine’s September-October 2018 issue.*

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# Montage

Art, books, diverse creations



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**Jocelyn and Chris Arndt, siblings from Fort Plain, New York, balanced a full-time tour schedule and undergraduate life.**

## Weekend Rock Stars

*For two Harvard siblings, studying and songwriting went hand in hand.*

by JACOB SWEET

**I**N AUGUST 2012, Jocelyn Arndt '17 and her brother, Chris '18, played a rock concert in front of approximately six people—including their parents and a couple of hot-dog vendors. The performance was set to be one of the last of their careers. In a year, Jocelyn would be at college; having a band would be infeasible.

"We were just like, 'Oh yeah, fun time's over,'" Chris said.

But among the handful of people there

that day was David Bourgeois, co-owner of a small production company near Albany. He couldn't believe it; the two teenagers performed in a glorified beer tent as if they were in front of a crowd of thousands. Jocelyn's soulful voice—which has drawn comparisons to Fiona Apple and Janis Joplin—and raw intensity were stunning to see from a 17-year-old. Chris played highly technical guitar riffs in an understated, bluesy way. The two had even written some of their own

songs, sprinkling them between somewhat obscure pop and rock selections from the '80s and '90s.

After the concert, Bourgeois met with both of them and their parents. If they wanted, he told them, Jocelyn and Chris could make it as professionals.

"I remember going home and being like, 'I never thought of music as something that could be a job,'" Jocelyn said. "It seems too fun to be a job."

The Arndts had started playing music in elementary school—separately at first, taking turns in the family's music room. When that proved burdensome, their parents suggested they just learn the same songs so they could practice together, Jocelyn on voice



and keys and Chris on guitar. Within a couple of years, they performed Led Zep-  
pelin's "Stairway to Heaven" for a small tal-  
ent show in Fort Plain—their hometown  
in rural upstate New York. By high school,  
they had become local rock stars. Classic  
albums were always playing at home. "The  
Arndt household has a steadfast rule: we  
can't have dinner without music playing in  
the background," Jocelyn said. "Growing up,  
Chris and I would take turns picking the  
soundtrack before dinner....We both took  
it very seriously."

Still, before hearing from Bourgeois, the  
two thought their musical careers would  
end after high school. Their parents were  
both teachers. It just seemed like they'd  
"go to college and then have college jobs,"  
Chris said.

The December following their beer-  
tent performance, Jocelyn was accepted  
at Harvard. A month later, she and Chris  
signed a record deal with Bourgeois. The  
group, called Jocelyn & Chris Arndt, would  
be filled out by a rotating cast of two or  
three studio musicians, with Bourgeois  
on drums. Jocelyn knew that moving to  
Cambridge wouldn't shake her music re-  
solve, even though her brother was four-  
and-a-half hours away and writing songs  
required long-distance correspondence.  
Every weekend during the semester, she  
returned to Albany to rehearse and tour.  
"It worked, I think, because we kind of  
thought that we could make it work,"  
Jocelyn said. "People at Harvard are pretty  
hardcore about everything, so I don't know  
if my commitment seemed any crazier than  
the next person's."

A year later, Chris joined her at Harvard.  
They put the finishing touches on *Strangers  
in Fairyland*, their first studio extended-play  
record, and took a Greyhound bus out of  
Boston every weekend to gig around the  
East Coast. The proximity made it easier to  
write songs ("Usually really late at night,"  
Chris said) and plan tours.

Easier, of course, is relative. During a typi-  
cal week they'd leave campus on Thursday,  
travel for nine or 10 hours on a Friday, per-  
form a show that night, travel *another* nine  
or 10 hours on Saturday, perform another  
show, and lug themselves back to cam-  
pus on Sunday. Longer breaks meant more  
elaborate tours. Weekend homework was  
done in cars, trains, and hotel rooms be-  
tween performances. Once, when a Chinese  
final was scheduled during a tour, Jocelyn

O P E N B O O K

## Harper Lee, Crime Reporter

*der, Fraud, and the Last Trial of Harper Lee* (Knopf, \$26.95), her first book, on the dual  
mysteries of a notorious crime and a famous novelist's attempt to write about it. The  
gripping pace is established in the prologue.

...Hundreds of people were  
crowded into the gallery, filling  
the wooden benches that  
squeaked whenever someone  
moved or leaning against the  
back wall if they hadn't arrived in  
time for a seat. Late September  
was not late enough for the Ala-  
bama heat to have died down,  
and the air-conditioning in the  
courtroom wasn't working, so  
the women waved fans while the  
men's suits grew damp under  
their arms and around their collars. The  
spectators whispered from time to time,  
and every so often they laughed—an un-  
easy laughter that evaporated whenever  
the judge quieted them.

The defendant was black, but the law-  
yers were white, and so were the judge  
and jury. The charge was murder in the  
first degree. Three months before, at the  
funeral of a 16-year-old girl, the man with  
his legs crossed patiently beside the de-  
fense table had pulled a pistol from the  
inside pocket of his jacket and shot the  
Reverend Willie Maxwell three times in  
the head. Three hundred people had seen  
him do it. Many of them were now at his  
trial, not to learn why he had killed the  
Reverend—everyone in three counties  
knew that, and some were surprised no  
one had done it sooner—but to under-  
stand the disturbing series of deaths that  
had come before the one they'd wit-  
nessed.

One by one, over a period of seven  
years, six people close to the Reverend  
had died under circumstances that nearly  
everyone agreed were suspicious and  
some deemed supernatural. Through all  
of the resulting investigations, the Rever-  
end was represented by a lawyer named

**Casey N. Cep** '07, a former  
Berta Greenwald Leddecky  
Undergraduate Fellow at this  
magazine, has since written  
widely and well, for *The New  
Yorker*, *The New York Times*,  
and other publications. But  
she has never written any-  
thing like *Furious Hours: Mur-*



Tom Radney, whose presence in the  
courtroom that day wouldn't have been  
remarkable had he not been there to de-  
fend the man who killed his former client.  
A Kennedy liberal in the Wallace South,  
Radney was used to making headlines, and  
this time he would make them far beyond  
the local *Alexander City Outlook*. Report-  
ers...had flocked to Alexander City to  
cover what was already being called the  
tale of the murderous voodoo preacher  
and the vigilante who shot him.

One of the reporters, though, wasn't  
constrained by a daily deadline. Harper  
Lee lived in Manhattan but still spent some  
of each year in Monroeville...only 150  
miles away from Alex City. Seventeen  
years had passed since she'd published *To  
Kill a Mockingbird* and 12 since she'd fin-  
ished helping her friend Truman Capote  
report the crime story in Kansas that be-  
came *In Cold Blood*. Now, finally, she was  
ready to try again....She would spend a  
year in town investigating the case, and  
many more turning it into prose. The mys-  
tery in the courtroom that day was what  
would become of the man who shot the  
Reverend Willie Maxwell. But for decades  
after the verdict, the mystery was what  
became of Harper Lee's book.

went to her professor's office a day early, completed the test, walked to the T, got to South Station, took a bus to Albany, and got on the road.

Their time in college has matured their songwriting. Chris, who concentrated in computer science, deals more heavily with the harmony and mixing side and Jocelyn deals more with lyrics and melody. Their sound has developed into something that Jocelyn—a former English concentrator—can't quite describe. Chris suggested "Indie blues rock" or "Alternative blues rock" as rough approximations. Bourgeois called it

"some new breed of millennialized authentic alternative rock."

Either way, it's unique. Their newest album, *The Fun and the Fight*, is their most cohesive yet. You might even guess they're siblings just by listening. Chris' rhythm guitar playing is almost voice-like, weaving through and echoing Jocelyn's emotional vocal lines, which can be upbeat one minute and sorrowful the next. On stage, Jocelyn often seems in a near-trance. Chris, also lost in the music, is a more serene presence.

Today, Chris said, they feel like everything they're doing has a little more weight and

significance. Their concert crowds, which often include both teenagers and baby boomers, give a pretty good indication of their musical range. On the music-streaming site Spotify, the group reaches just short of 50,000 listeners a month. On February 28, they performed on NBC's *Today Show*, their highest profile performance to date. It's hard for them to imagine that just a few years ago, they were pulling all-nighters to finish homework assignments between sets. "I know either one would've been a big deal for us, and for our parents, too," Jocelyn said. "I can't believe it when we look back."

# The Comic-Book Storyteller

Graphic novelist Amy Chu

by S.I. ROSENBAUM

**W**ATCHING AMY CHU, M.B.A. '99, stride through Midtown Comics in Manhattan's Times Square is like watching a queen visit the heart of her realm. The staff know her, of course. She looks up a few graphic novels by writers she knows, then heads upstairs to search for some of her own back issues, breezing past posters of characters she's written for DC and Marvel: Wonder Woman, Deadpool, Red Sonja, Poison Ivy, Green Hornet.

At 51, Chu is an established comics writer, working for the biggest publishers on some of the biggest titles in the business. She's living any comics nerd's fondest childhood dream. It just was never her dream. As a kid, Chu hadn't wanted to be comic-book writer—or any kind of writer. She certainly never planned on telling stories about antiheroes in spandex or metal-bikini-clad warrior babes for a living.

**Accidental comics writer Amy Chu, whose graphic novel, *Sea Sirens*, comes out this spring**

In fact, before 2010, the closest she'd come to writing a comic book was creating a Microsoft PowerPoint presentation in her old life as a business consultant. "It's not the same," she says now. "No one says, 'I was so moved by your PowerPoint presentation.'" But perhaps there were clues to Chu's destiny in her early

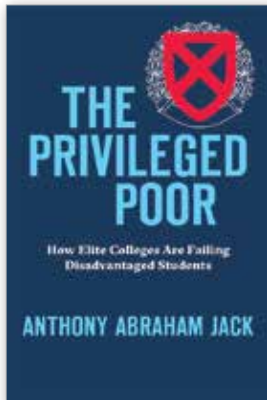
life. Born in Boston, she went to high school in Iowa, an experience she now describes as "fairly traumatic." Chu was nerdy and shy and one of the only Asian kids in town, and her dream was to play soccer. Only one problem: her school didn't have a girls' team. When the school district forbade her from trying out for the boys' team, Chu's parents sued and won under Title IX. She joined the boys' team. But the first time she stepped onto the field to play, the opposing team walked off en masse— forfeiting the game as a political statement, rather than face a female opponent.

She remembers the experience as mortifying. But it stood her in good stead when she eventually made it to Wellesley College, where she completed a double degree in East Asian studies and architecture, in a joint program with MIT. "You sue under Title IX," she jokes. "That's a really great thing to get you into a women's college."

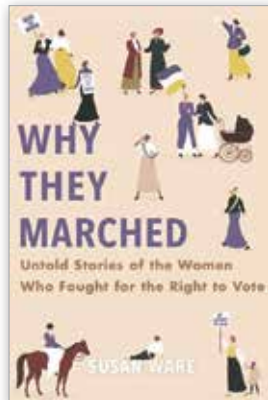
At Wellesley and MIT, Chu was more in her element than in the mostly white Iowa town she'd left behind. "I'd never seen so many Asians," she says. "Suddenly I'm actually popular. I can actually be invited to parties." At one party, she met the future writer and business consultant Jeff Yang '89, then a Harvard undergraduate. Chu had founded a literary journal for Asian-American stu-







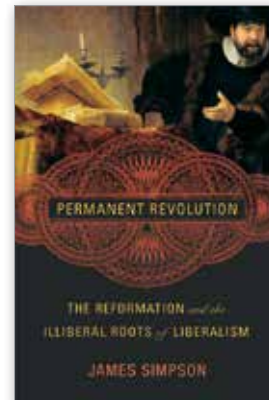
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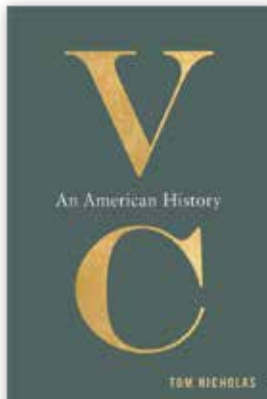
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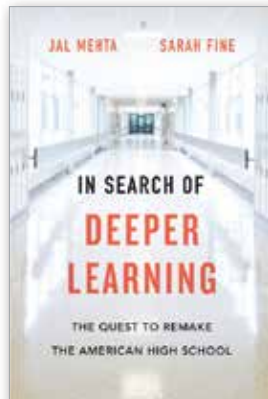
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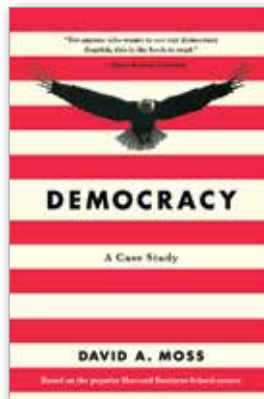
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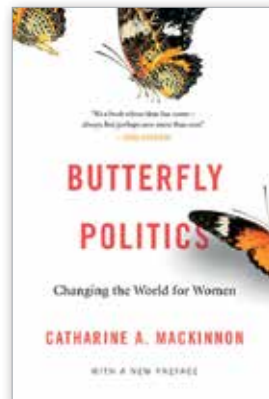
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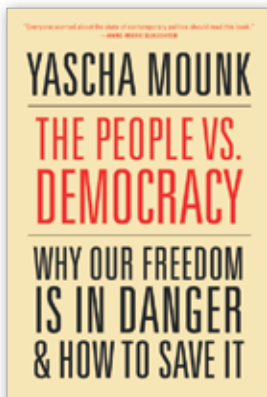
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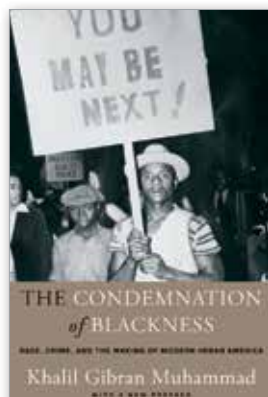
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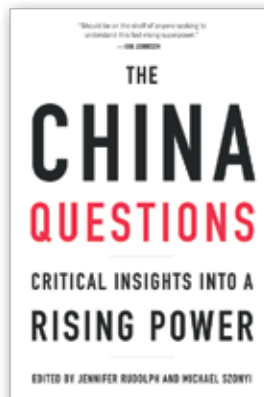
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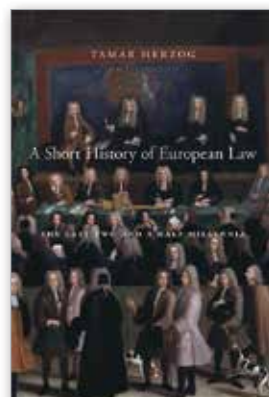
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dents at Wellesley, and Yang was editing a student publication at Harvard. “His whole thing was, ‘Let’s start a real magazine, an Asian-American magazine for the Asian-American population,’” Chu recalls.

The result was *A Magazine*, a periodical Yang and Chu co-founded with two other friends. They bootstrapped the publication by throwing parties for Asian Americans in New York. “If we’d stuck to the parties, we would have made a ton of money,” she says.

(As it was, the glossy publication lasted for a dozen years and had several hundred thousand readers at its height.)

After graduation, Chu tried several different jobs, including running an arts nonprofit and—through a chance encounter at a fundraiser—running the Macau tourism office in Hong Kong (despite not speaking Cantonese). By 1999, she says, “I thought for whatever reason I should get a business degree” and applied to Harvard Business

School, “just to get it out of my system.”

She enjoyed her time there (“It was awesome, actually,” she says. “I was pleasantly surprised.”) and became a management consultant, specializing in biotech firms. That might have taken her to retirement, if she hadn’t run into an old friend at Harvard’s first-ever Asian-American alumni summit in 2010.

Filmmaker and television writer Georgia Lee ’98, M.B.A. ’09, wanted Chu’s help

## Off the Shelf

Recent books with Harvard connections

The three latest installments in the Cass R. Sunstein-book-of-the-month-club, as three academic presses publish current work by the wildly prolific Walmsley University Professor (see “The Legal Olympian,” January-February 2015, page 43): **On Freedom** (Princeton, \$12.95), a succinct essay on democracy and navigating toward life’s better choices. **How Change Happens** (MIT, \$29.95), an exploration of social norms and challenges to them—making sexual harassment suddenly visible and unacceptable, for instance, while white nationalism simultaneously amplifies its voice and apparent following. **Conformity: The Power of Social Influences** (NYU, \$19.95), a complementary dive into the phenomenon of the title, and dissent.

**How Finance Works**, by Mihir H. Desai, Mizuho Financial Group professor of finance and professor of law (Harvard Business Review Press, \$35 paper). A teacher (and contributor to these pages) succeeds at his sternest educational challenge: making

financial statements, and the underlying flows of cash and capital, clear and useful to the quantitatively shy.

**The 8 Broken**, by Nancy Berliner ’79, Ph.D. ’04 (Museum of Fine Arts, \$55). The museum’s Wu Tu senior curator of Chinese art has crafted the first book on *bapo* (“eight broken”) painting, which originated in nineteenth-century China. The works, depicting antique texts, art, and ephemera, seem strikingly modern. Perhaps reflecting the turmoil of their era, they can evoke strong nostalgia for declining cultural norms.

**State Capture**, by Alexander Hertel-Fernandez, Ph.D. ’16 (Oxford, \$29.95). The author, at Columbia, searchingly investi-

gates the nexus among the Koch brothers’ political network, deregulatory business interests, and entities like the American Legislative Exchange Council, all bent toward shaping state and local policymaking—in one ideological direction.

**This Is How We Pray**, by Adam Dressler, M.T.S. ’05 (FaithWords/Hachette, \$20). A down-to-earth, personal—as opposed to theological or doctrinal—approach to prayer. The author has made a personal journey from Oral Roberts University to Harvard Divinity School to Grace Community Church in Clarksville, Tennessee, where he is now lead pastor.

**The Code of Capital: How the Law Creates Wealth and Inequality**, by Katharina Pistor, M.P.A. ’94 (Princeton, \$29.95). A Columbia law professor explains the status in law of capital in all forms, and how financial assets, intellectual property, and their brethren affect the ownership and distribution of wealth.

**Good Charts Workbook**, by Scott Berinato (HBR Press, \$35 paper). A Harvard Business Review senior editor provides vivid guidance on how to make “better data visualization” (a description inferior to the graphical contents within)—a good proxy for vivid thinking.

**The Role of the Scroll**, by Thomas Forrest Kelly, Knafel Research Professor of music (W.W. Norton, \$29.95). A gorgeously illustrated exploration—both scholarship and a passion project—of “fascinating objects that have always been shrouded by an intriguing kind of aura, and a quality of some-

**An untitled 1900 ink and color work by an unidentified artist, exhibiting the strikingly modern “eight-broken” style**



© MUSEUM OF FINE ARTS, BOSTON



with a startup idea she had: a comics imprint for books aimed at girls. She knew Chu had helped found *A Magazine* and wanted her to handle setting up the business.

To Chu, it seemed like a low-cost venture. “Let’s do it,” she said. She threw herself into research, buying and reading comics for the first time and taking a class on writing comics.

It was immediately clear that the class was not a place where Chu fit in: like the

soccer scene in Iowa in the 1980s, “Lo and behold, it’s all dudes,” she recalls. “I didn’t even know if Wonder Woman was DC or Marvel; they’re arguing over Martian Manhunter.”

The first assignment was a five-page story. Chu turned in a tale about a female cabdriver/mercenary in a dystopian metropolis who is hired to rescue a hostage named Abby (the twist: Abby is actually a cat). When she turned it in, something she calls

how standing outside of time,” not least because they continued to be produced after the invention of the eminently more practical codex and its spread in the Middle Ages. The author, who previously wrote *First Nights*, and taught the eponymous course, is an incorporator of this magazine.

The health beat. **Diabetes Head to Toe**, by Rita R. Kalyani '99 et al. (Johns Hopkins, \$22.95 paper), is a comprehensive guide to

understanding and living with an epidemic, chronic disease. **Well: What We Need to Talk About When We Talk About Health**, by Sandro Galea, M.P.H. '00 (Oxford, \$24.75), Boston University’s public-health dean, addresses Americans’ misguided confusion of medicine with health, and the costly mistakes (“[W]e spend so much and get so relatively little for it”) stemming from that category error—and what to do about it.

Debut novels. **The Organ of Sense**, by Alan Ehrlich Sachs '07 (Farrar, Straus and Giroux, \$26). “In an account sent to the *Philosophical Transactions*... a young G. W. Leibniz...” runs the opening sentence of a fiction, set in 1666, concerning a solar eclipse, a blind astronomer, and much else. The author, a Harvard Lampoon alumnus, concentrated (no surprise) in the history of science. Chia-Chia Lin '03, J.D. '07, did

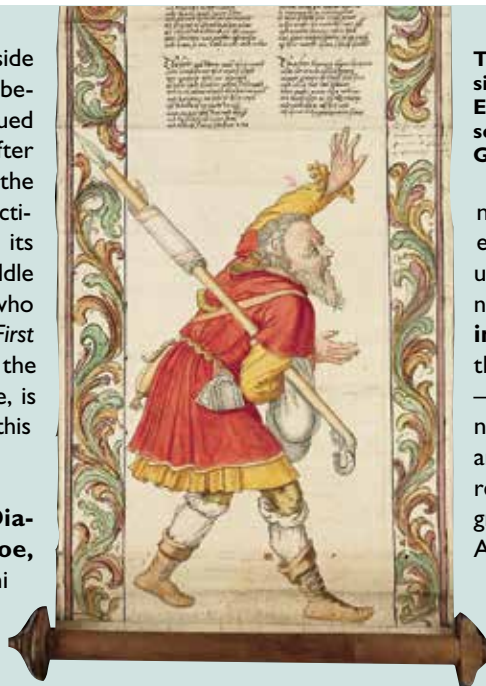
po, \$15.99), an emergency physician, is a breezy checklist of nutrition, exercise, sleep, and other tips new mothers can use to get—and keep—it together. **Elderhood**, by Louise Aronson, M.D. '92 (Bloomsbury, \$30), is a memoir, meditation, and guide to “redefining aging, transforming medicine, reimagining life” by a geriatrician with an M.F.A. who runs UC, San Francisco’s health-humanities program. Her examples and spirit are lovely, and wise.

**VC: An American Industry**, by Tom Nicholas, Abernathy professor of business administration (Harvard, \$35). A first history of venture capital, which has played an outsized role in propelling U.S. entrepreneurship and growth. The author grounds readers well, linking investments in, say, artificial-intelligence startups today to those in whaling expeditions two centuries ago.

The bottom of a sixteenth-century English alchemical scroll associated with George Ripley

not. An Iowa Writers’ Workshop graduate, she begins her novel, **The Unpassing** (FSG, \$26), with the feigned collapse—a stroke?—of the narrator’s mother, and proceeds to a real Taiwanese immigrant family’s loss, in Alaska.

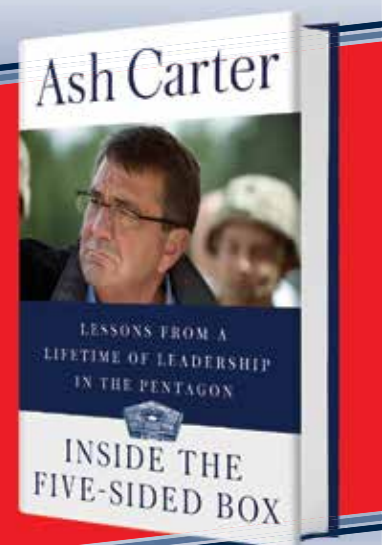
The lifespan. **Mom Hacks**, by Darria Long Gillespie, M.B.A. '05 (DaCa-



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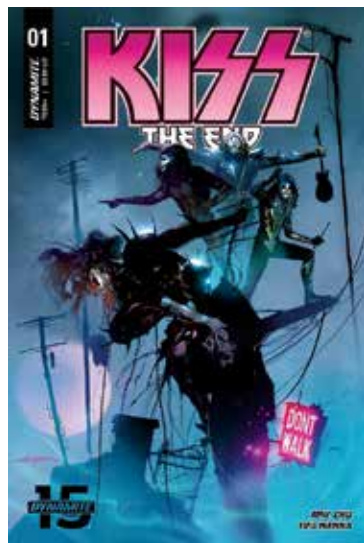
—ERIC SCHMIDT, technical advisor, Alphabet Inc.

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From Chu's oeuvre: a 2019 comic book tied to KISS's "End of the Road" tour and a comics imprint created by rapper DMC, with a graffiti-artist heroine.

ics in 2011, but Chu kept writing. The following year she self-published her own book, *Girls Night Out and Other Stories*, a collection of short comics, and started promoting it at conventions and comics stores around the country, which eventually led to professional writing jobs. Soon she

marked by a focus on human quirks and diversity. In her Red Sonja holiday special, for example, the Hyrkanian warrior takes a whirlwind tour of the many holiday traditions represented in New York City.

Her work is not all heavy metal and superheroes. Chu's first full-length graphic novel, *Sea Sirens*, drawn by Janet K. Lee and being published this June by Random House, is the story of a Vietnamese-American girl who tangles with an undersea world of mermaids and sea serpents.

It's an unusual thing to start a new career at 45, let alone one as talent-driven and difficult as comics writing, *let alone* to thrive at it. But Chu says every twist and turn in her own story has contributed to her current career; on her LinkedIn page, her bio says simply: "I tell stories."

"I don't think I could have done this when I was 23," she says, heading out the door of Midtown Comics with a stack of fresh books in her hand. "I wouldn't have been good at it."

"mind-blowing" happened: the instructor loved it. "A little light bulb went off," she recalls. "I could actually be semi-decent at this. People are having a reaction to something I made up."

Lee and Chu launched Alpha Girl Com-

was being entrusted with legacy characters at the two biggest comics publishers, DC and Marvel—characters like Ant-Man, Deadpool, even KISS. (Yes, the band. Yes, they have a comic book.) No matter what character she's writing, Chu's comics are

## A New Story of Suffrage

*Fresh portraits of foot soldiers for women's right to vote*

by MARINA N. BOLOTNIKOVA

IF THE women's suffrage movement took place today, what would it look like? Radically different, surely, from the way it did in the nineteenth and twentieth centuries, when its organizers

rode through the country on horseback, shouted through town squares, dropped leaflets from airplanes, and marched in neatly choreographed pageants to spread the word about their cause. Today's world

of online activism can feel deprived of that vitality—which makes Susan Ware's *Why They Marched: Untold Stories of the Women Who Fought for the Right to Vote*, all the more of a delight for a modern reader. Ware tells a new history of women's suffrage through portraits of 21 women (and one man) both famous and obscure, from the 1848 Seneca Falls Convention through the ratification of the Nineteenth Amendment in 1920.

"How can someone demand the vote without having that basic political right in the first place?" asks Ware, Ph.D. '78, an independent scholar of women's history and associate of Harvard's history department. Part of the answer is that the suffragists were intrepid and relentless. They were the first political pro-

*Why They Marched: Untold Stories of the Women Who Fought for the Right to Vote*, by Susan Ware (Harvard, \$26.95)

National Women's Party members picket the White House, 1917. In the years leading up to the Nineteenth Amendment's passage, the protesters were a regular presence in Lafayette Square.





testers to picket the White House (and to burn President Woodrow Wilson in effigy), for which nearly 500 were arrested and 170 went to prison between 1917 and 1919. Authorities were cracking down on dissent during World War I—and the activists were considered disloyal to the war effort. In the summer of 1918, after a group of suffragists were arrested and released on bail, they resumed their protests immediately and were arrested again and again.

One of them, Hazel Hunkins, cabled her anxious family in Montana: “TWENTY SIX OF AMERICAS FINEST WOMEN ARE ACCOMPANYING ME TO JAIL ITS SPLENDID DONT WORRY LOVE HAZEL.” Their experiences provided the women a sense of camaraderie resembling that of men in war; both suffering and exhilaration were entangled in the horrid and humiliating conditions in prison. Hunkins returned home in an ambulance and, one friend wrote, “violently ill.” They were honored by the National Women’s Party, one of the two major organizations orchestrating the suffrage fight, with brooches in the shape of a prison cell.

For the centennial of the Nineteenth Amendment, Ware wanted to tell a broader, more inclusive story about “woman suffrage,” as it was known then. A common narrative about the suffragists, she said in an interview, is that they were racist, wealthy white women—and many of them were. They mirrored the racism of American society, organizing segregated parades and disparagingly objecting that black men had been granted the vote before them. And it was largely only the wealthy who had the ability to volunteer their time. But this narrative, Ware argues, erases the history of both black suffragists who sought to integrate race and gender into the movement and working-class suffragists who saw the vote as an important tool for the urban poor, many of whom were women. As its portraits encompass women from different class, race, and religious backgrounds, *Why They Marched* provides glimpses of the movement’s connections to many questions about the fabric of society: the rights of factory workers, the relationship between patriarchy and white supremacy, and what it means to be female.

At the dawn of the modern period, it was not just received ideas about the role of women, but also new anxieties about the social shifts under way in an industrializing

O P E N B O O K

## Misguided Mind Fixers

She delves into these often disturbing efforts in *Mind Fixers: Psychiatry’s Troubled Search for the Biology of Mental Illness* (W.W. Norton, \$27.95). From the introduction:

**By 1988...** psychiatry’s transformation into a biological discipline seemed complete. That fall the psychiatrist Samuel Guze gave a lecture at London’s Maudsley Hospital provocatively titled: “Biological Psychiatry: Is There Any Other Kind?” His answer was implied in the title: of course not. Psychiatry was a branch of medicine, and all medicine was “applied biology,” end of story. “I believe,” he concluded, “that continuing debate about the biological basis of psychiatry is derived much more from philosophical, ideological and political concerns than from scientific ones.”

All this added up to nothing less than a palace revolution in American psychiatry, an astonishingly rapid, 180-degree turnaround in understanding and approaches to ailments of the mind. Why did it happen? What caused an entire profession to reorient itself so quickly and so completely?

For the psychiatrists who heralded these developments in the 1980s, the answers seemed clear. In the late nineteenth century, they believed, the field of psychiatry—especially in German-speaking Europe—had actually been on the right track. Under the leadership of Theodor Meynert and Emil Kraepelin, it had pursued a robust biological research program. Unfortunately, the Freudians had come along,

turned everyone’s heads, and led the field into a scientific wasteland for more than half a century. Finally, however, exciting new developments in neuroscience, genetics, and psychopharmacology had changed things. Irrefutable evidence that mental disorders were brain diseases had emboldened a new generation of biological psychiatrists to overthrow the Freudians and to bring back the brain as the primary object of psychiatric research, diagnosis, and treatment. It was a simple explanatory story, one with clear heroes and villains, and above all a satisfyingly happy ending.

The only trouble with this story is that it is wrong—not just slightly wrong but wrong in every particular. The nineteenth-century brain psychiatrists were not early versions of the 1980s biological revolutionaries, save perhaps for the fact that they wore longer waistcoats and had more facial hair. Their project did not fall victim to the siren call of psychoanalysis. It failed on its own terms. The Freudian psychiatrists came into positions of significant power only after World War II (not before), and they did so not because they were briefly able to persuade enough people to buy into their nonsense, but because they appeared to have grasped the mental health challenges of the post-war era better than the biologists had....



Modern psychiatrists revived the effort to link mental illness to biology, begun in the 1840s by scientists like Emil Kraepelin.

WIKIPEDIA/PUBLIC DOMAIN



Left: The banner of a men's group that supported women's right to vote. Right: Inez Milholland leads the 1913 suffrage parade in Washington, D.C.

distant to contemporary readers. But it was only 100 years ago that suffragists were campaigning out in Washington, lobbying Congressmen to pass the constitutional amendment that guaranteed them this foundational right. In the Senate, it squeaked

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America that shaped the public's fear of woman suffrage. Rose Schneiderman, a famous socialist and union organizer, had an answer to the popular claim that participating in politics would "unsex" women: "Surely...women won't lose any more of their beauty and charm by putting a ballot in a ballot box once a year than they are likely to lose standing in foundries and laundries all year round."

It was largely only white women, Ware says, who won the vote in 1920: black women (like black men) remained mostly disenfranchised until the Voting Rights Act of 1965. One of the most remarkable women Ware profiles, Mary Church Terrell, was the daughter of former slaves who eventually became wealthy members of Memphis's

black elite. She urged the leadership of the National American Woman Suffrage Association (NAWSA) to include the interests of black women on its agenda (often to little effect), and was active in women's rights movements in Europe, where she informed international audiences about the status of African Americans. Terrell spoke about race, gender, and power with a piercing clarity that rings true a century later. At a convention of the Women's International League for Peace and Freedom in Zurich, where it was reported that there were women from all over the world, she remarked: "On sober, second thought, it is more truthful to say that women from all over the white world were present."

The United States that deprived women of the vote might seem unrecognizably

by with only a narrow margin. How can we comprehend the radical transformation of many women's social and political status in such a short period?

Here, *Why They Marched* falls short. Ware explains that the suffrage movement was closely connected to Reconstruction and the Fifteenth Amendment that granted the vote to African-American men: "The Civil War and its aftermath put questions of citizenship and human rights firmly on the national agenda," she writes. "In this fraught but pregnant political moment, women activists believed they might have a fighting chance to win those rights for women as well." These important points lay the groundwork for Ware's recurring discussion of the relationship between race and gender in the suffrage movement. But as an

## Chapter & Verse

Correspondence on not-so-famous lost words

**Diana Amsden writes**, "Years ago, I believe I saw a silent-film scene of a woman, seen from behind, desperately pounding her fists on a huge city gate, and finally collapsing to her knees. Can anyone identify the movie?"

**Jerry Kelley hopes** that someone can identify a couplet he heard 50 years ago: "And he died as he lived, in a rich man's garret,/In a borrowed shirt, and drinking claret." He has searched for a source in vain ever since; his only clue—"likely a red herring"—is that the person who quoted

the couplet also quoted lines he identified as written by Vachel Lindsay.

**"The Game"** (January-February 2011). Jonas Peter Akins, who asked eight years ago, to no avail, about a poem suggesting that "The Game releases us, changed and changeless, into the November evening," possibly written by David T.W. McCord '21, A.M. '22, L.H.D. '56, has now answered his own question: "In the coverage of the fiftieth anniversary of Harvard's triumph over Yale, by that now familiar score, I found that the line was actually written

by Roger Angell '42, in a remembrance for the *Harvard Football News* of November 18, 1978. Angell was better, unsurprisingly, than my memory. 'The Game picks us up each November and holds us for two hours and then releases us into the early darkness of winter, and all of us, homeward bound, sense that we are different yet still the same. It is magic.' And so it is."

Send inquiries and answers to Chapter and Verse, Harvard Magazine, 7 Ware Street, Cambridge 02138, or via email to [chapterandverse@harvardmag.com](mailto:chapterandverse@harvardmag.com).



explanation for the emergence of suffrage and the larger feminist movement, they feel incomplete. Women had been talking about their political rights long *before* the Civil War, alongside discussions about the abolition of slavery and other movements that eventually transformed society. A broader sketch of the economic history of the United States and Europe during this period, including industrialization and the rise of wage labor, might provide a richer explanation for the conditions that shaped the minds of suffragists, and made women's liberation possible.

But the book does not attempt to be a definitive or intellectual history of suffragism. It is a focused, slim volume that allows Ware to zoom in on the lives of her suffragists; within their vivid stories are many surprises about what kinds of women were demanding the vote, and why. The earliest states to grant women suffrage were not on the East Coast, but those on the Western frontier: Wyoming, Utah, Colorado, and Idaho. Emmeline B. Wells, a prominent, early Mormon suffragist, was nevertheless excluded from leadership roles in the movement because she was the seventh wife of a polygamous husband; Mormon women's activism, Ware writes, "was quickly forgotten."

Ware's analysis recognizes that gender is so complex, so entangled with the structure of society, that it's impossible to exclude women who participate in patriarchy from an honest feminist history. Her effort to dust off these stories provides a messier, sometimes troubling, and more convincing picture of some of the women who changed



## ALUMNI

## “Doctor Bugs”

*Naturalist Mark W. Moffett investigates insects—  
and now, evolving human societies.*

by NELL PORTER BROWN

**T**ROMPING THROUGH a Peruvian rainforest looking for ants, Mark W. Moffett, Ph.D. '87, accidentally sat on a deadly fer-de-lance pit viper. In Sri Lanka, Kenya, and India, he barely escaped stampeding elephants. Then there was the time in Colombia, while tracking the world's most toxic frog (*Phyllobates terribilis*), that Moffett ended up armed with a poisonous tribal blow gun in a stand-off against drug smugglers. “Well, it's a long story,” he says, nearly chuckling at the memory. “Eventually, a military escort pulled us out and got us to the airport.”

By rights, the enterprising tropical biologist, a former graduate student of Pellegrino University Professor emeritus E. O. Wilson, should be dead. Many times over. Instead, his energy and oddly wide-eyed innocence have backstopped an eclectic career as an award-winning explorer, speaker, writer, and photojournalist. He travels at

a moment's notice, beholden to no one and nothing except his own desire to get up close to the creatures he loves—primarily insects and amphibians.

“The thing that one misses most from growing up,” he says from his modest house on Long Island, “is the experience of discovery. As a child, everything is new—all the time. I think people run out of steam for life because they lose this. But if you're in a jungle, or someplace you've never been or heard of...?” He stares off dreamily. “Like the time I was in Sri Lanka and something fell on me from the tree above, and I had no idea what this thing was. It was marching along my arm, with long legs. Its body was nearly spherical with a little turret on top, onto which all its eyes were aggregated. Some people might have reacted with fear.

But I'm going, ‘Wow!’”

He eventually learned it was a type of parasitic fly that lives on bats. “But,” he

### HM Explore More

For more online-only articles on the arts and creativity, see:

**Min Jin Lee on Her New Novel and Writing about the Korean Diaspora**



“I worry a great deal about how Koreans are perceived,” the author and current Radcliffe fellow says.

[harvardmag.com/min-jin-lee-19](http://harvardmag.com/min-jin-lee-19)

**Moffett—who has trekked across the globe in search of unusual creatures—with an ant's nest in Australia**

adds, “the *not* knowing? I mean, we’re continuously surrounded by experts telling us the names of everything *all the time*. But turn off the constant narration? Then you find that everywhere you look, you’re discovering things, and going into this zone where you’re seeing every single little thing that occurs. Like the behaviors of this fly. Or of ants.”

## Overseer and HAA Director Candidates

THIS SPRING, alumni can vote—using either a new online balloting site or the traditional paper, mail-in, ballot—for new Harvard Overseers and Harvard Alumni Association (HAA) elected directors. Email notifications about the new electronic-voting option and website link were sent April 3, when the paper ballots were also mailed. Votes must be received by 5 P.M. EDT on May 21 to be counted. All holders of Harvard degrees, except Corporation members and officers of instruction and government, are entitled to vote for Overseer candidates. The election

Those “little things” are captured by his more than 500 photographs in *National Geographic*. He’s also given countless lectures and written 120 scientific journal and magazine articles chronicling his exploits and biological observations during the last 30 years. A few of those years were spent scaling the tallest trees in more than 40 countries to examine orchids, bats, orangutans,

and other canopy-dwelling creatures for his first book, *The High Frontier: Exploring the Tropical Rainforest Canopy* (1993). *Face to Face with Frogs* (2008) also featured his photographs, as did the fascinating and critically acclaimed *Adventures among Ants: A Global Safari with a Cast of Trillions* (2010). Moffett built on that knowledge for his newest book, *The Human Swarm: How Societies Arise, Thrive, and Fail*

for HAA directors is open to all Harvard degree-holders.

The HAA Nominating Committee has proposed the following candidates in 2019.\*

For Overseer (six-year term):

**Danguole Spakevicius Altman ’81**, Houston. Founder, Vapogenix Inc.

**Alice Hm Chen, M.P.H. ’01**, Berkeley. Chief medical officer and deputy director, San Francisco Health Network

**Scott C. Collins ’87, J.D. ’90**, Boston. Managing director and COO, Summit Partners

**Janet Echelman ’87**, Brookline, Massachusetts. Visual artist, Studio Echelman

**Vivian Hunt ’89, M.B.A. ’95, D.B.E.**, London. Managing partner, U.K. and Ireland, McKinsey & Company, Inc.

**Tyler Jacks ’83**, Cambridge. Director, Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology

**John B. King Jr. ’96 (’95)**, Washington, D.C. President and CEO, The Education Trust

**Reshma Saujani, M.P.P. ’99**, New York City. Founder and CEO, Girls Who Code

**Ryan Wise, Ed.L.D. ’13**, Des Moines. Director, Iowa Department of Education

For elected director (three-year term)

**George C. Alex ’81**, Cohasset, Massachusetts. CEO, Twin Oaks Capital

**Bryan C. Barnhill II ’08**, Detroit. City manager, City Solutions, Ford Smart Mobility

**Ethel Billie Branch ’01, J.D.-M.P.P. ’08**, Window Rock, Arizona. Attorney general, The Navajo Nation

**Salomé Cissal de Ugarte, LL.M. ’94**, Brussels. Managing partner, Hogan Lovells

**Adrienne E. Dominguez ’90**, Dallas. Partner, intellectual property, Thompson & Knight LLP



**Danguole Spakevicius Altman**



**Alice Hm Chen**



**Scott C. Collins**



**Janet Echelman**



**Vivian Hunt**



**Tyler Jacks**



**John B. King Jr.**



**Reshma Saujani**



**Ryan Wise**

**Michael J. Gaw ’90**, Alexandria, Virginia. Assistant director, division of trading and markets, U.S. Securities and Exchange Commission

**Christina Lewis ’02**, New York City. Founder and CEO, All Star Code

**Zandile H. Moyo ’00**, Indian Springs, Alabama. Consultant, strategy and financial advisory services

**Derek C.M. van Bever, M.B.A. ’88, M.Div. ’11**, Cambridge. Senior lecturer and director of the Forum for Growth & Innovation, Harvard Business School

\*The HAA Nominating Committee has nominated nine candidates for Overseer, rather than the usual eight. This reflects an additional vacancy on the board created by the departure of James Hildreth ’79, who has stepped down in light of other professional obligations.



**George C. Alex**



**Bryan C. Barnhill II**



**Ethel Billie Branch**



**Salomé Cissal de Ugarte**



**Adrienne E. Dominguez**



**Michael J. Gaw**



**Christina Lewis**



**Zandile H. Moyo**



**Derek C.M. van Bever**



(Basic Books), which was published in April.

These efforts have earned him, among other honors, the Explorer Club's Lowell Thomas Medal, and the respect of his mentor Wilson, the pioneering sociobiologist and fellow ant-lover. Wilson knew Moffett was "something special from the start...a rare born naturalist," he told *Smithsonian* for a 2009 article about Moffett and an exhibit of his images, "Farmers, Warriors, Builders: The Hidden Life of Ants," at the National Museum of Natural History. "But Wilson declines to revel in his former student's success," the article continues. "'Mark is Mark,' Wilson reflects. 'He just developed on his own.'"

Promoting himself as Doctor Bugs (his website domain name), Moffett often entertains to educate. He has starred in National Geographic videos, memorably a 2011 segment on weaver ants—he ate their larvae, served on Ritz crackers, at Angkor Wat—and been a hit with talk shows, including *The Colbert Report*, *Late Night with Conan O'Brien* '85, and several on NPR. Moffett believes in "exercising" his brain: improvisational acting classes, reading and writing poetry, and performing stand-up comedy on open mic nights all help serve his ultimate aim—storytelling. "Human life is about narratives," he says, and humor "isn't used enough by scientists—much of the messaging is serious and dry. People are more driven to love nature, and want to save it, with messages that strike their positive emotions. Think of today's politics."

## People are more motivated to save nature by "messages that strike their positive emotions."

And Moffett's sometimes goofy presentation doesn't negate a serious side, as *The Human Swarm* reveals. Suspending photography and far-flung travels to hole up in his home office, "getting by on the fumes from the advance," he took more than five years to write this sweeping examination of what enables human civilization to function (or not). The book draws on past and current research from philosophy, anthropology, psychology, and biology, along with his own studies of ant and other animal societies. Moffett looks at traditional theories of how and why human societies evolved—because *Homo sapiens* can deliberate, coordinate, and collaborate—and proposes an even more fundamental reason: humans' distinctive manner of establishing identities.

These identities, based on markers ranging from clothing and accents to occupations and ethnicities, enable humans, he says, to immediately determine whether another human belongs—and then, potentially, to move beyond that single critical factor.

"The seemingly trivial act of entering a café full of strangers without a care in the world is one of our species' most underappreciated accomplishments," he writes, "and it separates humankind from most other vertebrates living in societies." It's what has enabled humans to form nation states, as opposed to the 200-member (at maximum) societies of most vertebrate species (where members need to know each other personally) and to incorporate strangers and, in time, a great deal of diversity, he explains. "Nations would not have taken hold without people repurposing their cognitive survival tools to take in, and adjust to, different ethnic groups."

As Moffett clarifies in his introduction, "Readers of every political persuasion will find both good and bad news in the current science." In person, he further notes that, in evolutionary terms, all societies and their "treasured identities" are ultimately ephemeral constructs, however much people cling

to those markers. "Because America is a country of immigrants—Native Americans being a tiny portion of the population—it doesn't have the natural break-lines of past state societies, which would typically fragment into regions originally occupied by different ethnic groups. The admixture of peoples across the landscape, and the varied ideas they bring," he continues, "are both the strength and the weakness of America. We can draw from this diversity to build ourselves up collectively and, in times when people feel threatened, rebel against it to tear ourselves down. Obviously, the latter reflects our current situation."

MOFFETT'S FOCUS on who, or what, "belongs" began with the ants crawling through



**An intrepid pair: Moffett and his wife, Melissa Wells, traveling in Yemen**

the backyard of his boyhood home in Colorado. The ones he befriended as an introverted, reclusive child. His family later moved to Wisconsin, where, at age 12, he joined the state herpetological society, and easily communed with adult scientists. High school felt limiting, so he left, and then began helping on research conducted by professors in the biology department at Beloit College (where his father was a career counselor).

At 16, he joined a summer expedition to a Costa Rican rainforest as resident snake-wrangler. "The team had me stand in a stream in the dark while they used a long, cut-off branch to hook a green tree snake that was looped around the twigs of a tree overhead," he recalls. "The snake went twirling through the air in the headlight beams and I remember thinking, 'Didn't they say this species is rear-fanged?' and wondering what that meant as it fell into my hands. Luckily 'rear-fanged' in this case meant having a bite like a bee sting."

The lack of a high-school diploma didn't keep Moffett, a fierce autodidact who swears he's never taken a course in entomology, from attending Beloit and graduating Phi Beta Kappa, with a degree in biology, in 1979.

During his senior year, long entranced by *The Insect Societies*, E.O. Wilson's seminal 1971 text, he simply wrote the professor, who invited him to visit. As Moffett remembers it, the two men were quickly down on Wilson's floor among opened books and speci-



**Marveling at Angkor Wat, the famous temple complex in Cambodia**

mens. (The Museum of Comparative Zoology [MCZ] holds close to a million ants, the largest collection in the world.) That led to Moffett's tenure as a graduate student in the department of organismic and evolutionary biology under Wilson's tutelage. There his research took off, literally. Rum-maging through the MCZ's specimen drawers, he "struck gold" with a case of marauder

ants. He was excited by the species' dramatic polymorphism—the varying sizes and shapes enabling them to perform diverse tasks in a complex society, which hadn't been adequately studied—and quickly proposed that as his research subject.

Stretching National Geographic funds to study in 11

Asian countries, Moffett spent 29 straight months in the field, far longer than usually allowed. "I guess in that sense Ed did let me do what I wanted, but only because I kept writing to let him know I was on the right track," Moffett explains. "Actually, I would often write him in a panic about all my difficulties—and in the month it took his return letter to arrive, I would have solved most of the problems myself, which I think was good for me."

Before leaving, knowing he'd have to

document the creatures he found, Moffett taught himself photography. And then, while traveling in India, he mailed his first six rolls of film to *National Geographic*, where the pictures landed with an appreciative editor; in 1986 his stunning images were published with a feature on those marauder ants, thereby launching his 30-year career as an ecological photojournalist. He traveled and worked for the magazine through the 1990s (and beyond) while he continued as MCZ research associate and associate curator of the ant collection. He was next a visiting scholar at the Museum of Vertebrate Zoology at the University of California, Berkeley, from 1998 to 2006, before moving back east, and becoming an entomology research associate at the Smithsonian, and later in human evolutionary biology at Harvard.

Moffett's photojournalistic and other achievements are due less to any love of the medium ("I don't care about photography except when it's useful to the story I'm telling") than to his ability to ignore or, more accurately, hardly notice conditions that others find inviable or repellent: stiflingly hot, wet jungles; months of subsistence-based, nomadic camping and trekking or bushwhack-

## The Director's Half-Decade

**With The Harvard Campaign** concluded and a new University president in office, the Harvard Alumni Association (HAA) has pivoted to take on new challenges and priorities. The organization is charged with engaging a wildly diverse cohort of 371,000 alumni worldwide. Starting with the class of 2022, notes executive director Philip Lovejoy, who has led the association for five years, essentially all current undergraduates were born within the new millennium—yet "then there are the folks coming back for their seventieth reunion, who were born in the 'Roaring Twenties.'" Few organizations serve people "aged 19 to 109," he adds: "That's why it's so important that we embrace our traditions and build upon past generations. But we also always have to look to where we're going and what the needs are going to be, because there's no question that society is going through radical transformations." The HAA can play a very important role, as it always has, "to bring alumni together for the good of the institution and society."

A new online balloting option launched in April for this year's elections of Overseers and HAA elected directors (see page 76) is one tangible way to better reach that broad group, especially the more than 59,000 alumni outside the United States. "The alumni voice in the governance of this University is what has always made us better and better, right?" says Lovejoy. "They challenge, they question, they oversee, and they push. They keep us honest. So, it is important, and I hope that the advent of online voting will

provide greater access to the elections so the alumni voice is heard."

To increase opportunities for personal contact, the HAA has proposed establishing a Crimson Society, an annual program for the post-fifty-fifth reunion classes that will *not* supplant the traditional quinquennial reunions. Meanwhile, to streamline reunion operations in general and potentially enable all reunioners to attend Commencement week events and commune with members of other classes, the HAA is also preparing to move all reunions to the spring. The process will start with the thirtieth reunion this May.

How best to engage and support alumni and alumni volunteers is a constant subject of exploration, Lovejoy says. Harvard clubs emerged in the nineteenth century, when alumni began moving beyond the Greater Boston area; they remain vital as geographically based, membership-dependent entities. But given digital communication and the changing needs of mobile alumni, he adds, the now nearly 200 domestic and international clubs are "not the only way people want to connect anymore. Enter SIGs"—shared-interest groups, the most rapidly growing alumni affiliates.

SIGs, which the HAA formally recognized in 2004, evolved from existing grass-roots, self-governing alumni groups, like the Harvard Gay and Lesbian Caucus and the Black Alumni Society. Today there are more than 50 SIGs, ranging from Harvard Alumni in Animal Health, Harvard Veterans Alumni Organization, and Harvard University Muslim Alumni to Harvardwood, Harvard Alumni for Global Women's Empowerment, and Harvard Alumni in



ing—through swamps, deserts, and mountains, at times getting completely lost. And, an essential intimacy with scorpions, spiders, biting ants, leeches, and parasitic botflies. (The botfly species *Dermatobia hominis* can deposit larvae under human skin; a 2010 video, shot at Harvard and now available on YouTube, shows a botfly maggot emerging from Moffett's hand, 10 weeks after the eggs were laid in Belize.) He can also sit still anywhere for as long as it takes to get what he wants. Once, documenting a beetle for a researcher in South America, he watched and waited, jotting down notes: "It's moved an inch. And its antenna is drooping." Eventually, "it moved and found its burrow," he adds, which "made for an exciting conclusion to the story." But it did take 10 hours.

Alone in a jungle, he feels content, alive. "Those times you're there for days, not moving... Turning the brain off is the most bizarre, wonderful thing," he reports. "It's the true creative time, the empty time when the mind has a chance to wander. There's not enough of that anymore." There's no shame in his conceding, "I'm not always good with reality," or with quotidian tasks or financial planning. His wife, Melissa W. Wells, "tells people I

should wear a medical-alert bracelet that explains that it's normal for me not to know what day or year it is, let alone when exactly things happened in the past," he adds. "It seems I live in the present tense."

Moffett and Wells, a healthcare consultant, married in 2008—both happily barely clad in furs, feathers, and body paint during a Rapa Nui-style ceremony beside the Rano Kau volcano on Easter Island; she shares his passion for adventuring. With the publication of *The Human Swarm*, Moffett has talks planned, including at the Smithsonian, The Explorers Club, the World Science Festival, and on May 2 at Harvard. But after that, he must get moving. "Frankly, it's been too many years in



**During a research trip, Moffett and Wells got married on Easter Island. The governor arranged "for a traditional ceremony," Moffett says. "We had no idea what we were getting into. They stripped us down at the edge of the Rano Kau volcano. Everyone on the expedition had an amazing time."**

New York; the longest I've lived in one place," he notes. "Melissa and I keep talking about Singapore as a base of operations in Asia. Or Botswana. Or Venezuela, if that country ever stabilizes. If you think Caracas sounds wild, you should visit its rainforest. Life is too short to miss such things!"

Food and Wine; Harvard Impact Alliance, a multi-sector approach to social change, is among the newest.

"Right now we're doing an incredibly cool project" with the First Generation Harvard Alumni SIG, says Lovejoy: a "red book" of more than 100 personal essays. The volume represents the first non-class-specific "class report," and will be printed and distributed early this summer; the HAA will mail free copies to participants, to that SIG's members, and to incoming first-gen College students.

Among the HAA's "biggest strategic imperatives in the coming years," Lovejoy continues, is figuring out how to move beyond geographic barriers to better integrate alumni. How, he asks, can we best "connect everybody in Chicago, for example, who is getting together around Harvard in some capacity...the people in the entrepreneur SIG, the Harvard Club of Chicago, the Business School Club of Chicago, the class of '87?" The clubs' roles may evolve, too: "Many find that they're challenged by memberships, so we really want to look at this concept. What does membership mean today? Are paid membership models right?" SIGs might supply the "content stream" for clubs, he says, but the local, face-to-face, personal



**Philip Lovejoy**

meetings are still "the richest way to get together—and people want those."

He's wary of perpetuating any perceptions of exclusivity. During the last five years, he says, the association has become "much more open and responsive," with strong working relationships among colleagues and alumni leaders across Harvard, pursuing a common goal: "How do we empower and strengthen our alumni to be strong citizens of Harvard? What do we need to do to do that?"

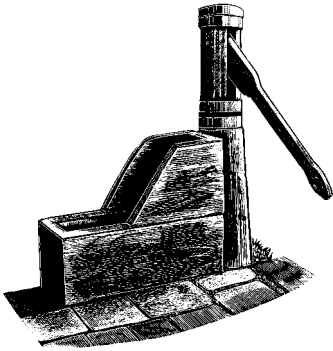
"We need to make sure that it's a place everybody is welcome and feels they belong," he continues. "So, consistent with the presidential task force on inclusion and belonging [see [harvardmag.com/diversity-report-18](http://harvardmag.com/diversity-report-18)], we're doing a lot of work on that within our volunteer groups, and also within the staff organization."

As the HAA faces these and other new imperatives, Lovejoy will continue to travel and meet with alumni. "The depth of commitment and love for this institution by our alumni is profound," he says. "And we rely heavily on our volunteers to really create these communities, build the connections, to care, to participate. It's an incredible privilege to be trying to steer this ship."

—NELL PORTER BROWN

WILL HALSEY/COURTESY OF THE HARVARD ALUMNI ASSOCIATION

# Paper Persists



"Your wooden arm you hold outstretched  
to shake with passers-by."

PAPER LIVES. Two recent reminders that paper still has a purpose have come to Primus's attention. Daniel D. Reiff '63, Ph.D. '70, an art historian at Fredonia State University who retired as SUNY Distinguished Service Professor emeritus in 2004, wrote recently about his newly published *Column Monuments: Commemorative and Memorial Column Monuments, from Ancient Times to the 21st Century*. "I am not able to send you a copy" for consideration, the author modestly wrote, "as it comes in five volumes (over 1,000 pages and 917 illustrations)—and will sell for about \$995," to research libraries and specialists. "I thought you'd like to *know* about it anyway"—and indeed we do, if only to inoculate ourselves, and friends, against such labors *in retirement*.

Porter professor of medieval Latin Jan M. Ziolkowski (an active scholar and director of Harvard's Dumbarton Oaks Research Library and Collection, in Washington, D.C.) apparently has the same gene. His *The Juggler of Notre Dame and the Medievalizing of Modernity*, accompanying an exhibition (see "The Juggler's Tale," November-December 2018, page 54), totals six volumes and 2,451 pages.

He had limbered up, as co-editor with Lane professor of the classics Richard F. Thomas, on the three-volume *Virgil Encyclopedia*, published in 2013.

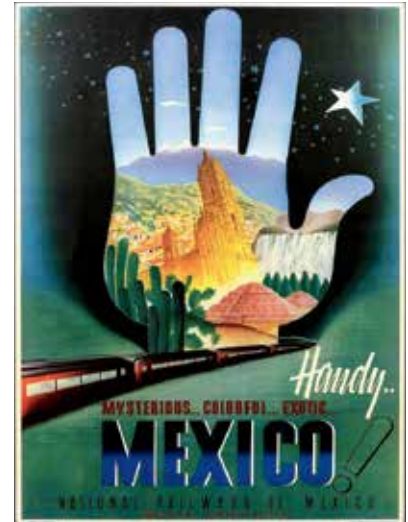


LONG MEMORIES. This magazine's March-April issue documented participants' recollections of the momentous early spring events that shook the campus a half-century ago ("Echoes of 1969," page 52). The animating issues then—war, racial justice—loomed large, and still do. But Harvardians rose to protest lesser matters during the 1960s, too. In late April 1961, a throng of students took to the streets in the "Diploma Riots," complete with togas, because President Nathan M. Pusey defended the faculty vote that made English the official language on diplomas.

The slight did not subside. At the class of '61's fifteenth reunion, secretary Greg Downes reports, he crafted a design swapping in TR-U-TH for VE-RI-TAS on the Harvard shield. That very Crim-son/brainiac form of protest has persisted, as shown on this swag from a recent reunion. A blow against those who would trifle with tradition—or, one presumes, advocate nowadays for dubbing everything digitally (a class of 1961 Reunion 12.0 in 2021?).



TRAVEL TEMPTATION. After a cold winter, the mind wanders to spring and summer, and inviting venues, European or otherwise. As it happens, among the elements collect-



ed in Dumbarton Oaks's ephemera archives are some post-World War II travel posters, meant to encourage visitors to trot the globe again, for non-belligerent purposes. May this sample whet your appetite.



CENTERED ON THE YOUNG. During his 58 years on the faculty, the late Buttenweiser University Professor Stanley Hoffmann (profiled in "Le Professeur," July-August 2007, page 32) had an outsized impact on the University, intellectually and during turning points such as the crises of April 1969. He also helped the United States and Europe understand each other, in a way that has seemed quaint of late.

The autumn 2017 edition of *Commentaire*, recently circulated on these shores, contains memorial essays by a number of former academic colleagues. Peter Gourevitch, Hoffmann's Ph.D. advisee ('70) and then a newly appointed Harvard assistant professor (now emeritus from the University of California, San Diego), draws an enduring lesson from his mentor's founding and early leadership of the Center for European Studies in 1969, amid colleagues including Henry Kissinger, Franklin Ford, David Landes, and Samuel Beer:

"[T]he key to what the CES became was Hoffmann's very strong commitment to have the Center be built not to serve these very famous senior faculty 'barons' but rather to be the instrument of the young, the graduate students and junior faculty. He wanted the intellectual life of the Center to proceed from the bottom up in order to encourage these voices."

~PRIMUS VI





# Africa in Clay

*Pliable arts from across the continent*



CLAY ARTWORKS ARE as varied as the populations of the world: “There are dozens of different typologies of clay,” says Clowes professor of fine arts Suzanne Blier, corresponding to different colors and textures found throughout the earth’s river banks. Viewers can admire the material’s surprising versatility on a single continent at the Harvard Art Museums’ exhibition “Clay—Modeling African Design” (through November 2021), curated by Blier, who is also professor of African and African American studies, and Jessica Levin Martinez, research curator of African art initiatives.

The Nile and Congo rivers define two major regions for ceramics. A sturdy, globular jug from the nineteenth century, created by skilled artisans (probably women) from the Kongo culture, would not appear out of place in a museum of modern art: its seemingly improvised watery patterns, in earthy blue, brown, and white, “evoke the Congo River itself and the way it engages different features of the landscape,” an exhibit label reads. Clay also provides a canvas for more



tightly focused designs. A hollow cylinder divided into three bands—the top and bottom incised with feline-like creatures representing aristocracy, the center with a checkered, geometric pattern—was probably used in funerary rituals. The longevity of ceramics may have made them practical markers for burial sites, explains Blier, and because clay comes from the ground, where the dead are buried, it is also linked to concepts about the body, ancestral spirits, and the divine. In ancient Egypt, tiny ceramic figurines made of bright blue faience were buried with the dead, to do their chores in the afterlife.

Most of the objects displayed—pottery, masks, jewelry, an acoustic instrument—involve clay elements, but the exhibit also invites viewers to explore the pliability of other materials. An eye-catching photograph by contemporary artist Alexis Peskine, one of the few pieces not borrowed from the Peabody Museum of Archaeology



and Ethnology, shows two figures on a Senegalese beach wearing tin cans, rice bags, and plastic bottles refashioned into space-age suits. A part of the Afrofuturist movement, it combines pan-African themes with modernity, technology, and self-determination—the ability to mold a new future.

The exhibit, and Blier’s recent research, are bound up with larger historical questions. Why consider Africa as a unified whole? One reason, she explains, is that the division of the continent into regions—North Africa as connected to the European sphere, and sub-Saharan Africa on the periphery—is a relic of colonialism. “The Sahara really did not exist as a wall between northern and southern cultures,” she says. An exhibit piece makes that point: a raffia palm textile from the Kuba culture in present-day Congo, adorned with geometric patterns of mind-bending complexity. (A wooden box in a similar style, shown above, sits below it.) Such textiles were collected early in Europe; they were considered luxury fabrics, like velours, and used in nativity scenes and elsewhere, Blier says. “These have been highly valued for a long time.”

—MARINA N. BOLOTNIKOVA





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