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## Cambridge 02138

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#### **HABEAS CORPUS**

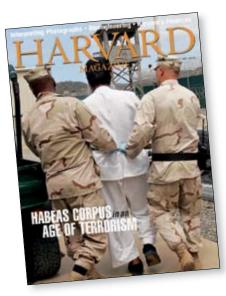
As JONATHAN SHAW'S thoughtful article observes ("The War and the Writ," January-February, page 24), the courts and Congress recognize that the Constitution allows for the suspension of habeas corpus "in Cases of Rebellion or Invasion." But Shaw does not explicitly distinguish these limited situations from what the article variously refers to as "war," "terrorism," "times of crisis," "armed conflict," "periods of crisis" and "hostilities."

There are meaningful distinctions between this nation's distinguishable security activities at home and in such foreign countries as Iraq, Pakistan, and Afghanistan. Unfortunately, the Bush administration shielded these various activities from scrutiny by placing them under the broad protective screen of a "war on terrorism." But the courts, the Congress, and the public need to make distinctions if the judicial and political processes are to work.

A war is not necessarily a war for legal purposes because the president and arguably even the Congress choose to name it as such. We should not suspend the writ, congressional inquiry, or common sense every time a political leader runs up a "war" banner.

ROBERT H. SAND '58, J.D. '61

In his brilliant study of twenty-first century terrorism and our response, vel non, thereto, Philip Bobbitt (Terror and Consent, 2008) notes at the outset that "among well-informed persons, a number of dubious propositions about twenty-first century terrorism and the Wars against Terror are widely and tenaciously held." He then lists 22 of these, more or less all of



which are reflected in the opinions and proposals voiced by the "well-informed persons" quoted in Shaw's article. They all might be better informed, and better able to offer credible contributions to the dialogue revolving around this subject, if they first read his book.

> John Richardson, LL.B. '60 Orford, N.H.

Two hundred and fifty men held without trial at Guantánamo: this is a drop in the bucket considering that there are thousands of dangerous terrorists in Pakistan, Afghanistan, and Iraq, to say nothing of those in Palestine, Lebanon, even Europe. Let them go: send them back to their countries of origin except for those whose countries of origin are dangerous for them. They won't make much difference in the "War on Terror." Even if every one of the Guantánamo detainees is dangerous, they will simply disappear into the sea of terrorists. The Bush administration was not really afraid of these men; they have no magical powers. But they

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might testify against the United States in the information war for status and respect in the world.

> Mary M. Smith '61 South Portland, Me.

PHILIP HEYMANN'S description of Guantánamo as "only a small-scale detention problem" may be true, but only if one views Guantánamo as sui generis. In fact, however, the United States holds hundreds more prisoners at Bagram Air Force Base in Afghanistan and thousands more in a variety of prisons in Iraq, not to mention the unknown number still held in black sites around the world. None of these groups have captured the attention of the media or the public as have the prisoners held in Guantánamo, but all share the same denial of habeas corpus rights (and those held in other locations lack even the meager rights that have been tenaciously won for the Guantánamo prisoners by courageous lawyers).

David Remes asserts that anyone who "threw a grenade at an American soldier or shot at an American convoy" has clearly "attacked the United States." But that's only true if the American soldier or convoy was legally present in the country where the attack occurred. Since U.S. forces invaded both Afghanistan and Iraq illegally, surely anyone in those countries, be they members of the armed forces or civilians, has the legitimate right of selfdefense. Describing such actions as an "attack on the United States" is akin to a rapist demanding "justice" after being stabbed by a woman he had assaulted.

STEVEN PATT, Ph.D. '75 Cupertino, Calif.

I WRITE IN APPRECIATION of Jonathan Shaw's article on detention without criminal charges and offer a supportive footnote. At the time of the American Revolution, leaders of the independence movement were aware that the conservative British jurist Lord Mansfield had decided in 1772 that an African slave purchased in Virginia, bound for Jamaica, but temporarily detained in British territorial waters, must be set free.

Remarkably, in its recent decisions to the effect that so-called "enemy combatants" at Guantánamo Bay could use the writ of habeas corpus to protest their indefinite detention without charges, the justices of the U.S. Supreme Court turned



Dear Readers.

For many years, alumni like you have supported publication of Harvard Magazine by making small donations. These contributions—along with advertising sales and a University subsidy—have enabled the magazine to keep you in touch with the community, prepare intellectually engaging articles, and provide objective coverage of Harvard today.

The rapid decline in advertising (historically the magazine's largest source of revenue) and rising pressure on other funding sources during the past six months now force us to make many adjustments, even as our staff continues to work as hard as possible on your behalf.

The most significant change you will notice, beginning with this issue, is a smaller publication: fewer pages translate into immediate, urgently needed savings on paper, printing, and postage—the principal costs in delivering your magazine. (Internally, we have cut costs across the board, including compensation.)

We will complement the printed Harvard Magazine by posting even more content on our website, www.harvardmagazine.com (see page 6). There you will find regularly updated news about the University and its people, multimedia materials accompanying articles, and carefully selected reports about alumni and developments affecting Harvard from around the world. The website maintains the same rigorous editorial standards and the same focus on serving you that have been at the core of the magazine's mission for more than 100 years.

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Catherine A. Chute Publisher

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historian and twice cited the more than 230-year-old decision by Lord Mansfield. Sommersett v. Stewart, 10 How. St. Tr. 1, 79-82 (K.B. 1772), cited in Rasul, et al. v. Bush, et al., 542 U.S. 466, 481, n.11 (2004), and again this time in the text, not in a footnote cited in Boumediene, et al. v. Bush, et al., 128 S.Ct. 2229, 2248 (2008) ("a petitioner's status as an alien was not a categorical bar to habeas corpus relief").

The writ of habeas corpus, originating at Runnymede in 1215, strengthened and made more explicit during the English Civil War of the seventeenth century, is the foundation of criminal law in Great Britain and the United States. As my Harvard classmate Robert Bellah has demonstrated, Harvard played an inglorious role during the McCarthy years after World War II. It would warm the hearts of many old alums if Harvard and its magazine were to step forward and stand fast in defense of the writ of habeas corpus.

> STAUGHTON LYND '50, Ph.D., J.D. Niles, Ohio

I was deeply shocked by the article on habeas corpus-not shocked by its contents but by the date of its publication. Why has this article not appeared years ago? Why does Harvard Magazine have to wait safely until after the election of Barack Obama, when it can be sure to be with the tide of mass public opinion, to produce an article on such an important moral issue? Is this intellectual timidity, conformity, or both?

> Ann Godfrey, M.D.S. '96 Palo Alto, Calif.

Editor's note: We first assigned coverage of this subject in 2006, but did not receive a publishable article then, nor during a subsequent attempt in 2007. This article was published as soon as it was completed by a staff writer. Related issues were raised in "Understanding Terrorism" (January-February 2002), which dis-

#### 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, use our website, www.harvardmagazine.com, or fax us at 617-495-0324. Letters may be edited to fit the available space. cussed concerns about tribunals, privacy, information-gathering, and civil liberties.

I HAVE CONTEMPLATED with growing horror the abuses of basic human rights and violations of international law that our government has been perpetrating in the prisons of Guantánamo, but have felt that eventually our legal system would deal with the issue. I would like to state that I do not want torture techniques, such as "waterboarding," done to prisoners in my name, even for the protection of the United States. The one sure way that our enemies can destroy us is to get us to descend to their level of barbarity.

But I take issue with the statement of Anthony Lewis. The Taliban can in no way be considered a legitimate government, given the abuses it perpetrated upon most of its hapless citizens. But treating their soldiers as "agents of terror" because they were opposing us on the battlefield is nonsense. As in most wars, most of them are just grunts, with no control over their situation.

> Howard Toburen '60 Lynnwood, Wash.

#### **DIVERSITY DEFICIENCY**

THE CHART showing the Crimson contingent in the upcoming Congress ("Crimson in Congress," January-February, page 60) should not be a comfort to the College leadership. It displays very graphically how Harvard and other Ivy League institutions have contributed to and perhaps even caused the toxic political polarization of this country. How can an institution which proclaims as its goals leadership, excellence, and diversity have 93 percent participation in one party in a country balanced between two parties? Surely half of America will come to despise institutions which appear willfully to have created such polarization.

> Bruce P. Shields '61 Wolcott, Vt.

#### **GETTING TO GREEN**

PRESIDENT FAUST is right when she reminds listeners that the world's current turmoil represents a systematic crisis that has arisen from a failure of "wider vision" ("Educating Professionals," January-February, page 58). Connect the dots. Al Gore asks his audience ("Gore Boosts a Greener Harvard," page 58) to substitute renewable energy for carbon-based ener-

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gy in order to control global warming. Turn to page 61 for Elizabeth Gudrais's report on the development of heating, lighting, and plumbing in low-cost homes in Latin America ("For Santiago's Poor, Housing with Dignity"). Astute readers may spot the great dilemma of the twenty-first century. How can nations reduce the use of carbon-based fuels while lifting the poor out of poverty? When leaders combine a social-justice agenda with their environmental-protection concerns, there's hope for humanity. When the desire to save "Mother Earth" overrides human-rights concerns, brace yourself for a time of troubles.

> Robert F. Murphy, M.Div. '95 Falmouth, Mass.

I DETECTED no note of irony in the reporting that "The consciousness-raising during Harvard's Sustainability Celebration included lots of giveaways..." (page 58). Do Harvard students need stickers to remind them to reduce food waste? Are they generally without T-shirts? When are we going to recognize that sustainability means "less stuff" and that self-styled "green" swag is actually not "green" at all?

> HELENE S. YORK '83 San Francisco

#### SECRETARY PERKINS

Your excellent profile of Frances Perkins (Vita, by Adam Cohen, January-February, page 32) was accompanied by a stock photo of her with "steelworkers constructing the Golden Gate Bridge." Ms. Perkins, a friend of organized labor, would have known they were "iron workers." Steel workers make steel, iron workers erect steel buildings and bridges. This would be trivial, except that it kills a little history. The first metal buildings and bridges were built of iron, often small pieces of cast iron. Those iron workers adapted to the new steel technology, moving from low-rises to skyscrapers (the Empire State Building, et al.), but they kept their hard-won and proudly spoken union name. So, for another example, do the Teamsters who now drive a team of cylinders, not horses. And you and I are not "automobilists," as we first were known, but we have reverted and become "drivers," like our predecessors on stage coaches and buggies.

M.R. Montgomery, M.A.T. '65, NF '84 Lincoln, Mass. (please turn to page 69)

"I was interested in helping to make Harvard affordable for students because I received financial aid. But I also needed to be sure I had enough money for retirement."

K. DANIEL RIEW, M.D. AB '80

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John de Cuevas '52 just



#### Zellweger Gets Her Pudding Pot



PEBRUARY 5, 2009 + BREAKING NEWS

Traffic came to a stop in Harvard Square today for a parade with Renée Zellweger, the Hasty Pudding "woman of the year."

#### A Death in the Harvard Family: John Updike '54, Litt D. '92



JANUARY 27, 2009 - ALUMNI IN THE NEWS

Noted author John Updike '54, Litt.D. '92, died of lung cancer on January 27 at the age of 76.

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JANUARY 22, 2009 . HARVARD IN THE NEWS

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Howell Jackson will become acting dean of Harvard Law School, subject to the confirmation of Elena Kagan as U.S. Solicitor General.

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Solve the most recent creation of puzzlemaker John de

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#### Barney Frank: "The Most Outspoken Man in the House" JANUARY 13, 2009 • ALUMNI IN THE NEWS

Jeffrey Toobin profiles Congressman Barney Frank, the most important figure in the House of Representatives involved in legislating solutions to the financial crisis.

#### Inaugural Addresses Then and Now

JANUARY 13, 2009 - ALUMNI WRITERS

An archival look at presidential inaugural talks, and a contemporary, amusing historian's take on the often-clunky, but increasingly populist, first-day rhetoric.

#### Up Next: The Harvard Center for Gastrophysics?



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# Right Now The expanding Harvard universe

NATURE, NURTURE, NARCOTICS

## Our Psychotropic Lives

E LIKE to think that as humans, we are somehow above biology—capable of self-restraint and subverting base urges. But professor of history Daniel Lord Smail argues that for humans and animals, life is by and large a quest to feel good. We may be responding to biological urges that are complex and sophisticated, but they are biological urges all the same.

In his most recent book, *On Deep History and the Brain* (University of California Press), Smail posits a new view of human history in which physiology and culture evolve symbiotically in a process driven by brain chemistry and psychotropic effects. Seen from his perspective, we are all hooked on the hormones and neurotransmitters that signal pleasure and relieve stress.

In popular usage, the term psychotropic refers to drugs—prescription or recreational—that radically alter consciousness. But the technical definition includes all substances that act on the central nervous system—including caffeine, alcohol, and anesthesia. Smail has coined an even wider definition, referring to psychotropic "mechanisms"—not only substances that we ingest, but also actions that affect the balance of hormones and neurotransmitters in our bodies. The list includes exercise, sex, gossip, even skydiving.

He argues that the way we define addiction is arbitrary and artificial. We stigmatize addicts, considering them on the

wrong side of a fallacious dividing line that changes location from one culture and one epoch to the next. Why do we wholeheartedly endorse pursuit of a "runner's high," equivocate about caffeine and alcohol, and condemn cocaine use? In eighteenth-century Europe, Smail points out, the list of addictive substances to be used with caution included books. With the rise of the novel and the spread of literacy, a new fear of "reading mania" gripped the populace. He quotes one scholar's account that young women were seen as particularly vulnerable, because they might "grow addicted to the pleasures induced by novels...have their passions awakened, and form false expectations about life."

Perhaps, then, what differentiates humans from animals is the very ability to intentionally self-medicate? Not so fast, says Smail, who notes multiple examples of animals doing the same thing, including birds that "get drunk" by gorging on fruit that has begun to ferment as it decays. He argues that evolution pays attention to psychotropy, noting that in breeding dogs to enjoy human contact, we have created a class of animals "addicted" to petting, in the sense that they crave and seek out the hormonal response it generates.

Evolution attaches pleasing chemical signatures to behaviors that confer advantages in survival and reproduction; it is obvious enough why sex and eating



Illustration by Mark Brewer

would be pleasurable. But when we find ways to trip the same circuits with other activities (for instance, by activating the exhilaration of the fight-or-flight response through skydiving), those behaviors have their own evolutionary and his-

# For humans and animals, life is by and large a quest to feel good.

torical consequences. Smail does not think it mere coincidence that the increasing accessibility and popularization of products such as coffee and spirits in Europe (the proliferation of coffeehouses, the influx of rum from the Caribbean and Brazil, the gin craze of the mid-eighteenth century) coincided with declining attendance at religious services, and in some places, transitions from monarchical states to democracy. "Where individuals once relied on religion and ritual as sources of dopamine and other chemical messengers," he writes, "they turned increasingly to items of consumption, giving up God in favor of Mammon."

He divides psychotropic mechanisms into two categories: autotropic (altering one's own mood) and teletropic (altering someone else's mood). In eighteenthcentury Europe, he writes, there was "a tectonic shift away from teletropic mechanisms manipulated by ruling elites toward a new order in which the teletropies of dominance were replaced by the growing range of autotropic mechanisms available on an increasingly unregulated market." Here he sees the seeds of our modern consumerism: the coffee, chocolate, and spirits habits of earlier centuries stemmed from the same ethos as today's "retail therapy."

To support his argument that pre-modern societies' rigid class structure, as oppressive as it might have been, was also soothing, Smail draws evidence from evolutionary biology: researchers have found that baboons feel less stress (as measured by their hormone levels) when they live in groups with clearly delineated rank order. If rank order is less clear, the rules that govern interactions—such as which one should step out of the way when two baboons cross paths—require constant

negotiation, and the uncertainty seems to induce anxiety.

The book is less a thorough exposition of ideas than an open invitation to consider them. Smail (a medievalist by training) began writing it as the introduction to another book—a "deep history" of humanity, on which he is now working. Both projects grew out of his frustration with perceived shortcomings in the way history is taught and studied. Historians, he complains, tend to act as though history begins with the first written texts. He aims to write an authoritative, unified history that reaches all the way back to the Paleolithic era and integrates evidence from anthropology and evolutionary biology. And it isn't a one-way street: Smail, who also teaches a course on the history of emotion, believes biologists might gain insights from analyzing the descriptions of emotional states found in ancient texts—traditionally historians' domain.

In this scholarly space where disciplines merge, "we can finally dispense with the idea, once favored by some historians, that biology gave way to culture with the advent of civilization," he writes. "Civilization did not bring an end to biology. Civilization *enabled* important aspects of human biology."

∼ELIZABETH GUDRAIS

DANIEL SMAIL E-MAIL ADDRESS: smail@fas.harvard.edu

**BOOSTING BONDS** 

## Save Yourself

s THE Obama administration advances a stimulus approach it hopes will reinvigorate consumer spending and restore lending, many households need to focus on an opposite strategy: how to break the cycle of debt and begin to build savings. In recent years, the U.S. savings rate has hovered at or near zero, as Americans and financial institutions have grown addicted to a borrow-and-spend economy. For low-income families, this trend has particularly dire implications: a job loss or health calamity may wipe out a child's future educational prospects or, worse, lead to immediate homelessness.

Peter Tufano, Coleman professor of financial management at Harvard Business School, has proposed a public-policy change that would encourage poorer Americans to save by allowing them to purchase U.S. savings bonds with a portion of their federal income-tax refund. The suggestion results from several years of research conducted by the Doorways to Dreams Fund, a nonprofit research and development lab that Tufano founded in 2000 to develop creative ways to meet a range of financial-service needs among

This 1918 "Joan of Arc" poster marketed savings stamps that could ultimately be exchanged for a war bond.

the poor. "Although low-income people have plenty of access to check-cashers and credit," he says, "they have little access to savings products." Even large mutual-fund companies, he points out, require a minimum deposit of \$2,500 to \$3,000.

In contrast, federal savings bonds offer an ideal vehicle for the small saver. They are available to anyone with a Social Security number (including those with poor



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credit), come in small denominations (starting at \$25), charge no fees, may earn an inflation-adjusted interest rate, and guarantee no loss of principal. Their only limitation: they must be held for at least one year, and redemption before five years results in a loss of three months' interest. Although widely available through much of the twentieth century, especially during wartime, savings bonds faded from view in recent decades as the Treasury pursued more efficient means of raising money.

Last spring, Tufano and his colleagues conducted a study to determine whether the introduction of savings bonds at taxassistance sites would increase the likelihood and level of saving among low-income tax filers. The experiment focused on 31 H&R Block tax-preparation offices located in Schaumburg, Illinois, and in Boston. Four of the sites offered only standard H&R savings products (such as

"Easy Savings" and the "Easy IRA"). The remaining 27 sites offered clients savings bonds alongside the company's products.

The findings proved highly significant. The fraction of refund recipients who chose tax-site savings was 8.5 times higher in "treatment offices" than in "control offices." The availability of the savings bonds not only produced new bond sales, but increased the demand for savings overall. Among those who purchased bonds, nearly two-thirds were first-time, small savers, who reported having no other money saved or invested at the time of purchase. Individuals with more dependents had an increased likelihood of saving when given the option of bonds, even though they had revealed low intent to save at the outset of the study. Moreover, many of the bond purchasers chose to "gift" savings to relatives (often a child) and expressed a preference for the bonds'

redemption constraints, indicating that they planned to hold the bonds for five to 10 years or more.

Based on their research, Tufano and his collaborators at Doorways to Dreams have called on the Treasury to reintroduce the savings-bond option on tax forms, to give low-income refund recipients a simple way to put money aside for the future. Filers would simply check a box directing the Treasury to keep a portion of their money. "Saving bonds have always offered a way for families to take care of themselves and, at the same time, to invest in the country," Tufano says. "This certainly can't be a bad thing in the current environment."

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DOORWAYS TO DREAMS FUND WEBSITE:

www.d2dfund.org

MIRROR ME

## The Internet: Foe of Democracy?

stein, has had a polarizing effect on democracies. Although it has the capacity to bring people together, too often the associations formed online comprise self-selecting groups with little diversity of opinion, explains the Frankfurter professor of law. This confounds the constitutional vision of the founding fathers through a perversion of the notion of free speech. Such environments reinforce preexisting viewpoints, undermining the constructive dialogue that promotes progress in democracies.

Speaking on September 17—Constitution Day—Sunstein (who is bound for Washington; see Brevia, page 51) said the founders made only one "truly original contribution" to constitutional thought. Their predecessors, influenced by Montesquieu, thought that successful self-government required everyone to be alike. The founders, in contrast, believed heterogeneity and diversity constitute a creative force. "When Hamilton explained the system of checks and balances with what he called 'the jarring of opinions' in the legislative branch," Sunstein noted, "he said

that it promotes circumspection and deliberation, and serves to check the excesses of the majority." This idea "turns traditional republican thought on its head."

Protection of free speech is one element allowing Hamilton's "jarring of opinions" to succeed. But Sunstein worries that the conception of free speech emerging in today's communications market emphasizes "an architecture of control...by which each of us can select a [customized] free-speech package." Google

publics of like-minded individuals of the sort Montesquieu preferred, but the founders considered "destructive of self-government...."

Sunstein buttresses his argument with data from three studies he has worked on in the last decade. In the first, he and colleagues assembled a group of liberal-minded citizens from Boulder and a separate group of conservatives from Colorado Springs to discuss climate change, same-sex civil unions, and affirmative action. "We were particularly interested," he says,

### Like-minded groups became more extreme and the internal diversity of views "evaporated."

News asks, "[W]hy not set up your pages to show you the stories that best represent your interests?" The *New York Times* offers "Mytimes"; Amazon and Netflix employ collaborative filtering to ensure "a kind of personalization...by which your communications universe can be yours." (MIT's Nicholas Negroponte first identified this "daily me.") The resulting self-segregation creates numerous small re-

"in finding what would happen to the private, anonymous statements of views expressed" before and after the discussions. On each issue, the like-minded groups became more extreme and the internal diversity of views "evaporated," Sunstein reports. Pre-deliberation, for example, some liberals wanted to know more about the costs, especially for the poor, of an agreement to reduce greenhouse gases, and

some conservatives were open to same-sex civil unions. Post-deliberation, the diversity of views on all three issues dropped precipi-

Sunstein found a similar effect within juries, and even among federal judges on courts of appeals panels. When comparing the voting records of judicial appointees, the split between Democratic- or Republican-appointed judges increased from 10 percent on mixed panels to 30 percent on panels consisting exclusively of single-party appointees.

These findings suggest, he says, that free speech is not enough to ensure a healthy democracy. Important as well are "unchosen serendipitous, sometimes disliked encounters with diverse ideas and topics," as well as "shared communications experiences that unify people across differences." Public spaces such as city parks and sidewalks provide the "architecture of

serendipity" that fosters chance encounters with a "teeming diversity" of ideas. Newspapers, magazines, television, and radio—which Sunstein calls the "great general-interest intermediaries"—played a similar role in the twentieth century. "If you are reading a daily newspaper, not online, the real thing," he says, "chances are your eyes will come across a photo-

graph or a headline that will attract your interest, produce curiosity, make you read maybe a paragraph, and eventually an article and conceivably change your life"—the sort of thing your Google News feed filters out.

The shared "general-interest intermediaries" not only exposed readers to diverse topics and points of view, but created "a shared experience, a social glue," Sunstein believes. In their absence, the current system of self-sorting—only 2 per-

> cent of Daily Kos readers, for example, are self-identified Republicans—diminishes the serendipity that alerts us to "the occasional, maybe infrequent legitimacy of the concerns of our fellow citizens."

Yet the "new technologies here are more opportunity than threat," Sunstein suggests, "and what is limiting the realization of the opportunity is the absence of relevant ideals in the minds of the people who are using and developing and innovating [these] technologies." For a partial solution to the problem, he says, Americans must "recover our constitutional aspirations as citizens and as providers of information." While not denying market pressures—"the information we receive is a product of

what information we demand"-Sunstein advises seeing the notion of the "daily me" as "a kind of science-fiction story rather than as a utopian ideal." And, he says, we should create twenty-firstcentury equivalents of the kinds of public spaces and institutions where diverse people will congregate.

~JONATHAN SHAW

#### SUBVERTING STEREOTYPES

## Laughing at Slavery

N HIS 1997 book Rock This! the black comedian Chris Rock sends up the "Uncle Tom" stereotype of a subservient African American who kowtows to the majority culture. Rock affectionately describes his gay uncle, whose name is Tom. "We call him Aunt Tom," he writes, adding, "I love my Aunt Tom. I know that if I was in a fight, Aunt Tom would take off his pumps and whip some ass."

This example appears in Laughing Fit to Kill: Black Humor in the Fictions of Slavery, a new book by Glenda Carpio, associate professor of African and African American studies and of English. The booksix years in the making—describes how slavery has provided both a backdrop and a wellspring of raw material for much African-American humor.

Some of the book's examples are hilarious, others disturbing, but the analysis is dead serious throughout. "I don't treat humor lightly, though I enjoy it," Carpio says. She shows how black comedians, artists, and writers have "conjured" slavery-based stereotypes and themes, resurrecting images, characters, and events from the past to re-examine them in the present, often through the lens of comic imagination, to transform deep suffering into cathartic laughter and insight.

The comedian Dave Chappelle, for example, once played the slave Kunta Kinte in a parody of the 1977 miniseries Roots during an episode of his Chappelle's Show (formerly on Comedy Central). "[A]s Kunta, he receives interminable lashes for refusing his new, slave name," Carpio



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writes. "But just as the lashing begins to become unbearable, Chappelle's Kunta suddenly frees himself from the post to which he is tied, runs to the overseer, and proceeds to beat him. 'What did I tell you about getting out of hand!' yells Chappelle, turning his back to reveal the thick padding that protected him from the lashes all along.

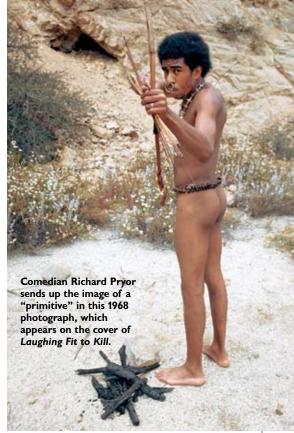
"Chappelle employs classic postmodern techniques to measure the distance from his subject," the passage continues. "Not only are his scenes representations of representations, but they also flaunt their seams, thus bringing attention to the process of making fiction while commenting on the overt familiarity of the scenes they parody."

Besides discussing modern comic artists such as Chappelle and Richard Pryor, Carpio ranges back to seminal black fiction writers like William Wells Brown (1814-1884) and Charles W. Chesnutt (1858-1932). Laughing Fit to Kill also conducts probing analyses of several

Chesnutt (1858-1932). Laughing Fit to Kill also conducts probing analyses of several major figures, including modern painter Robert Colescott, visual artist Kara Walker, novelist Ishmael Reed, and dramatist Suzan-Lori Parks, who, in 2002, became the first African-American woman to win the Pulitzer Prize for drama, for her play Topdog/Underdog. "I wanted to make the connection between high and low, polite and popular culture," Carpio explains, "to show how the legacy of slavery is treated from both ends."

She also writes to "critique the kneejerk reaction we have to stereotypes, that they are simply bad," Carpio says. "They're also seductive. Artists invite us to examine why stereotypes persist, and to consider the power they have. We protest against them, but something is keeping them alive. The conjuring artist says, 'I'm going to bring these things fully alive in front of you, and make them bigger and louder and get you to ask what it is that drives these stereotypes.' The major ideology of slavery—that the human body is a commodity—persists in the marketability of racial stereotypes now."

Even a figure with the gravitas of Frederick Douglass "was a really good mimic," Carpio says. "In his lectures, he could imitate the slaveholders and the mockery they made of basic human institutions like marriage and family—fathering chil-



dren they would then own." Douglass eventually gave up such burlesques in the years just before the Civil War.

In 2005, Chappelle made a very different renunciation, but one that may have drawn on similar principles. His show had been a huge commercial success: the DVD of its first season sold more than three million copies, setting a record for a television program. Yet Chappelle turned down a \$50-million offer from Comedy Central to write and perform two more seasons. "He was worried that the audiences were not laughing in a critical way—that they were just consuming these stereotypes, not thinking about them," Carpio explains. "Sometimes people don't get the humor—that's a huge risk that artists who trade in stereotypes take. I'm interested in artists who take those risks.

"People see African-American humor as a folk expression," she continues. "They don't see it as an art form. Scholars might use sophisticated analytic tools to study the humor of, say, Samuel Beckett, but they drop all those tools when they turn to black humor. The notion is that black humor is not creative, it's just folk stories handed down. I wanted to take a sophisticated approach to the artistry of black humor."

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# New England REGIONAL SECTION





## Extracurriculars

#### SEASONAL

• April 30 to May 3 www.fas.harvard.edu/arts 617-495-8690/76

The annual *Arts First* festival, free and open to the public, offers an undergraduate Smörgåsbord of dances, concerts, plays, and other performances. President Drew Faust honors this year's Arts Medalist, poet John Ashbery '49, Litt.D. '01, at the New College Theatre (10-12 Holyoke Street) on April 30 at 5 p.m. Tickets at www.boxoffice.harvard.edu, or call 617-496-2222.

#### **EXHI**BITIONS

## Carpenter Center for the Visual Arts

www.ves.fas.harvard.edu; 617-495-2317

• March 12 to April 12, with an openingnight lecture by the artist at 6 P.M.

Agnes Varda: Les Veuves de Noirmoutier (The Widows of Noirmoutier) features her 2004 video installation. Note: Varda will also lecture at screenings at the Harvard Film Archive, March 13-16. See www.harvardfilmarchive.org for further details.

#### Sackler Museum

www.artmusuems.harvard.edu/sackler 617-495-9400/9422

• Continuing: Re-View

Some 600 works are on display from different parts of the University's collection.

## Peabody Museum of Archaeology and Ethnology

www.peabody.harvard.edu; 617-495-1027

- Opening April 3, with a lecture by Mayflower author Nathaniel Philbrick at 5:30 P.M. Wiyohpiyata: Lakota Images of the Contested West highlights drawings by Plains Indian warriors recovered from the Little Big Horn battlefield.
- Opening April 29, with a book signing and gallery talk by the artist at 5 P.M.

Avenue Patrice Lumumba: Photographs by Guy Tillim explores the colonial architecture of Angola, Mozambique, Congo, and Madagascar.

## Harvard Museum of Natural History

www.hmnh.harvard.edu 617-495-3045

• Opening April 18

Evolution offers visitors a comprehensive

look at where we come from. On April 16 at 6 P.M., paleontologist Neil Shubin, Ph.D. '87, talks about his discovery of the 375-million-year-old *Tiktaalik roseae*, on display.

#### NATURE AND SCIENCE

## The Harvard-Smithsonian Center for Astrophysics

www.cfa.harvard.edu/events 617-495-7461. 60 Garden Street.

• March 19 and 26 at 7:30 P.M. Lectures and rooftop viewing.

#### FILM

#### The Harvard Film Archive

www.harvardfilmarchive.org Visit the website for complete listings. 617-495-4700

• April 11-12

Life at Street-Level: The Films of Ramin Bahrani includes Good-Bye Solo and a discussion with the Iranian-American director.

#### DANCE

#### The Harvard Dance Center

www.fas.harvard.edu/-dance 617-496-2222; 495-8683

• April 16-18, 8 p.m.

The ninth annual *Viewpointe* concert features works inspired by the *Ballets Russes*. New College Theatre. Tickets required.

Left to right: Likasi, DR Congo, 2007, by Guy Tillim, and a detail from a ledger drawing by an unknown Plains Indian warrior, circa 1865, both on exhibit at the Peabody Museum; and Mango Season, Crawford Market, Mumbai, Maharastra, 1993, on display at the Sackler Museum



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#### **NEW ENGLAND REGIONAL SECTION**

#### LIBRARIES

www.hcl.harvard.edu/info/exhibitions

Pusey Library 617-495-2413/2445

• Opening April 15

Diaghilev's Ballets Russes, 1909-1929: Twenty Years That Changed the World. An April 15-17 symposium and performances are cosponsored with the Office for the Arts. Registration required.

Houghton Library 617-496-4027

• Closing April 25

Harvard's Lincoln celebrates the presidential bicentennial with a display of books, prints, ephemera, and other artifacts. Registration is required for the April 24-25 symposium, Abraham Lincoln at 200: Perspectives on His Life and Legacy.

• Opening May 5

"Ever Westward": Sir Arthur Conan Doyle and American Culture honors the sesquicentennial of the author's birth. Related events are planned; see the website for symposium details and registration.

#### THEATER

#### The American Repertory Theatre

www.amrep.org; 617-547-8300

• March 25 through April 22 Trojan Barbie follows a doll-repair expert who goes on vacation, only to find herself in the midst of an epic conflict.

#### MUSIC

#### Sanders Theatre/Lowell Hall

www.fas.harvard.edu/-tickets/ 617-496-2222. All concerts are at 8 p.m.

• April 17

Harvard-Radcliffe Orchestra performs Mozart and Brahms in its final concert with retiring conductor James Yannatos.

• April 18

The Harvard Jazz Bands will honor jazz master and Boston native Roy Haynes.

April 25

The *Harvard-Radcliffe Chorus* performs Mozart's Requiem.

• April 25

The Sunday Jazz Band and Harvard Wind Ensemble present a program of American Music—works by Copland, Davis, Ellington, and Bernard Rodgers. (Lowell Lecture Hall)

Events listings also appear in the *University Gazette*, accessible via this magazine's website, www.harvardmagazine.com.



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## Love's Labors

Experiencing new partners in the second half of life • by Nell Porter Brown



T AGE 47, with a solid academic career and a grown daughter, Mary Brown Parlee 65 fell suddenly in love—with a man she'd known for decades. They had worked together in an MIT lab during the 1960s and spent summers on nearby Maine islands with their respective families. But by the time they took serious note of each other's romantic appeal, in 1990, both were divorced, single parents who had weathered many years alone. "We knew it was better to be on your own than to be unhappily married," Parlee says. She had met plenty of nice men, but was "defensive and edgy" about relationships. It wasn't until a six-month sabbatical right after her daughter left for college that Parlee saw how alone she felt. "It made me more realistic—and more brave," she says. "I realized I had to do something or my life was not going to change, and that I wanted someone I could be my whole self with. So when Joe and I got together I knew that I had to take a risk, even though I was scared."

Forming new love relationships at later ages often requires such renewed fortitude. "Life has left tire tracks on a lot of us by the time we reach our fifties and sixties and it's hard to take that chance again in loving someone because of what it cost the first time," asserts Teri (McCannel) Motley '65, who was divorced when she and Herbert J. Motley Jr. '65 married 10 years ago. "I was managing OK as a single woman, but things are just richer when they are shared." Howard L. Needleman, D.M.D. '72, PD '74, a widower who remarried in 2001, pushed himself "out there" when the right time came to find a new partner. "Being alone was horrible," he

says. "No one really needed me and I like being needed."

THE RISING BULGE of older single Americans makes later-life re-partnerings in various forms potentially much *more* common in the years ahead, thanks to a steady divorce rate, increasing longevity, the rise of financially independent women, and waning stigmas toward singlehood and cohabitation (a growing trend; see page 12H).

U.S. Census data from 2007 report 52.2 million single males and 59.4 million single females over the age of 45. The gender split widens the older people be-

After dating in college, Herb and Teri Motley reunited as husband and wife 10 years ago.

come—women live longer, and men are more likely to remarry in general (and to partner with younger mates, as is popularly

believed)—but not by that much. Of those aged 45 to 64, the data show 36.7 million single men versus 38.8 million women; after age 65, that widens to 15.4 million men and 20.5 million women. "The media has helped freak singles out by leading them to believe that older people, women especially, have a better chance of being shot by a terrorist than getting married," says Pepper Schwartz, a University of Washington sociology professor specializing in relationships and sexuality. "There are still a lot of good women and men out there who are single." Most of those between 45 and 64 are divorced and, overall, widows far outweigh widowers, especially in the 65 and older category.

Not much hard research has been done on the topic of older re-partnerings, although a national survey revealing the robust sex lives of elders was enlightening (but more on that later).

When exploring later love, the population should rightly be divided into at least

12D March - April 2009 Photograph by Stu Rosner

#### **NEW ENGLAND REGIONAL SECTION**

two groups: ages 45-60 and those over 60, says Schwartz, who has written 14 books, most recently Prime: Adventures and Advice on Sex, Love, and the Sensual Years, a candid memoir of her love life after the end of her 23year marriage. "These are very different ages psychologically," she says. The time, money, and emotional commitment each group can or will give to a relationship differs significantly. "The younger group, if divorced or widowed, tend to still have children in the house and are in the thick of their careers, while the older people are looking at career peaks and thinking more about job security, retirement activities, and financial well-being."

Values obviously change with age, says Needleman, 62, of Needham, Massachusetts. "Family, security, religion, and professional compatibility: these are more important to older people than appearance-looks or dress, 'popularity,' and living in the moment." He and his wife, Leslie Soble Needleman, share friends, interests, and activities—such as traveling for about six weeks of the year—all of which rise in importance because there is more leisure time available for recreation, entertainment, and family. He advocates partners also sharing the same "ballpark age," so that what's "fun" and what one is able to do are mutual: "going out to party at clubs until midnight versus staying home by the fire with a good book and retiring at 10 P.M."

Cynthia Johnson MacKay '64 and Warren Joseph Keegan, M.B.A. '61, D.B.A. '67, met through his Harvard Magazine personal ad and married in 2007. "I want people to know how different and so much better later marriages can be," she says. Younger unions are more like business enterprises, as she sees it; there are expectations around working hard, building a home, having children, succeeding in careers. "But when you're older, it's pure pleasure," she says. "There's no reason to be together except that you enjoy each other; you can negotiate any kind of relationship you want." The Keegans, for instance, live apart most of the week and together on the weekends. And they have found a prenuptial agreement helpful. In fact, it makes life together "much less complicated: there's almost no reason to get mad at the other person!"

LINDA J. WAITE, Flower professor of urban sociology at the University of Chicago, is more cautious. All in all, the merging and shifting of kinships that branch out from second or third unions, along with new questions around financial and/or legal responsibilities are essentially unchartered waters, says Waite, whose research centers on aging, health, the family, and marriage. "More things are up for negotiation in later partnerships—and because of that, the chances of misunderstanding and conflict are just much higher." That said, she adds, research shows that second marriages are not much more unstable than first marriages, for reasons that are not entirely understood.

Even if children are "out of the house," reformulations of family life require immense sensitivity on all sides. "Just look at the family vacation: do we take all the kids? What about the grandchildren?" Waite says. "People don't know what the relationship should be between a woman who has finished childbearing and has adult or young-adult children and a new spouse. Is it his responsibility to help put his wife's kids through college, or help them buy a house? And what is her role with his previous family?"

Teri Motley recalls that all of their children, then ranging in age from 16 to 32, wore black when she and Herb married. "It's a reminder that divorce is hard on kids, and that their feelings need to be respected," she says. "Each of our kids came to her own relationship with the new spouse in her own way." "Boy, did they give Teri a hard time about transferring to divinity school in Boston based on forming another relationship," adds Herb. But choosing a wedding date for that March was important to him because he "wanted to attend Teri's graduation as a husband, not just as a boyfriend."

Negotiating the ex-partners can add more complications. Teri still shares care and responsibility for a severely handicapped son who lives in Vermont, near his father. And Herb's former wife lives in the same town as the Motleys, and often shares holidays with them.

When Parlee married her later-life love, Joseph Bauer, in 1991, the youngest of their respective children was 25, so that transition proved relatively smooth. Recently,



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#### **NEW ENGLAND REGIONAL SECTION**



Left: Howard Needleman and Leslie Soble Needleman, shown visiting the Acropolis last October, found each other and married after the deaths of their original spouses.

the couple moved back to the Boston area from Maine to be near their shared total of 11 grandchildren and two great-grandchildren. "My daughter told me, 'Now it's time for us to take care of you guys for a change,'" Parlee says, but with all the children and the dual careers, "that hasn't happened yet. We're still helping them."

Needleman disengaged from a previous relationship with a woman who had children still at home because "I did not think I had the motivation to deal with a young family again. It was difficult, but I had to realize that it was not the kind of lifestyle I wanted for my near future, given what I had been through with my late wife's illness." As a widower, he felt most comfortable re-coupling with a widow with older children, who had also experienced a happy first marriage. "With Leslie, we were on the same page: both our families had been broken involuntarily," he explains. "We have one big happy family now, but it has taken a long time and a lot of effort on everyone's part to get to that point."

The expectations and practical realities of raising kids keenly affects second and third relationships, says Geordie Hall '64, of Vermont, who divorced after a 30-year marriage and later began a new relationship with children on both sides. Parents are coping not only with ex-spouses and kids, but with the formation of new rules and new alliances in a new household. "There are differences in parenting objec-

tives and styles," he explains. (That second relationship, though rife with such conflicts, still lasted eight years.)

CONCERN FOR one's children also contributes to strategies around managing money and estates. "Older people want to make sure their children are taken care of and that their resources go to the next generation—and that has to be negotiated in a different way than if the couple had children together," Waite says.

When Parlee and Bauer decided to marry, for example, she resigned her tenured post as a psychology professor at City University of New York Graduate Center, sold her "Hudson River-view" home, and moved to Boston. She also signed a prenuptial agreement, based on his lawyer's advice. "I had been supporting myself, so that was another risk I took," she explains. "For women on their own, financial independence is very important. It turned out very well; Joe is a kind and generous man, so money has never been an issue between us."

Pension payments may also be threatened by remarriage (but not by cohabitation). This is especially important for women on their own who have relied on spousal benefits. Because the Social Security rules on payouts to either divorced or widowed survivors who remarry are nuanced and tend to focus on age at time of spousal death, length of original marriage, age at remar- (please turn to page 12])



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#### Unmarried, Together

Growing up, Brian Newmark '72 looked at his parents and their married friends and thought "something was missing." To him, the unions lacked dynamism, the freedom and energy that "led people to grow," he explains. "It was nothing I was ever drawn to." That feeling has stuck with him—through three serious, long-term adult relationships and the raising of his now 22-year-old daughter. He and his current partner, Terry Accola, have been together a dozen years, and have bought a home in Lincoln, Massachusetts, but still have no plans to tie the knot.

"One of the nice things about getting old is that it is very freeing: there is a certain letting go of societal dictates, or what others might think of your situation," says Newmark, a semi-retired psychologist. "Society is definitely tilted toward being a couple and getting married—Social Secu-

rity and health benefits and tax incentives. People have to be careful not to get married for the wrong reasons: because it's easier and less expensive. We consciously chose to live together instead."

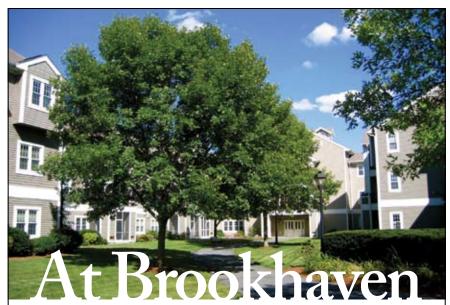
They are not alone. The number of heterosexual individuals older than 50 living in "unmarried-partner households" nearly doubled from 1990 to 2006, according to associate professor of sociology Susan Brown at Bowling Green State University in Ohio. "Cohabitation among older adults has increased over the last decade, and since the 1970s, just as it has among younger people," Brown says. "It's still a small number, but it is moving only in one direction. The data also suggest that older adults are choosing cohabitation as a longterm alternative to marriage," rather than a preamble, as is typical for younger adults.

According to U.S. census data that Brown analyzed, 2 percent of that older cohort were cohabiting in 2006 compared

to 1.1 percent in 1990. (She notes that the census counts only those who self-report living together full-time.) The over-50 group was also the fastest-growing segment among all the cohabitors categorized by the data, although the 30-39 and the 40-49 age groups contribute greater overall numbers, at 6.6 percent and 4.5 percent, respectively, in 2006.

"Of those who do form a union, onethird choose cohabitation and two-thirds choose marriages," says Brown, whose work is funded by the National Institute on Aging. The later-life live-ins are also relatively stable, she reports. "The relationship is as likely to end in separation as it is in death, while the average young person cohabits one to two years."

Confirming that data is a 2007 study published in the Journal of Family Issues, "Age and the Desire to Marry," which found that "single people at older ages seem to be rejecting marriage," says coau-



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#### **NEW ENGLAND REGIONAL SECTION**

thor Jenna Mahay, assistant professor of sociology at Concordia University in Chicago. "We expected people in their fifties and sixties to be more likely to want to remarry because of perceived gains (help with children, personal finances, et cetera). And what we found was the opposite: they were less likely to want to marry than their younger counterparts."

For Linda McJannet, Ph.D. '71, of Cambridge, living with Michael O'Shea, her partner of 17 years, has had a multitude of benefits. When they first got together, it lessened pressure on their respective children to absorb the new partner, and reduced expectations around family holidays and step-relationships. It has since fostered financial autonomy, helped preserve separate identities, and created a comfortable degree of emotional latitude. "Anyone who has been through a divorce knows it's a horrible experience—the lawyers get richer and everyone else gets

poorer. Nobody wants to go through that again," she reports. "Living together takes away that sense of 'should it all go crashing'...presumably it's not going to be such a painful obstacle to moving on with your lives if we want to. I don't think we'll want to, but you never know."

In fact, she and O'Shea have taken it one step further and live together in a two-family house. They share a bedroom and common space, but maintain two kitchens (great for entertaining and holiday dinners), and divide distinctly personal space otherwise. "The downstairs is his male retreat, where he displays his German bottle stoppers and his baseball collection, and the upstairs is ours; then I have a study on the third floor," she says. "We think it's the best of both worlds."

Both couples interviewed split financial responsibilities, but maintain separate bank accounts, benefits, and retirement funds. "We bought the house together,"

Newmark says, "and financially we're sharing a good system as far as we both put in equal amounts and we balance it out in a way that both of us feel is fair." McJannet and O'Shea do share some business investments, but those are clearly spelled out in legal terms so there are no misunderstandings. "We both agree that whatever estates we have should go to our children," she says.

At one point, McJannet thought it made better financial sense to take that trip down the aisle. But a visit to an accountant convinced them otherwise. "At any rate, money is not the best reason to make that additional commitment," she adds. "We agree we'll take care of each other and see each other through whatever comes and whatever medical valleys lie ahead. I think the model of cohabiting frees you to think about all kinds of arrangements for living with someone you love most successfully."







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#### **NEW ENGLAND REGIONAL SECTION**

#### **LOVE'S LABORS**

(continued from page 12F) riage, and eligibility for alternative benefits, concerns about them or pension benefits should be well researched.

The Motleys recognized early on that clear communication around money was

Edward O. Laumann, Ph.D. '64, Mead Distinguished Service Professor of sociology of the University of Chicago, says overall health is closely linked to sexual activity in late life and plays a large role in the success and happiness of late unions. He was a coprincipal investigator on the National Social

### "Sharing that primal companionship was something I missed a lot when I was single."

essential; they participated in extensive counseling to develop a prenuptial agreement that separates their assets so each set of children would inherit based on their own parent's share, Herb explains.

Commingling assets late in life should be carefully considered with an attorney—and probably with adult children, who may worry that their parent is vulnerable to scammers and gold diggers. "Some men are nervous that women are looking for sugar daddies," says Pepper Schwartz. Women, especially if wealthy, may have the same concerns. "There are insecure men who are not economically viable looking for women who can support multiple homes and extensive travel," Schwartz explains. "You have to do due diligence."

IF YOU'RE HEALTHY, they say "wealthy and wise" should follow. Yet diseases and physical ailments absent in younger years can't help but reverberate in later-life relationships. "Losing someone I loved and shared life with for 30 years was devastating," says Needleman. "It's like I was physically ripped apart." When dating in your twenties, "You don't ask a person if they've had operations, or major illnesses, or 'Do you have stents in your coronary arteries?"" he adds. "But when you're older you want to know, 'Can this person travel to Asia with me? Are they going to need the handicap cart on the golf course?' I guess we're all afraid of being hurt and one of my biggest fears is of losing someone again."

Facing his own need to "re-grow," Needleman chose physical as well as emotional compatibility. "It's selfish, but at this point in my life I'm going to be selfish because the window of opportunity is narrowing and I've tried to design my life with Leslie and our children around the things that make us all happy."

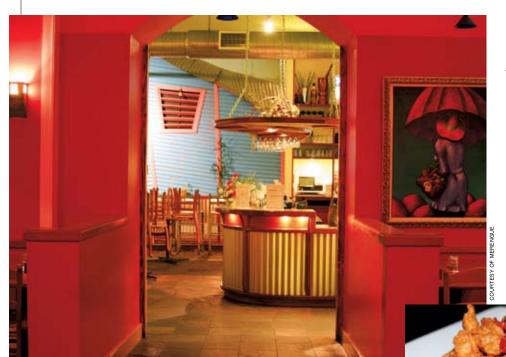
Health and Aging Project, the first comprehensive survey to examine marital history, sexuality, and physical and mental health in Americans aged 57 to 85. The study, published in the 2007 New England Journal of Medicine, revealed that sexual activity doesn't decline much from the fifties to the seventies, and that most people continue to enjoy each other in the bedroom well into their seventies and eighties.

"Sexuality keeps people motivated to exercise, eat right, avoid getting fat, and take care of themselves," Laumann says, and declining sexual activity can indicate other potential health problems. Linda Waite, a survey coauthor, noted a significant related finding: 78 percent of men aged 75 to 85 have a spouse or other intimate relationship, but only 40 percent of their female counterparts do. "For most men, aging is a partnered experience," she says, "but women's sexuality is more often affected by the death or poor health of their" partners. The most common reason cited for lack of sexual activity was the male's physical health, Laumann adds, although women were more likely to note a lack of interest in sex.

Parlee says she never knew what "falling in love" was until she found Bauer: "Our time together was like being a teenager all over again"—and that passion has continued to flourish. The Motleys agree the physical relationship is crucial. "Let's not neglect that warm body," Teri says, laughing. "Sharing that primal companionship was something that I missed a lot when I was single." They dated briefly in college, and saw each other over the years at reunions. Herb recalls hugging Teri hello at their thirtieth, then embracing her again four years later as husband and wife. "I always liked the way he hugged ...and I still do," she says. He gives her a knowing smile.

## Latin Flair

A Boston hot spot takes you away.



O EXPERIENCE, within a few miles of home, a completely different slice of life through the cuisine of a foreign country, is a wonderful thing. Such was true of our trip from Medford to Merengue.

This Latin American restaurant bubbles with life, from the walls dressed in fuchsia, royal blue, and aqua to the glowing bar lights, from the giggling children slurping up their caramel flan to the jazzy guitar music, fairly danced to by servers handing out Red Bull and *batidos oasis* (a thick fruit shake—try the guava) along with the usual *cervezas* and a nice array of Chilean *vinos rojos*.

Nearly everyone here speaks Spanish, but the menu has English translations of dishes like *mofongos* (mashed plantains), *gandules con coco* (coconut with green pigeon peas), and *cerdo frita* (fried pork). Lis-

Above: Rich colors and paintings by Latin American artists add to Merengue's vibrancy. tening to the language around us, with ceiling fans whirring above and the curtains pulled tight against the cold New England winds, we

could have been in Cuba, Puerto Rico—or the Dominican Republic, where owners Nivia and Héctor Piña grew up. "We want people to come inside the restaurant and not be in Roxbury," Nivia says, "but to feel the colors and be transported back to their homes, to their mom's and grandma's cooking—and for other cultures to come in and try our food." Merengue, the is-

land's traditional dance form, she says, "is a happy dance with happy music that makes you want to move your body, go on vacation—have some fun."

Responding to high demand for their home-

style fare, the Piñas expanded Merengue in 2001 into two large rooms that now comfortably seat 90. Dominican food enjoys a rich heritage, starting with the indigenous Taino Indians and reflecting later Spanish and African influences. Every night, Merengue's diners hail from many of the countries—El Salvador, Haiti, Cape Verde, Colombia, and Puerto Rico —that "share some of the same menu," Nivia says: "a lot of seafood, coconut, rice and beans, pineapple, and goat." And, of course, plantains. Green ones, yellow ones, mashed, fried, boiled, and broiledthese starch-heavy fruits "are like bread to us," she adds.

We had our yellow ones, less sweet than bananas, sautéed (\$2.50), along with a sampler (\$10) of chewy, bite-sized fried

meats, green plantains, and cassava (a mainstay crop for the island). The seafood combination platter (\$19), served over soft yellow rice with a smoky coconut sauce, of-

fered fresh lobster, shrimp, mussels, and tender octopus. The juicy red snapper fillet (\$13) came smothered in a tangy garlic and oil sauce, just right to open the sinuses, and singed red and green peppers.

For dessert, please try the *tres leches* cake (\$3.50). Made with condensed, evaporated, *and* whole milks, this custardy treat is a primal mouthful of motherly love.

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IMAGE: Titian, *Venus with a Mirror*(detail), about 1555. Oil on canvas. National Gallery of Art, Washington, Andrew W. Mellon Collection 1937.1.34. Image courtesy of the Board of Trustees, National Gallery of Art, Washington.

# Montage Art, books, diverse creations



## The Harvard Center for Gastrophysics?

The University partners with the father of molecular gastronomy. by ELIZABETH GUDRAIS

URPRISE IS Ferran Adrià's stock in trade. He delights the diners at elBulli, his restaurant near Barcelona, with creations such as gelatin served hot; a "bubble tea" drink in which the liquid tastes of prosciutto and the bubbles of melon; and jellybean-like objects the color and shape of a green olive—that burst in a splash of briny liquid when bitten.

These are just a few of the hundreds of playful dishes the chef has served in his nearly 25 years at elBulli (declared the world's best by Restaurant magazine for three years running, and four times in all). Adrià's experiments with flavor, temperature, and texture have taken him into scientists' terrain-and his future menus

- The Alcotts, Père and Fille
- Open Book
- On Judicial Interpretation
- Off the Shelf
- Second-Life Photography
- 22 A Scourge Remembered
- Chapter & Verse

may get a boost from Harvard science labs. During a visit to Cambridge in December to de-

Celebrated chef Ferran Adrià mingles cooking and science at elBulli, his restaurant near Barcelona.

liver a guest lecture and to visit some of those labs, the chef signed an agreement with profes-

sors of physics and engineering for an ongoing collaboration.

Thus far, Adrià and his staff have achieved their culinary feats through sheer trial and error; he has no formal scientific training. When a friend gave him a canister of nitrous oxide (the same propellant used in Reddi-wip) as a gift, he played around to find out what he could do with it. The result was culinary foam, perhaps Adrià's most famous invention. (He uses substances such as beet, carrot, coconut, and honey, pureeing and then

straining the liquid before aerating. The resulting foam has no egg or milk to dilute or distract from the taste of the main ingredient.) He learned about "spherification"—the use of thickeners such as alginate and calcium chloride to form these "essences" into bubbles—on an



Visit harvardmag.com/extras to read more about Ferran Adrià's visit and watch a video excerpt from

#### MONTAGE

Creations from the elBulli kitchen: "spherical balloons of rosewater with touches of lychee" (below); "alphabet soup," a dessert with "letters" of crunchy, dehydrated strawberry meringue (right); melon "caviar" in ham consommé (bottom).



exploratory visit to a factory. Upon discovering a new technique, Adrià and his team test it across a wide variety of substances, moving from the obvious to the outlandish. (A good example is the mango anchovy ravioli foam a New York Times writer tried on a 1999 visit.)

Adrià's invitation to Harvard came from Otger Campàs, a postdoctoral fellow in applied physics and applied math who wrote him an e-mail in Catalan (their shared native tongue) after talking with other foodie scientists about the overlap between their work and Adrià's. Particularly in the area of soft condensed matter, says Campàs, "the connections are so obvious." (A television news clip about Adrià's visit noted another similarity between elBulli and Harvard: exclusivity. The restaurant's famously opaque system books the entire year's reservations, approximately 8,000 from a reported 2 million requests received, on a single day each October.)

From postdoctoral fellow Jiandi Wan, who works with Joseph professor of engineering and applied mathematics Howard Stone, Adrià heard about double emulsions (tiny bubbles, each inside another thin bubble, dispersed in a fluid). Emulsions—defined simply as a mixture of two unblendable liquids—are everywhere in cooking: examples include butter, cream, salad dressing, and anything else that mixes oil and water. Emilie Dressaire, a doctoral student in the same lab, showed Adrià how she combines glu-



cose syrup and sucrose ester molecules in a KitchenAid mixer to produce a foam made of "nanopatterned cells" that hold their shape and preserve a foamy texture in the absence of fat. Dressaire thinks this technique could find an application in fat-free ice cream (see "A Durable Bubble," November-December 2008, page 18); after poking a finger into a sample of the foam, kept in the lab refrigerator, Adrià mentioned that the elBulli kitchen had been using glucose syrup since 2005.

For Campàs, who grew up during Adrià's ascent to godlike status and learned to cook using the chef's books and DVDs, the whole experience has taken on a tinge of the surreal. During an interview over lunch one day in January, Campàs's cell phone rang; when he

checked to see who was calling, the name "Ferran Adrià" flashed.

Campàs visited elBulli in late January with Mallinckrodt professor of physics and applied physics David Weitz. Details of the partnership are still being solidified, but all involved hope it will include an exchange of scholars in both directions. (While in Cambridge, Adrià also gave guest lectures in an undergraduate course on innovation in engineering and a Harvard Business School course taught by assistant professor Michael Norton, who had written a case study on elBulli.)

And Adrià voiced hopes that Harvard scientists could help him better understand the principles that underlie his creations. Why is it easier to make foam from beets than from anything else he's tried? Why do the melon "caviar" beads have a soft center at first, but congeal into dense, gummy balls if not eaten right away? Adrià

said he hoped to collaborate on an encyclopedia of cooking and science that would explore these

He practically salivated as he listened to descriptions of the equipment in use in Harvard science labs, including a spin coater—which uses centrifugal force to coat

surfaces with an extremely thin layer of a given substance—and Jiandi Wan's machine for creating double emulsions. And then, of course, there's the potential that Harvard scientists could help him solve problems that still frustrate him, such as making an ice cream that can be served hot without melting.

Weitz, who directs Harvard's Materials Research Science and Engineering Center, says one of his first priorities is getting cooking into the curriculum. He hopes to get Adrià's input in creating not only a graduate course in soft condensed matter, focusing on food, but also a course for the new undergraduate general-education curriculum (possibly co-taught by Adrià himself). "Those of us who do sci-

ence do it because it's fun," he says. "We want to bring real science, through cooking, to people who are not ordinarily interested in science."

Among those who don't consider themselves ardent Adrià fans, the chief criticism is that he engages in culinary acrobatics, concerning himself more with feats of science than with food that actually tastes good. Adrià vehemently denies this (as do most reviewers). Using nitrous oxide to make foam or a liquid-nitrogen bath to freeze liquid ingredients and mold them into shapes such as a dessert cup (a method similar to deep frying, at the opposite temperature extreme) is no

different from cooking with boiling water or hot oil, he asserted during the undergraduate engineering lecture. He urged his listeners not to confuse what is complicated with what is merely new: "Cooking has always been sciencephysics and chemistry. When you lit a fire to cook a million years ago, you were already using science."

## The Alcotts, Père and Fille

Lives "lavishly wealthy" and "perilously poor" by Julia Wallace

RONSON ALCOTT is known today—if he is known at all—as the father of Louisa May, the author of Little Women and more than a

dozen other books written mainly for girls. But for a large part of the nineteenth century, he was the more famous of the pair. Born into a poor farming family in 1799, he rose to become a Transcendentalist philosopher, a groundbreaking educational theorist, and an influential friend of a number of eminent New Englanders, including Emerson, Thoreau, and Hawthorne. He was also a grandiose dreamer and schemer whose unbending pursuit of his (at times bizarre) ideals led him to squander his meager savings, refuse most work, and nearly abandon his long-suffering wife,

Fans of Little Women and its sequels will remember that the four spirited March sisters were romantically impoverished: Amy struggled to scrounge up the spare coins for a treat of pickled limes, and Meg and Jo had to make do with old dresses

and lemonade-stained gloves when they attended balls in the fancier parts of Concord. The four Alcott girls were not so lucky. Their father was fired from a series of teaching jobs because of his rigid insistence that children should not learn by rote, and the Alcott family was often indigent, forced to rely on charity from Bronson's famous friends to help them through.

But even as Louisa and her sisters chafed under the poverty and restrictions of their childhood—Bronson's philosophies forbade consumption of "animal material," an epithet that came to encompass even honey and cotton—they were roaming free through the Massachusetts woods, putting on elaborate plays, and scribbling in the journals that their parents encouraged them to keep. John Matteson, J.D. '86, who won a Pulitzer Prize earlier this year for Eden's Outcasts, his double biography of Alcott père and fille, describes the contrast this way: "A typical day for Louisa began with a trip to Emerson's house and might continue with a nature walk with Thoreau, only to end with

**Grandiose dreamer Bronson** Alcott impoverished his family-but spurred Louisa's imagination. His letters, such as that to Louisa at right, were perhaps his only successful writings.

a homeward trudge to a cottage where there was sometimes insufficient food, where the father wore the mantle of a social outcast, and

where the mother tried to bear up under the weight of the evermounting debts and disappointments. Louisa's life was in one sense lavishly wealthy. In another, it was perilously poor."

Matteson found himself in a similar but opposite situation 20 years ago. He was thriving as a corporate lawyer in North Carolina, but longed to spend his days studying and writing about American literature, which was becoming increasingly important to him. At Harvard, he had quickly discovered that there were more enticing aspects to being in Cambridge than getting a legal education. During his three years at the law school, he learned to cook, spent hours chatting and arguing with his peers, and, most significantly, took elective English classes in his free time. Studying Melville, Dickens, and Twain with professors who included

Sacvan Bercovitch and Robert Kiely turned out to be a good deal more stimulating than attending lectures on copyright law.

Matteson eventually quit practicing law and moved to New York to attend graduate school at Columbia University, where he wrote his doctoral thesis on ethics in the "Age of Emerson." After publishing his first scholarly article, in the fall of 2001, he received an unexpected call from a literary agent eager to develop a book proposal with him. Matteson initially wanted to tackle the topic of nineteenth-century utopian communities, but quickly became obsessed with one in particular: Fruitlands, the radical commune that was founded by

Bronson Alcott in 1843. (It failed that same year, largely due to Bronson's haphazard farming skills; Louisa immortalized the absurdities of the operation later in a vignette, titled "Transcendental Wild Oats.") Eventually, Matteson's book evolved into a comprehensive examination of Bronson and his fraught but loving relationship with his headstrong and talented second daughter.

Matteson was drawn to the story of the Alcotts in part because he felt a kinship with Bronson. Here was another man who had made a midlife career change because he refused to choose safety over passionate scholarship, who cared more for the life of the mind than for the lure of creature comforts, and

Louisa loves -

OPEN BOOK

## From Literature to the Lab

Enrollment in graduate study led Harold Varmus, A.M. '62, S.D. '96, to discover that his initial inclination (medicine) was the right one. In *The Art and Politics of Science* (W.W. Norton,

\$24.95), he traces a career that led to a Nobel Prize with J. Michael Bishop, M.D. '62, S.D. '04 (whose memoir was excerpted March-April 2003, page 48), and then to the National Institutes of Health and Memorial Sloan-Kettering Cancer Center.

espite outward signs that I had chosen a life of studying and teaching literature, soon after starting my graduate work at Harvard, I began to suffer some further internal doubts about abandoning medicine. The

Harold Varmus

seemed to have formed a community of scholars, with shared interests in the human body and its diseases and common expectations that they would soon be able to do something about those diseases.

These Saturday excursions probably account for an influential dream that I had one night about my continuing inde-

Ether Dome at the Massachusetts Gen-

eral Hospital, entranced by diagnostic

dilemmas discussed at the weekly clini-

cal pathology conference. These stories

struck me as far more interesting than

those I was reading, and my medical

school friends expressed genuine ex-

citement about their work. They also

account for an influential dream that I had one night about my continuing indecision. In that dream, my future literature students were relieved when I didn't turn up to teach a class, but my future patients

A dream reinforced the future Nobel laureate's choice of a medical career. were disappointed when I didn't appear. It seemed I wanted to be wanted....

I decided to consult

the augury again, by reapplying to medical school. Harvard Med had the first deadline....I was soon granted an interview with the notoriously confrontational dean of admissions, Percy Culver, who quickly made it clear, in a parental tone, that he found me too inconstant and immature in judgment to be admitted....In contrast, ...[t]he Columbia interviewer, an esteemed physician and anthropologist- rheumatologist named David Seegal, asked about the translation of the Anglo-Saxon phrase Ich ne wat. This was easy; it simply means "I don't know." Seegal used it to discuss why a physician might admit fallibility to a patient....By the fall of 1962, I was happily enrolled [there], helped for the first, but not the last, time by someone's exaggerated appreciation of my competence in two cultures.

who had a deep interest in pedagogy. (Matteson is now a professor of English at John Jay College of Criminal Justice). And like Bronson, Matteson is the father of a daughter who possesses what he calls "a consuming desire to write"—a 14-year old who is hard at work on her own first book, a trilogy of fantasies based on the animals that appear in the first canto of Dante's *Inferno*. "A light bulb went on," Matteson says, "and I decided to use my experiences with my own daughter as a way of reading between the lines. This biography became a melding of life and art, of heart and head."

To get a deeper look, he went back to Harvard. Houghton Library has a large and lush collection of Alcottiana: everything from locks of Bronson's hair to correspondence between Louisa and Alf Whitman (the model for Laurie in Little Women). Bronson Alcott did not have his daughter's gift for writing-most of his mystico-philosophical publications were brutally mocked by the critics of his day—but he shared with her an obsessive desire to set his life down on paper in any way he could. He was a fanatical diarist, chronicling the minutest milestones in his daughters' development and just about every thought that ever crossed his

In many ways, Matteson's training in legal scholarship made him the ideal person to glean this bounty, which he describes as both "utterly marvelous and utterly frustrating." Eden's Outcasts brims with highly specific insights (at one point Matteson notes Louisa's use of the word "nook" to describe a play space and contrasts it with Bronson's earlier philosophical decree that "there should be no 'nooks' or secret places in the youthful mind"). It also sets out a compelling, almost lawyerly case for Bronson's relevance and importance despite his many failures. His fiery insistence on living out his philosophy produced some spectacular embarrassments, but his experiments also bore spectacular fruit—including his own wild, introspective scribbler of a daughter. Matteson feels that the same is true of his own unconventional career. "Leaving a secure place in the law to go back to graduate school was thoroughly reckless and irrational," he says, "but I had to do it, and it saved my life. It taught me the supreme value of choosing what is authentic rather than what is safe."

graduate curriculum in English literature was not especially onerous, but it felt like a prolongation of college. Most of my courses were heavily populated with Harvard and Radcliffe undergraduates. First-year graduate students had little sense of identity as future scholars, we were often taught by older graduate students, and Harvard's famous professors, with the notable exception of the wonderful playwright and poet William Alfred, paid little attention to us. Making a commitment to literary scholarship under these circumstances was not easy....

Occasionally on Saturday mornings, I traveled across the Charles River to join some Amherst classmates at Harvard Medical School, while they sat in the

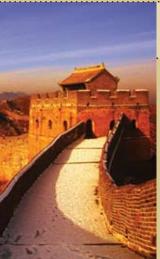


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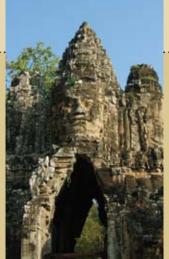
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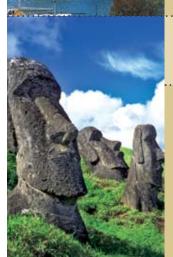
With Richard Thomas, Professor of Greek and Latin

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## On Judicial Interpretation

The "parlor game" of appealing to the Founding Fathers

by PAUL M. BARRETT

ot until page 201 of his erudite book *The Invisible Constitution* does Laurence H. Tribe drop the name of a one-time research assistant: "a remarkable young man who was then my student but who has since gone on to astonishing and inspiring achievements in his own right, Barack Obama." The reference is entirely gratuitous and a little embarrassing for a reader who admires Tribe's intellect and was hoping he'd get through his slender text (it's only 211 pages, excluding notes and appendices) without advertising his relationship with the most famous for-

mer editor of the Harvard Law Review.

Laurence H. Tribe
'62, G'63, J.D.'66,
The Invisible
Constitution
(Oxford, \$19.95)

Law Review.

I am not implying that
Tribe—'62, G'63, J.D.'66, Loeb
University Professor and professor of constitutional law, author of numerous influen-

tial scholarly books and articles, and celebrated advocate who has argued more than three dozen cases before the Supreme Court of the United States—went out of his way to lavish praise on his one-time acolyte in hopes that Obama would soon be in a position to nominate justices to the highest court in the land. Not at all.

After reading this penetrating volume, I am confident that Tribe, a perennial presence on potential nominee lists during the Clinton years, has decided, once and for all,

to take his name out of contention.

How do I

know this? Well, first there's the very subject of the book, published last fall, a couple of months before Election Day. Tribe argues that without something called the "invisible Constitution," neither we—nor the jurists in black robes—can understand the plain written one. "The visible Constitution," he writes, "necessarily floats in a vast and deep—and, crucially, invisible—ocean of ideas, propositions, recovered memories, and imagined experiences that the Constitution as a whole puts us in a position to glimpse."

Picture the confirmation hearing before the Senate Judiciary Committee. A Republican leans into his microphone and asks, "So, Professor Tribe, can you explain to us which of your 'recovered memories' and 'imagined experiences' you would bring to bear when deciding whether to preserve Roe v. Wade or extend a constitutional right to marriage for same-sex couples?"

That wouldn't be the end of it, either. Tribe has made the bold choice of illustrating his book with six glossy pages of jurisprudential doodles: winsome renderings in bright blue, green, and yellow Magic Marker of a half-dozen methods for "constructing" the invisible Constitution. These he has entitled "Geometric Construction," "Geodesic Construction," "Gyroscopic Construction," and three other types of construction that begin with the letter "G."

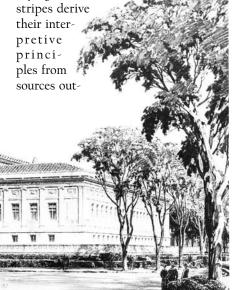
It's hard to capture in words the glee that young Republican Senate staffers would experience as they skipped off to a Capitol Hill Kinko's to reproduce easelmounted versions of the scholar's artworks, each of which he helpfully signed "LT 2/08," leaving little room to claim that his publisher slipped in the illustrations as some sort of joke. The blown-up sketches would never get out of the television shot. Even Dick Cheney's crew would have to classify the ensuing interrogation as torture.

BUT I AM NOT HERE (exclusively) to tease Professor Tribe. His book, dubious illustrations notwithstanding, is a serious and helpful meditation on constitutional interpretation. The fact that it probably kills any chance he'd have to put his provocative ideas into practice on the federal bench is a sad reflection not on Tribe, but on our shallow judicial politics.

Tribe argues persuasively that the most conservative jurists on the closely divided Supreme Court—chiefly Antonin Scalia, LL.B. '60, and Clarence Thomas—get it wrong when it comes to deciphering our foundational legal document. The originalists, as they are known, contend that judges can look only to the literal words of the Constitution and the "original" understanding of those words held by the men who wrote and ratified them. That's why the conservatives find it laughable that anyone could ground in the Constitution a woman's right to choose to seek an abortion. The Constitution doesn't mention abortion. The Founding Fathers would never have countenanced the act. Case closed.

Not so fast, Tribe

says. Jurists of all



#### side the text of the Constitution, and many of these principles cannot even be traced directly to the document's words. My favorite example of this seemingly self-evident but often-obfuscated observation is the basis of originalism itself. The Constitution nowhere instructs its inheritors to interpret its opaque terminology ("equal protection," "due process," "cruel and unusual punishments") according to the original understanding of its drafters. The Constitution doesn't offer guidance on whether to read those terms as static or evolving. There's an argument to be made that the Founders' intent deserves special deference, or maybe even something approaching exclusive deference. But such ideas are drawn from someone's version of what Tribe calls the invisible Constitution: the unwritten premises and intuitions and experiences that have accumulated over more than two centuries of law and poli-

tics in America.

Tribe's liberal version of the invisible Constitution is no secret, and he does not elaborate much on the substance of his views in this book. He believes that judges-whether they lean left or rightinevitably champion the values they perceive as underlying or animating the ambiguous admonitions and protections outlined in the Constitution. In articulating those values, judges give meaning to a phrase like "equal protection." For him those words, applied to questions of racial relations, can be used not only to strike down intentional segregation but also to uphold race-conscious policies ("affirmative action") that seek to remedy the lingering injustices of slavery and Jim Crow. For Justice Scalia, equal protection suggests that race can never be taken into account in any way in forming public policies. That's a legitimate argument. Tribe's point here is only that it can't be settled by simplistic appeals to literalism or the parlor game of WWJMD (What Would James Madison Do?).

As for the doodles—well, some of them I just didn't get. For all its vectors and protractor-drawn circles, Geometric Construction left me baffled. (Don't feel bad if you have the same reaction; after all, Tribe's undergraduate concentration was mathematics.)

Geodesic Construction, by contrast, is much easier to understand. Tribe has scribbled a many-faceted form similar to

## Off the Shelf

Recent books with Harvard connections

The Case for Big Government, by Jeff Madrick, M.B.A. '71 (Princeton, \$22.95). The editor of Challenge argues that "active and sizable government has been essential to growth and prosperity," in a book that anticipated recent headlines.

Wired for War, by P.W. Singer, Ph.D. '01 (Penguin, \$27.95). Those drones over Afghanistan and Pakistan, says the Brookings Institution senior fellow, are but the leading edge of robotic conflict in the twenty-first century.

Postcards from Tomorrow Square, by James Fallows '70 (Vintage, \$14.95 paper). Collected dispatches by Atlantic Monthly's man in Shanghai and Beijing. An excellent shoe-leather reporter, Fallows accessibly covers Chinese manufacturers, Macau's gambling boom, and the country's massive hoard of dollars.

The Crisis of the Twelfth Century, by Thomas N. Bisson, Lea professor of medieval history emeritus (Princeton, \$39.50). Amid collapsed leadership and governance, threats to social order and peace, new approaches to power and legitimacy arose. A sweeping scholarly history of Western Christendom.

The Piano Teacher, by Janice Y. K. Lee '94 (Viking, \$25.95). A debut novel of "romance, secrecy, and betrayal," as the publisher puts it, in World War II and a decade later, set in Hong Kong, where the author (formerly of Elle and Mirabella magazines) was born and now lives.

Still Jewish, by Keren R. McGinity, A.L.M. '97 (New York University, \$39.95). A multigenerational history of women and intermarriage in America.

More Than Just Race, by William Julius Wilson, Geyser University Professor (W.W. Norton, \$24.95). Wilson's latest installment in a career-long investigation of ghettos, low-skilled black men, and the fragmentation of African-American families—and of the changes needed to alter the status quo.

All Other Nights, by Dara Horn '99 (W.W. Norton, \$24.95). A different sort of

Civil War romance, this novel begins with Jacob Rappaport planning a poisoning at Passover in New Orleans.

The Scientific Life, by Steven Shapin, Ford professor of the history of science (Chicago, \$29). A densely reasoned examination of the moral life of scientists and why it matters, as they practice in the academy, within corporations, and as entrepreneurs in pursuit of riches.

**Enchanted Hunters: The Power of Sto**ries in Childhood, by Maria Tatar, Loeb professor of Germanic languages and



Quality time: Rainy Day with Dream Blocks (1908), by Jessie Wilcox Smith

literatures and of folklore and mythology (W.W. Norton, \$26.95). More exploration of children and reading, as previously reported in "The Horror and the Beauty" (November-December 2007, page 36).

China between Empires, by Mark Edward Lewis, JF '86 (Harvard, \$29.95). A Stanford scholar on the formative pre-Buddhist period of the Northern and Southern dynasties.

#### GALLERY

## Second-Life Photography

Three years ago, Lee Smith '69, associate vice president for legal affairs at the University of Texas, his wife, Michelle, and their 19-year-old daughter, Allison, visited Al Akhawayn University in Ifrane, Morocco, where Allison eventually enrolled for a year. For Smith, it was his first time back in Morocco since 1975, when he lived there for two months, staying "until either my health or my money ran out," as he recalls. Though he had been a passionate photographer in college, when "my camera was a permanent extension of my hand," he had not done any serious photography for 30 years. Meanwhile, digital technology had revolutionized the field that Smith had abandoned out of frustration with his lack of a darkroom and the control of the final image that it offers—a function that darkrooms have now largely ceded to computer software.

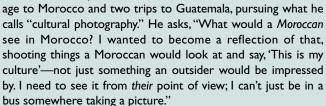
During his 1975 Moroccan sojourn, Smith took no pictures, partly because he had been told that its people were averse to being photographed. But on his return trip, he carried a five-megapixel Pentax camera and a determination to "take pictures"

I could show somebody." He discovered that Moroccans didn't mind photographers, that digital photography had arrived, and that "I still had an eye." Furthermore, he could fine-tune his prints on a computer. "Everything that had turned me off to photography was gone," he declares. "Now, I'm a second-life photographer."

"I have always loved the photo essay," he adds. (In college, he created a number of them for Harvard Yearbook Publications, where he was managing editor as a senior; he has also had photographs published in *Time* and *Cos-*

Left: A Mayan textile vendor, Ruth, whom Smith befriended in a Guatemalan village market. Above, right: oranges stacked for sale at a Moroccan bazaar.

mopolitan.) In recent years he has made a third voy-



To do this, a photographer needs to melt invisibly into the surroundings while remaining present and engaged. Smith's physical appearance, which he calls "visually ambiguous," helps: though he's identified as an African American in the United States, his ethnic heritage, which includes Native American and European elements, has led some to peg him as Peruvian or Italian. "Pakistanis see me and think I am Indian," he explains, "and Indians see me and assume I am Pakistani." Furthermore, he adds, "I have never met a stranger." In Guatemala, for example, he spent time every day with a Mayan woman named Ruth, who sold textiles in the village market. "Her friends, the women who did the weaving, became my friends," Smith says. "For some reason people open themselves to me and welcome me into their lives."

Exhibition spaces have also welcomed him to their walls. In the past two years, Smith's 20-by-30-inch prints have hung in eight different venues, from New York to his hometown of Austin (see www.imagesofmorocco.com). As a "second-life photographer," he often reflects on a bit of advice he got from Ansel Adams in 1970, but was "too self-absorbed to understand," he says. "Ansel said, 'If you want to be a successful photographer, get a job selling shoes.' What he meant was, if you want to discover your art, find a day job that pays the rent and puts food on the table, because if you depend on photography to do that, you will be consumed by taking the pictures people pay you for, and will never discover your own art. Maybe practicing law is something like selling shoes." 

CRAIG LAMBERT



the geodesic domes made famous by Buckminster Fuller '17. He suggests that a large body of famous constitutional rulings make more sense if they are seen as the triangular facets that comprise the geodesic surface. Beneath the facet that is the landmark *Miranda v. Arizona* decision that yielded "You have the right to remain silent," and other warnings to criminal suspects, lies the core Fifth Amendment protection against coerced self-incrimination. Beneath the decisions establishing the "exclusionary rule"—which requires

courts to throw out evidence, even if true

and relevant, that has been gathered in an unconstitutional manner—lies the need to give practical force to protections such as that against self-incrimination.

Tribe does not insist that these particular facets are the only possible ways to shield the constitutional values in question. But he does maintain that there was nothing illegitimate about the Supreme Court employing the invisible Constitution, via Geodesic Construction, to give the visible one practical effect and meaning.

The nation, I think it's safe to say, will not have the opportunity to hear Laurence

Tribe explain his six "G"s as a nominee before the Judiciary Committee. Barack Obama seems like a pragmatist who will send up candidates for the court more likely to win broad approval. But I kind of wish the Democrats would call Tribe as an expert witness to talk about how we think about the Constitution, seen and unseen. We'd all learn a lot.

Paul M. Barrett '83, J.D. '87, an assistant managing editor at BusinessWeek, covered the Supreme Court for the Wall Street Journal from 1991 through 1996.

20 March - April 2009 Photographs by Lee Smith

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## A Scourge Remembered

A reporter turns to film to capture the story of tuberculosis.

by ELIZABETH GUDRAIS

ER VOICE reaches out across the decades, from a time when people still wrote letters. "Dear Lorraine,...I just finished writing my darling a long love letter...I miss him so much. I wonder if he knows that....I'm so lonesome."

It was a time when entire hospitals dedicated themselves to the treatment of tuberculosis, and when Americans would disappear to those hospitals for years on end. *Everyone* knew someone who had TB. The disease had no cure, and even the mode of transmission was not well understood.

But that era is less remote than it might seem. The memory of how strong a grip the disease once had on the United States has faded quickly, considering that an effective remedy for TB (the antibiotic streptomycin) was not developed until 1943. In the new film *On the Lake: Life and Love in a Distant Place*, G. Wayne Miller '76 reopens this chapter in history and reminds Americans how recently tuberculosis was not just a disease of the developing world.

Miller, a newspaper reporter at the Providence Journal who moonlighted as a

G. Wayne Miller

novelist and writer of nonfiction books, wanted to try the medium of film but was casting about for the right topic. Years earlier, he had written a newspaper series and a book on teenagers growing up in Rhode Island; one of his subjects, David

Bettencourt, grew up to be a documentary filmmaker, and the two had kept in touch.

In 2006, Miller was working on another newspaper series, about the life of a man who lived at a hospital for psychiatric patients and the severely disabled, in northwest Rhode Island. While reporting that story, Miller was reminded of the hospital's history as a tuberculosis sanatorium. When he started talking to Bettencourt about a collaboration, his original thought was to narrate the hospital's history through the years—the different patients and maladies it had housed. But as they explored the photographs and records in the hospital archives, they quickly realized that narrowing their focus to tuberculosis, but broadening it to a national scope, would produce a better story.

The film, focusing on three sanatoriums—in Burrillville, Rhode Island; Saranac Lake, New York; and Denver, Colorado—reminds us that life went on inside the hospital. Wallum Lake, the sanatorium in Rhode Island on which the film's title is based, had a bowling alley, a barbershop, and its own newspaper. Patients made friends and fell in love. We are introduced to Janet Dudones, the daughter of a TB patient and a nurse who met at the Saranac Lake sanatorium, and Cecelia and Ray Dones, who met when they were both patients in Denver-where they still live: 48 years of marriage, four children, and nine grandchildren later.

Tuberculosis, we learn, is behind much of the early population growth in Colorado—and is the reason the state has a Jewish community of any size. At one time, 60 percent of Colorado's population comprised TB patients and the friends and relatives who had come to be close to them. We learn about the brutal surgeries that TB patients underwent out of desperation in the absence of a cure—such as collapsing the affected lung or inserting a porcelain ball into the chest to close the cavity eaten by the disease. At Wallum Lake and elsewhere, we learn, patients were forced to sleep on huge porches, open to the ele-

ments even in winter, based on the idea that natural light and fresh air were therapeutic. Doris Terranova, a onetime patient at Wallum Lake, recalls: "You'd wake up, and your bed would be covered in snow."

Miller and Bettencourt found many of the film's subjects by creating a website where people could write in. The recentness of the American TB epidemic helped: people shared stories of parents', siblings', and even their own illness. Interviews with former patients give away some characters' fates, but Miller weaves narrative tension by waiting until late in the film to



Year-round fresh air and sunlight were seen as curative in the early 1900s. Children at tuberculosis sanatoriums, including Wallum Lake (shown here), were sent outside barely clothed, even in winter.



reveal whether others—such as Barbara Bowie, the letter writer unsure of her sweetheart's devotion—left the sanatorium alive.

MILLER ENTERED Harvard mulling a choice between writing and medicine. A creative writing course in his first year tipped the scales. During his senior year, he took courses in still photography and filmmaking that kindled an interest in the visual. (He notes that his *real* first film premiere was senior spring, when his tenminute documentary on the construction of 60 State Street in Boston was screened at the Carpenter Center.)

He has spent his entire career at newspapers (starting as a freelancer while working as a "baggage smasher" for Delta

Airlines, as he puts it) and has written seven books, including one novel as well as nonfiction explorations of worlds including NASCAR (in 2002's Men and Speed) and Hasbro, the Rhode Island-based toy company that brought us G.I. Joe and Mr. Potato Head (in 1998's Toy Wars). He still works at the Providence Journal, but has two more film projects in mind: a documentary on old-money Newport and one on Catholic nuns. (The second "is a story about spirituality in the age of celebrity," he says, confiding that on a visit to a convent, he heard nuns talking about Tom Brady and Jamie Lynn Spears.)

Wallum Lake (later named Zambarano

Hospital after Ubaldo Zambarano, onetime head of the TB sanatorium) closed its last TB ward in 1982, but the disease, also known as consumption and the "white plague," is still the world's number-two cause of death by infection (the first is AIDS). TB causes an estimated 1.6 million deaths a year and is believed to infect a third of the world's current population, although most of these cases do not blossom into active disease (see "A Plague Reborn," July-August 2008, page 38). Miller and Bettencourt tried to emphasize this point as well, in hopes of raising awareness of the need for relief funds and medical research. Their publicity materials include a quotation from Presley professor of social medicine Paul Farmer, founder of the nonprofit Partners in Health, which treats TB patients in Haiti, Rwanda, Peru, Russia, Lesotho, and Malawi: "We can hope greater understanding of how this dreadful illness affected our neighbors in New England might stir greater compassion and more helpful action—on behalf of the millions who still suffer and die each year from tuberculosis around the world."

Screenings of On the Lake are being scheduled at venues nationwide and on some PBS affiliates. For more information, visit www.onthelakemovie.com or www.gwaynemiller.com.

Richard van Frank asks who wrote: "Though children may darken your hours/With their shoutings and their fights,/They also brighten up the house-/ They never turn out the lights."

"telescope of mind" (January-February). Dan Rosenberg was the first to identify this stanza, which begins the prologue to

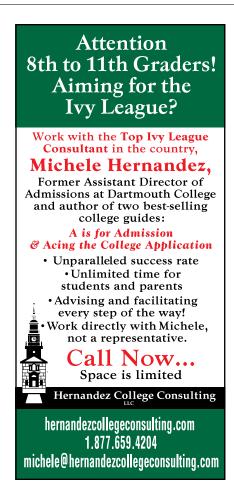
#### Chapter & Verse

Correspondence on not-so-famous lost words

John Howard Payne's 1818 play Brutus; or The Fall of Tarquin. The author of the prologue may have been one of Payne's friends, the Reverend George Croly.

"ambassador's nose" (January-February). Graeme Wood identified this variant of an incident between a footman and child in Gogol's Dead Souls, chapter two.

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PEAKING TO ALUMNI at Commencement exercises at the conclusion of her first year in office last June, Harvard President Drew Faust joined her voice with those of other university leaders in touting the collective prowess of American higher education, extolling "the most valuable educational resource in the world"—a system that has "managed to combine broad access with unsurpassed intellectual distinction."

But that synthesis of excellence and access is rapidly coming undone—even as U.S.-based universities continue to rank at the top of lists of relative institutional excellence, and the country is admired across the world for its historic primacy in offering higher education to the many, not just the few. Even as the advent of the Information Revolution and the postindustrial economy has intensified Americans' faith that advanced degrees and advanced research are central to social opportunity and economic vitality, the United States no longer leads the world in the attainment of college degrees. Meanwhile, growing imbalances in popular access to and wider resource gaps among institutions of higher learning threaten to turn higher education from a great equalizer of opportunity to a force that deepens inequality.

Perhaps as a result, tax-exempt private universities' eye-popping endowments have attracted congressional criticism: per capita leaders like Princeton and Stanford have more than \$1.5 million per student, and the absolute total for Harvard's endowment, before the recent downturn on Wall Street, reached \$36.9 billion. Senator Charles Grassley (R-Iowa), for example, proposed that universities be required to spend at least 5 percent of their income each year, as private tax-exempt foundations are already required to do. [For background, see "Endowments-Under a Tax?" July-August 2008, page 65.]

Alarmed leaders of super-rich colleges parried by skimming a bit of endowment-return cream to lower net tuition and expenses for middle- and upper-middle-class students, as well as for lowerincome enrollees. While some commentators praised this largess, op-ed critics pointed out that the options open to the Harvards, Princetons, Yales, and Stanfords of the world are light years from the tough fiscal trade-offs faced by the modestly endowed universities and tax-starved community colleges that the vast majority of Americans attend. "Bravo for Yale and Harvard, but what about the rest?" asked University of California, Berkeley chancellor Robert J. Birgeneau in USA Today.

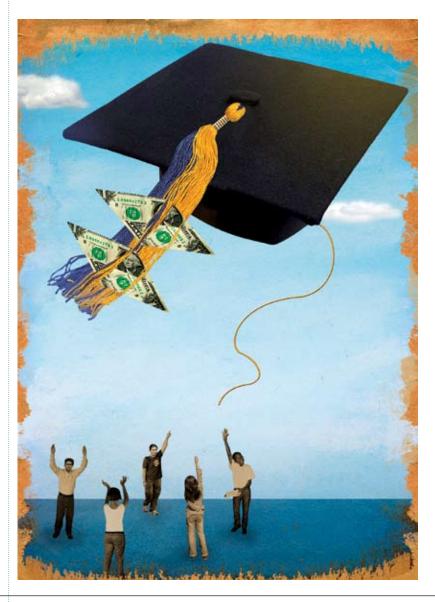
The aid enhancements and ensuing debate did little to expand college access, but did dramatize why fundamental solutions must involve more and better-directed resources from the federal government, not just regulatory gimmicks that induce

# REOPENING THE DOORS TO COLLEGE

The crisis in access to higher education, and a strategy for moving beyond elite handouts for the lucky few



BY THEDA SKOCPOL AND SUZANNE METTLER



charity from the richest universities. In America, private benefactors, churches, and state governments have promoted a raucously decentralized, competitive hodgepodge of thousands of colleges and universities, collectively offering many more citizens routes into all kinds of vocations than do the elite universities in Europe. At the same time, the federal government has long used public expenditures, regulations, and tax breaks to promote educational access and institution-building. Especially after the Civil War, when the land-grant university system (subsidized by the Morrill Act of 1862) spread higher education across the country and into practical areas of knowledge, and again during the golden era following World War II, when the GI Bill expanded student access and science grants fostered widespread research capacities, Washington played a pivotal role in shaping a capacious and inclusive system of higher education.

But that national role has shifted since the 1980s, contributing—along with private and state-level choices—to diminished access and institutional disparities. The time has come to redirect federal efforts: to focus on expanded grants and simplified loans for low- and middle-income college students, and to build the capacities of the public community colleges and universities to open doors of opportunity for the many, rather than catering to the wealthiest and luckiest few.

#### THE CLOSING COLLEGE DOOR

BEFORE WORLD WAR II, a broad network of public and private colleges existed in the United States, but the Depression hurt both, and higher education remained an elite affair into the 1940s. Then, suddenly, the doors to higher education swung wide. The population grew by 54 percent between 1945 and 1975 (from about 140 million to 215.5 million), yet the number of students enrolled in higher education rose more than sixfold (from about 1.7 million to about 11.2 million), and the number of earned degrees grew more than tenfold (from 157,349 to 1,665,553). Expansion of state universities led the way, but universities grew across the board. Millions of young men from modest backgrounds were able to complete college on the GI Bill. Advances for other groups, including women and minorities, followed.

Since the 1970s, however, enrollment expansion has slowed and social opportunity has constricted, despite the heightened value of a college degree. In 1979, an American worker who had completed a college degree earned about 1.4 times the income of a worker who hadn't—and that premium grew to 1.75 by the end of the century, where it remains today. Families obviously have a greater incentive to send offspring to college, and the proportion of 18- to 24-year-olds enrolled has indeed grown by more than a third since the late 1970s. Still, the overall enrollment increase has lagged the rising wage differential, and the response has been especially sluggish lower down the income ladder. Socioeconomic gaps in enrollment have expanded, and so have racial gaps between whites and blacks (even though blacks have become increasingly likely to graduate from high school).

In 1970, 6.2 percent of the U.S. population in the bottom income quartile had completed a baccalaureate degree by age 24—but that percentage actually *declined* slightly, to 6 percent, by the year 2000. Meanwhile, lower-middle-income young people from the second-lowest income quartile improved their college completion rates only slightly, from 10.9 percent to 12.7 percent. But completion percentages for young people in the third quartile—

solidly middle-class families—rose markedly, from 14.9 percent to 26.8 percent in 2000. And for the most privileged, those from the top quarter of the income distribution, college completion rates rose from 40.2 percent to 51.3 percent. Compared to the mid twentieth century, higher education is now increasingly exacerbating socioeconomic inequality in the United States. Its success at fostering upward mobility has diminished sharply.

Many factors combine to explain this deteriorating access to college for less-privileged Americans: problems in the K-12 educational system, the effects of post-1965 immigration, and the impact of changing family structures and practices.

But institutional policies, public and private, have also played a prominent role. As professor of education and economics Thomas Kane explains, "Between 1965 and 1980, the average tuition at a private four-year college rose only 22 percent faster than inflation. However, between 1980 and 1999, tuition at private four-year institutions rose 136 percent in real terms. After rising by 17 percent in real value between 1965 and 1980, the average public [institution's] four-year tuition rose by 114 percent between 1980 and 1999." Today's in-state cost of more than \$13,000 for a year at a public college can equal a large chunk of the annual income of a poor or lower-middle-class family, obscuring the putative value of future income gains from higher education. This helps explain why less-privileged young people with the highest test scores attend college at substantially lower rates than their privileged age-peers with the same scores. (The gap is even wider between high- and low-income students with the lowest scores.)

At the same time, public grants and subsidies have failed to keep up with rising costs, and the process of obtaining aid has become harder. From the GI Bill through enactment in 1973 of Pell Grants (voucher grants to help low-income students), federal aid policies stressed *grants* to make college predictably affordable. Thereafter, the bulk of federal programs shifted toward student *loans*, with the government providing subsidies to encourage banks to lend—and more recently, toward tax credits as well. Typical indebtedness for college graduates who take loans now averages about \$20,000—a daunting amount for young people from less-privileged backgrounds.

Moreover, guaranteed bank loans and nonrefundable tax credits disproportionately help subsidize college costs for privileged families, while Pell Grants for low-income students have been allowed to deteriorate in real value. In 1975, maximum grants covered 84 percent of the cost of a public education, but by 2006 the subsidy had shrunk to less than a third of the cost. According to education experts Ted Mitchell and Jonathan Schorr, 38 percent of students enrolled in four-year public institutions in 1995 came from Pell Grant-eligible low-income families, but that percentage dropped to 28 percent in 2003. Some states have grant programs of their own, but in recent years much of that aid has shifted toward "merit scholarships," which are likely to be won by middle- and upper-middle-class students, thanks to better educational resources and access to college counseling. Low-income families, on the other hand, rarely know up front—when their children must apply to college—how much help they will qualify for, especially the total they might expect from state, national, and private sources combined.

As these trends have played out, according to a 2007 Organization for Economic Cooperation and Development report, "the



United States has moved from first place for higher-education attainment levels among 55-to-64-year-olds to fourth place among 35-to-44-year-olds and tenth place among 25-to-34-year olds." In the youngest age cohort, Belgium, Canada, Denmark, France, Ireland, Japan, South Korea, Norway, and Spain have all overtaken us—a startling development for the one-time world leader in access to higher education and a worrisome development in an ever-more-competitive world economy.

#### THE CHIMERA OF CHARITY

GIVEN THE FISCAL OBSTACLES in Washington, some in Congress are trying to address cost increases in higher education with cheap regulatory gimmicks, such as mandated payouts from the richest college endowments or a "watch list" ranking colleges by their rate of annual tuition increases. But such lists can hurt poorer colleges that must boost their top tuition rates (easily paid by the wealthiest) to survive or improve. As a result, lower prices at the Harvards and Stanfords of the world can, ironically, end up making things worse for most U.S. students and their families as the effects reverberate through the entire system of competing colleges and universities.

For the 2007-08 admissions season, a few super-rich universities cut prices across the board—but that benefited the well-to-do as well. These same universities brag about their promises of a free ride to families making under \$40,000 to \$60,000, but very few students from low-income families gain admission to the top colleges. The only way highly privileged institutions could even *slightly* widen the tiny dent they make in higher-educational disparities would be to double or triple the size of their entering classes—with growing proportions of slots set aside for less-privileged students to whom they offer substantial remedial and support services along with free tuition. With a few

exceptions—such as Amherst College in Massachusetts, a leader in adding and supporting low-income students, and Berea College in Kentucky, which admits only low-income students for a no-frills, debt-free education—the best-endowed institutions show little inclination to use their wealth in such a way. Instead, they deploy burgeoning resources to enhance research programs, poach top faculty, and subsidize aid and fabulous services for the small numbers lucky enough to gain admission.

But a policy focus such as Senator Grassley's on high-priced, high-prestige institutions obscures the reality of modern higher education. Eighty percent of college students attend public institutions—and nearly half of them are enrolled in two-year community colleges. State and local subsidies to such institutions have shrunk in recent years (even as the demand for admission to them has grown), and inevitably the public institutions have had to raise their tuitions. This makes access to *them*, too, increasingly costly for average and less-privileged families. Faced now with greater competitive pressure as Harvard and the other elite universities offer lower sticker prices to middle-class kids, state universities will have an even harder time attracting top high-school seniors, and will face sharper trade-offs between giving merit aid and need-based aid, and between giving student aid in general and supporting institutional facilities.

In short, regulatory gimmicks and Ivy League noblesse oblige worsen the distributional dynamics: what is good for Harvard is not automatically good for U.S. higher education as a whole. In an ever-intensifying rat race, the wealthiest half-dozen private universities are squeezing the less-endowed privates, and all the endowed private institutions are, in turn, putting pressure on little-endowed colleges and public universities. This picture—more and more resources (dollars, top students, star faculty) flowing toward the top of the top—mirrors the trend

of class inequality in the United States since the 1970s, and further widens class inequalities overall.

The focus of policy, in other words, should be on broadening opportunity for the vast majority of potential college-goers in the middle and at the bottom. That means making college more affordable for less-privileged families and enhancing incentives and capacities for community colleges, public universities, and private colleges of lesser means to recruit and educate students from families of modest means, including families whose breadwinners have not attended college.

#### **WASHINGTON'S ASSIGNMENT**

The public mood about government is shifting, as millions of families realize they need its support to cope with rising costs and prepare their children for the future. Legislators can no longer ignore issues of access and excellence in higher education because opportunity, citizenship, and economic competitiveness are all affected by the choices the federal government makes about this critical sector. The obvious top priority has to be further boosting outright grants for low- and lower-middle-income students. Pell Grant levels rose significantly in 2007, but increasing the enrollment and graduation rates of less advantaged students will require additional growth beyond the "keeping up with inflation" that Barack Obama promised as a candidate.

Other aspects of federal assistance need work, too. As Obama suggests with his "American Opportunity Tax Credit," such help must take the form of "refundable" credits (that is, funds that go to families even if they do not owe a lot in income taxes). That is the only way such payments could actually expand access for lower-income students. Furthermore, federal loan policy should take advantage of the current banking crisis, perhaps by using a higher proportion of public funds to make loans directly to students. Another possibility is to encourage tougher competition among subsidized private bank lenders, encouraging them to lower costs to students as a condition of enjoying federal guarantees. Either way, reducing the amount the federal government diverts to subsidizing banks can free resources for increasing access to college.

Next, it must become easier for families to understand and predict college aid of all sorts. For low- to moderate-income students, the apparent "sticker price" of college tuition combined with the overwhelming complexity of federal policies and the timing of colleges' financial-aid decisions (now coming *after* students gain admission) may preemptively discourage many from even applying. Some progress was made in 2007, but policymakers should further streamline the process so potential students can base their decisions on a more realistic understanding of how much aid will be available to them. Information about potential financial-aid packages could be given to families early in students' high-school years.

Loan-repayment policies also need careful attention, because of the burdens and distributive inequities they create. Current practices impose severe penalties on former college borrowers who fall into financial trouble, often making them worse off than if they had never attended college in the first place. If the repayment system could be made somewhat redistributive, that could help make federally guaranteed loans progressive, rather than regressive in impact. Why not make student loans automatically repayable through the annual tax-return system? Repayments

universally set at a fixed percentage of incomes over a period of years after college would ensure neutrality about career choices; eventually, this approach might allow the collection of slightly higher repayments (perhaps up to 110 percent) from the highest earners. Their good fortune would bolster the system's capacity to make loans to others.

A renovated federal approach to higher education must also find ways to encourage states to invest in public universities and colleges. In recent decades, state support for public universities has both declined dramatically and increasingly been diverted toward better-off students. Even though state budgets have been burdened by growing entitlement obligations (most notably for Medicaid and K-12 education), appropriate shifts toward higher education could be spurred by federal supplements to financial-aid allocations for low-income students. Or the federal government could give incremental general-purpose support to higher-education institutions that increase enrollment and graduation rates for Pell Grant students. Some private colleges might benefit in this scheme, but most of the federal reward would go to the public institutions that enroll the bulk of needy students.

The nation's 1,045 community colleges deserve particular attention and support. Funded by states and localities, these two-year institutions attract large numbers of less-privileged students and funnel graduates with basic college skills into local workforces. Making community colleges more affordable, and increasing their capacity to link to local employers, or to better counsel students able to go further in college, can arguably do more for open access than any other sort of institutional support.

Academic institutions must get involved as well. Community-college students often find that few of their credits transfer to four-year institutions, a situation that could be remedied by better cooperation. The Jack Kent Cooke Foundation, for example, has recently created an exemplary program to support Amherst College and seven other highly selective institutions that have partnered with nearby community colleges to identify promising potential transfers and help them make the transition to four-year college. Both the federal and state governments need to learn from such efforts. Ultimately, these linkages should reach down to the high schools that enroll students from families lacking college experience, to provide trained counselors to lift student aspirations, channel their efforts in realistic ways, and make connections to colleges seeking to broaden admissions.



Our country can't compete without broad access to higher education. Harvard, Princeton, and Stanford may dominate the headlines, but public institutions are at the front lines of this struggle, and we must foster their efforts to identify and direct talent for the future. The competitiveness of our economy and the vibrancy of our democracy both depend on rejuvenating the marriage of excellence and opportunity that has characterized America—and U.S. higher education—at their best. Now is the time to reopen the doors to college for the many, not just the lucky few.  $\nabla$ 

Theda Skocpol is Victor S. Thomas professor of government and sociology at Harvard and past dean of the Graduate School of Arts and Sciences. Suzanne Mettler is Clinton Rossiter professor of American institutions at Cornell. This essay is adapted and excerpted from their article "Back to School," which appeared in the Fall 2008 issue of Democracy: A Journal of Ideas (www.democracyjournal.org/article.php?ID=6639).

N 1971, when Howard Stein was professor of playwriting at the Yale School of Drama, the program accepted a young playwright, Christopher Durang '71. Stein burst into the office of Robert Brustein, the school's dean, with the news. "We took in a kid from Harvard who is about 21 or 22 and who already has a subject: a scream for help in a world he knows provides none," Stein announced. "So he keeps on screaming and laughs at it."

Nearly four decades later, Durang's characters are still screaming and the audiences still laughing. The cries erupt from the personal trials and primal anxieties of his own life, which his stagecraft somehow turns into hilarity. (He confesses that some mornings he "feels both grateful and bitter at the same time, which is a complicated feat.") Durang wrings laughter from his troubled family ("My parents cared for each other and I was a wanted child, but they fought so much that it was hard to be around") as well as from a bedrock hopelessness over the absence of a caring God.

Though many associate Durang with religious themes, religion has offered him little solace since he lost his Roman Catholic faith at 19, while at Harvard. Take his 1985 play, *The Marriage of Bette and Boo*, in which he traces the dissolution, through 33 scenes, of the marriage of an ideal 1950s couple closely modeled on his parents. Toward the end, the playwright's proxy, Matt, reassures his mother, who is dying of cancer, that God is not punishing her for remarrying outside the church. "I don't think God punishes people for specific things," Matt declares. "I think He punishes people in general, for no reason."

Durang's best-known play is probably Sister Mary Ignatius Explains It All for You (1980), which opens with a doctrinaire lecture by a nun who outlines the Roman Catholic rulebook for life. But four of her former students, now thirty-something adults, puncture this dogma when they show up and confront Sister Mary with their actual lives, which include rape, abortion, unmarried parenthood, homosexuality, alcoholism, wife-beating, and the painful death of a parent from cancer. The action climaxes when

the infuriated nun shoots two of the students, quickly justifying the homicides with airtight Catholic reasoning. Theology and reality rarely confront each other so bluntly on a stage, least of all in a comedy. Sister Mary Ignatius got rapt reviews and catapulted Durang into the first rank of American playwrights. "Only a writer of real talent can write an angry play that remains funny and controlled even in its most savage moments," wrote Frank Rich '71 in the New York Times. "Sister Mary Ignatius confirms that Christopher Durang is just such a writer." (Though classmates, Durang and Rich didn't know each other in college.)

Durang's theatrical *oeuvre*—which includes 15 full-length plays and 35 one-acts—is radically unbalanced: all the works are comedies (see

www.christopherdurang.com). But the laughter is dark; Durang is a modern master of black humor. His comedies spring from an imagination that breaks laws not only of drama, but of time and space. "One must guard oneself against the possibility of dying with laughter while watching a Durang play," wrote Stein in a preface to *Christopher Durang: 27 Short Plays*, a 1995 collection, before comparing him to the Romanian/French absurdist Eugène Ionesco and to the ribald Greek playwright Aristophanes. "He has to be offensive to be effective, just as Aristophanes had to be offensive and Jonathan Swift had to be offensive." Playwright Albert Innaurato (*Gemini, The Transfiguration of Benno Blimpie*), Durang's Yale classmate and youthful collaborator, references his friend's "extreme circumstances, crazy characters, and a certain amount of illogic. Chris is an extremely funny and creative writer."

Brustein, now senior research fellow at Harvard, moved his theatrical enterprise from New Haven to Harvard in 1979, and the following spring launched the American Repertory Theatre, which has staged several Durang plays. Brustein calls him "a native American absurdist" who is "really committed to the family play." In a 1997 essay on Durang, Brustein noted that "the quintessential American drama is and has always been a family drama—a work in which the writer lays his ghosts to rest at last, making peace with his past by exorcising the dead." Indeed, many critics have compared *The Marriage of Bette and Boo*, which Brustein calls "a masterpiece," to another great American family play, the far-less-jocular *Long Day's Journey into Night* by Eugene O'Neill.

In both works, alcohol fuels rage and painful confrontations, but Durang, unlike O'Neill, includes some punch lines. In one Thanksgiving scene, borrowed directly from his childhood, an inebriated Boo spills gravy on a rug and then tries to vacuum it up as Bette repeatedly shrieks, "You don't vacuum gravy! You don't vacuum gravy!" It's a hilarious scene onstage, but "The argument that followed the real event wasn't funny," Durang recalls. "There's a distancing mechanism. When I was young, holidays could be hellish. Maybe I have an innate tendency to want to tame painful memories, to make

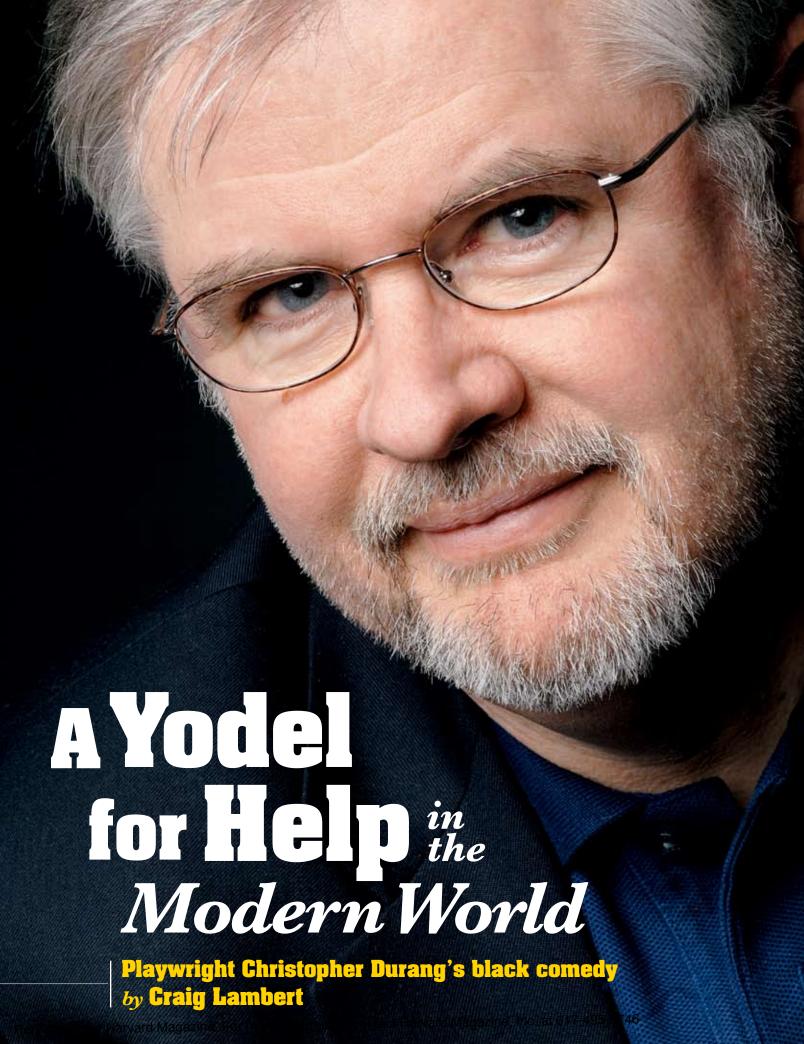
them comical."

As an only child amid a turbulent family, Durang must often have hoped for some kind of rescue, but actress Sigourney Weaver, his friend since they were classmates at Yale, isn't sure that "a cry for help" really captures his outlook. "Maybe a yodel for help?" she suggests.

Durang's black comedy will undergo an acid test in March, when his new play, Why Torture Is Wrong, and

In 1988 Durang (left) joined with actor/singer friends Sherry Anderson and John Augustine for a tongue-in-cheek night-club act, "Chris Durang and Dawne." Durang opened the show by declaring that he'd started to find playwriting too hard, and so was becoming a lounge singer. He claimed that he and his back-up group, Dawne, had been touring the country singing "at Ramada Inns and convention centers everywhere, it's been horrible." The three performed the act many times in the next eight years, and shared a Bistro Award in 1995.







the People Who Love Them, opens at the Public Theater in New York. "It's about torture and the war on terror," Durang says, "but it is a comedy." In this political play about "homeland insecurity," the young female protagonist drunkenly marries a man she barely knows, and soon worries that he may be a terrorist. Her father, a right-wing ideologue, becomes an instant enemy of the new husband and works covertly to find out who the man is and what he may be planning. Meanwhile, the father himself seems to be heading a shadow government. "It becomes quite farcical and dark," Durang explains, "but I slam it into fantasy in the last scene just so people can go home with some hope. Audiences are willing to go to dark places, but they don't want to be sent home miserable."

THERE SURELY WERE SOME FORLORN MOMENTS in the small house in central New Jersey where Durang grew up. After his birth, his mother's three subsequent pregnancies ended in still-births due to an Rh-factor incompatibility; *Bette and Boo* is rife with dead babies. "The first-born is exempt from the Rh issue," he explains. "That was lucky for me, but I feel some survivor's guilt."

His father, F. Ferdinand Durang, was an architect—and one of many alcoholics on both sides of the family. "I felt like I was living in 'Alcoholics-a-Poppin,' " Durang says. "Some got into AA, some were dry drunks. People who aren't alcoholics have their own convoluted reactions to it. As a child I perceived that nothing in life worked out—nobody was able to solve any problems."

Durang's mother, Patricia, who worked as a secretary at Bell Labs, had a way of prodding her drunken husband into fights; the couple separated when Durang was 13, to his great relief, and finally divorced when he was a college freshman.

Yet both sides of the family also valued the arts. "Ferd" Durang came from a long line of architects, and as far back as the 1700s the Durang clan had also produced actors, performers, and dancers: *The Memoir of John Durang* [1768-1822] is one of the earliest written journals by an American actor. Family members would speculate about whether young Christopher would go into architecture or theater. "They were very encouraging," he recalls. His mother talked about theater a lot, and took her son to shows in New York (he recalls funny songs in *Fiorello*) and to the Paper Mill Playhouse in Millburn, New Jersey, to see Betsy Palmer in *The King and I*.

At the age of eight, Durang announced that he was going to write a play, and produced a two-page comedy based on the "Lucy has a baby" episode of *I Love Lucy*. His mother showed the tiny script to Durang's second-grade teacher at Our Lady of Peace School, who decided that the class would take an afternoon off and put it on. "I got to choose the actors," he recalls. "It felt very fun." He kept turning out plays, with longer and longer scripts.

At the Delbarton School, a private, all-male Benedictine secondary school in Morristown, New Jersey, Durang collaborated with his classmate Kevin Farrell on two musicals produced there, and, with Patricia Durang's persistent backing, at a com-

munity theater, the 50-seat Summit Playhouse. A slight brouhaha ensued after the first Delbarton production when nuns from a private girls' parochial school nearby forbade their students to act in any more Delbarton shows after witnessing a mildly risqué gesture—a strap dropping off a shoulder—in the first musical.

On entering Harvard, Durang received the Jack Lemmon Scholarship and as a freshman wrote, directed, and acted in his first "dark" play, Suicide and Other Diversions, at the Loeb Experimental Theater, with Bonnie Raitt '72 in the cast. Yet auditions at the Harvard Dramatic Club didn't land Durang any roles: "I began to feel that I must not be that good an actor," he says. He moved toward musicals at the Agassiz Theater and as a sophomore sang in the chorus—Durang has an excellent singing voice—of How to Succeed in Business Without Really Trying.

But by then he was sliding into a two-year depression. He had a work-study job cleaning bathrooms two hours per day. "I was up until 2:00 A.M., then I'd sleep until 1:00, have lunch, clean bathrooms, and it would be 4:00," he says. "I stopped going to classes, except for my favorite professor, William Alfred. I owed papers. I went to the movies nearly every day for four years at Harvard, but the only literature, movies, or theater I was responding to had a dark, despairing, tragic content. I found



those." Eventually a social worker at the University Health Services evaluated Durang. "They screened you to see if you were crazy enough for psychotherapy," he says. "I passed!"

The Vietnam War was raging, and Durang marched for peace. For six months he went to a small experimental Roman Catholic mass celebrated at the Divinity School, where nuns wore mufti and participants talked about Vietnam. "I hoped that praying to God would help end the war," Durang recalls. "But we had

been praying for two years, and apparently God was sitting up there saying, 'No, not quite yet. We'll napalm tomorrow.' At one Mass, a nun declared that she still felt hope. A little voice in me said, 'I don't. I don't feel hope.' That may have been my last day in church, except for funerals."

Durang twice landed on academic probation, but managed to graduate on time in English. ("I don't regret that there was no theater degree," he says. "At Yale I arrived with a certain freshness because I hadn't been saturated with theater at Harvard.") The summer after his junior year he made up a failed course—a signal achievement. "I found that you could take an action and fix something that had gone wrong," he says. "That was something no one in my family had done."

This, plus an empathetic psychotherapist, helped lift Durang's depression by senior year and he began writing again. Having sung the male lead in *Annie Get Your Gun* one summer, he amused himself writing *The Greatest Musical Ever Sung*, which told the Gospel stories as a musical comedy. In the Dunster House dining hall, he sang parodies like "You Can't Get a Man with a Prayer," and "Everything's Coming Up Moses" to friends over dinner. When he directed the show for the Dunster Drama Society, a Jesuit teaching fellow wrote a letter to the *Crimson* complaining about its positive review and calling both the reviewer and the playwright "pigs trampling in a sanctuary."

That letter went into Durang's Yale application, along with a new play, *The Nature and Purpose of the Universe*, about "a housewife whose life is hell—then God sends down two angels to make her even *more* miserable." He took the title from a grandiloquent pamphlet Harvard published amid the student unrest of the late 1960s, "The Nature and Purpose of the University." Durang at first misread the last word as "universe," thinking, "They have a *pamphlet* on that?" The play won a contest at Smith College and was staged there.

At Yale, he recalls, "Suddenly I was in a place where it was theater all day long, and cabaret shows every weekend." Sigourney Weaver and Durang became fast friends and often ate together. Albert Innaurato was in their class, and Wendy Wasserstein joined them a year later. The 20 acting students included not only Weaver but Meryl Streep. Actors and directors were enrolled in the playwriting workshop. "Actors would read your play and the directors would rehearse them a little bit," says Durang. "It's such a great thing for playwrights to hear their work read aloud by good actors."

Though Yale had accepted seven playwriting students, "They threw out nearly everyone except Chris and me," says Innaurato. "They spoiled us a lot; they let us do what we wanted." That included responding to a museum's invitation for a theatrical piece on William Blake and Thomas Gray by reading some of the poets' work in a museum gallery, then declaring that Blake and Gray had met on a summer-stock tour of The Glass Menagerie. Innaurato and Durang proceeded to portray the poets as two of that play's female characters, with Innaurato dressed as a high priest and Durang in a cassock. This somehow segued into Sunrise at Campobello, with the two men, still in clerical costumes, playing Eleanor and Franklin Roosevelt, who decide to celebrate a mass and sing Kyrie eleison to the tune of Cabaret's opening number, "Willkommen." The museum "tried to throw us out for impropriety, outrageousness, and blasphemy," says Innaurato. The pair (please turn to page 70) also collaborated on a full-length play,

Photograph by Susan Cook Harvard Magazine 31



VITA

# Fernando Zóbel de Ayala

Brief life of a peripatetic man of arts: 1924-1984 by John Seed

AVING FLED the Spanish Civil War as a boy and endured the Japanese occupation of the Philippines in his teens, Fernando Zóbel '49 kept his most valuable possessions portable. He once showed his Harvard classmate Ralph Graves an

album containing small drawings and prints by master artists. Commenting on one precious image—an anatomical study of a man's shoulder and arm—Zóbel dryly told Graves, "There wasn't much left to collect, so all I got were the armpits."



Remarks like that were a Zóbel trade-mark; their purpose was to help people forget his background. The name on his Harvard application was Enrique Francisco Fernando Zóbel de Ayala y Montojo Torrentegui Zambrano, but he was "Ferdie" to his friends.

The son of an industrialist father and an aristocratic mother, Zóbel grew up in Manila and then Madrid, until his politically conservative parents retreated to the Philippines in 1936. During his next five years, at an international school north of Manila, he avidly doodled images of knights and gained a new perspective on the conflict in Spain from Hemingway's For Whom the Bell Tolls.

He returned home the day after Pearl Harbor and spent most of 1942 in a torturous orthopedic bed, trying to recover from the neck and spinal problems that had been his bane since childhood. In 1943, his father died from lack of treatment for an infection. Zóbel coped by studying and by reading intensely. In 1945, after liberation, an

American family friend urged him to apply to Harvard.

In Cambridge in 1946, Zóbel stood out as a well-to-do Spaniard among veterans attending on the GI Bill. But becoming a regular at the private Fox Club did not interfere with his art studies or hard work in history and literature. He wrote a senior thesis on the plays of Federico García Lorca (then banned in Spain) and graduated magna cum laude in three years. But he loved Harvard so much, he couldn't leave. After a short, miserable summer in Manila, he returned to try law school briefly and then spent two years as an assistant curator in the graphic-arts section of Houghton Library, developing a lifelong interest in rare books and manuscripts.

In August 1951, Zóbel finally returned to Manila to take a job with a token salary at Ayala y Compañia, his family's real-estate and development corporation. For the next nine years, he lived a kind of double life, devoting every moment outside work to his

passions: painting, writing and lecturing on art and archaeology, traveling, exhibiting, and collecting.

While visiting Boston in 1954, he studied briefly at the Rhode Island School of Design, where he saw an exhibition of Mark Rothko paintings that committed him to modernism as an artist. The result was his Saetas series—the word means both "darts" (a reference to his use of hypodermic syringes to paint) and also a traditional kind of Spanish devotional song that has links to flamenco. In Manila, he promoted other Philippine artists the best way he knew how, by buying their work when few others did. Finally, in late 1960, suffering from depression and illness, he left his collection of Philippine modern art to the Ateneo de Manila University and departed for Spain, where he had been cultivating friendships with other modern artists.

Spain was, in many ways, the love of his life. (He once said that, when it came to resisting matrimony, he was immovable "like a pyramid.") He and his friends felt the country needed a major collection devoted to its modern artists, despite the rigid Franco regime, and spent several years seeking a suitable site. In 1963, they visited the ancient hill town of Cuenca, southeast of Madrid, and Zóbel reported himself "quickly entranced by the mood, the style, and the charm of the city and its inhabitants." Living in a succession of medieval towers, he painted in the morning, sketched in the afternoon, and met friends at Pepe's restaurant in the evening—they had their own room, where they discussed modern art over the best pollo al ajillo in town. By 1966, Zóbel had taken over more than a dining room: at considerable personal expense, he had installed his growing collection of works by Spanish modernists in Cuenca's historic casas colgadas, a set of medieval houses perched on a cliff above the Huécar River. Thanks partly, perhaps, to his name and family connections, the Museum of Abstract Spanish Art was born.

Eventually, Zóbel had nearly identical studios in Cuenca, Seville, and Madrid, where he also kept an elegant apartment filled with precious objects and works of art. But his fragile health—he suffered a series of strokes in his fifties—prompted him to give the Cuenca museum to the much larger Juan March Foundation in 1980. (He reported that it was "harder to give away a museum than it was to establish one.") To Harvard he donated 138 drawings by Spanish masters, and a selection of Asian works; in the Philippines, he was also the force behind the creation of Manila's Ayala Museum, to which he donated art and ethnographic items. By the time he died of a heart attack during a visit to Rome, he had also vitalized the career of many contemporary artists: the painter Simeón Saiz Ruiz, for example, has recalled how Zóbel had a knack of challenging him to greater effort in a supportive way.

Zóbel himself left behind a legacy of late abstract paintings that project an immense sense of calm. "Critics have asked me," he once said, "what I did with the anguish in my life. My answer is that I leave it at home where it belongs, since it has nothing to do with my painting."

John Seed is a professor of art and art history at Mt. San Jacinto College in southern California.

Opposite: In a 1966 image taken in the Museum of Abstract Spanish Art in Cuenca, Zóbel holds one of his sketches; his painting Ornitóptero hangs behind him. At left is Homenaje a Vasarely II, a sculpture by Amadeo Gabino; the painting at far right is Barrera con rojo y ocre, by José Guerrero.

# The Developing Child

With a new interdisciplinary center, Harvard turns its focus to the earliest years of life—in an approach that combines science, policy, and practice.

by Elizabeth Gudrais



T A SCHOOL in Peñalolén, a working-class neighborhood in Santiago, Chile, kindergarten teacher Patricia Pérez is reading to her class. The story involves a pig who wants to impress a lady friend so she'll agree to go on a picnic with him. From a fox, a zebra, and a lion, he borrows items to spiff himself up: a tail, stripes, and a mane. When Mr. Pig arrives at his intended's house, she doesn't recognize him and refuses to go with him; he saves the day by coming back unadorned, prompting the lady pig to exclaim with delight: "¡Qué romántico!"

When the story ends, Pérez works with her pupils on vocabulary words such as *consejo* ("advice"—which Mr. Pig got from his friends, but should not have heeded), asking students to sound them out and write them on the board. In a nearby classroom, different kindergartners listen to *their* teacher reading; others read on their own, choosing from books strewn across tabletops.

To American visitors, these are unremarkable kindergarten scenes. In Chile, however, such scenes are less ordinary. Chilean children typically do not learn to read, or even begin working with the full alphabet, until first grade. "Early-childhood education has not, in Latin America in general, been thought of as *education*," says Graham professor of education Catherine Snow. "The approach is: Let the kids play, get them used to being in groups, and we'll worry about teaching them starting in first grade. But then in first grade, the expectations for progress are suddenly very high, and none of the preparatory work has been done. Kids kind of get dropped into the deep end."

The hands-on approach to books in the Peñalolén classrooms is part of *Un Buen Comienzo* (UBC; "a good start"), a program designed with guidance from Snow and Harvard colleagues. It aims to improve the quality of early-childhood education in Santiago, increasing literacy and school success for the young participants. UBC is a project of the Harvard Graduate School of Education (HGSE); a Chilean philanthropic foundation is underwriting and implementing it, and researchers from a Chilean university will evaluate its effectiveness.

*Un Buen Comienzo* reflects a recognition of early childhood as a crucial time for the development, both emotional and cognitive, that influences children's later lives. Chile's expansion of

preschool programs, integrated into the existing school system, offered a unique opportunity to reach children at a younger age. Past efforts tended to focus on later childhood, but "the costbenefit ratio is more favorable in early childhood than at any point in the life cycle," says HGSE dean Kathleen McCartney. In the case of some skills and abilities, in fact, by the time a child enters school it's too late to have maximum impact. Children's vocabulary at age five very reliably predicts the number of words they know in sixth grade (see chart, page 36). "We know from a number of studies that a very good predictor of success in literacy is oral language skills," says Snow. "So if kids are limited in the oral language skills that enable them to understand a story that's read aloud, or to tell a story about an event in their own lives, then they will have difficulty accessing meaning in the texts they learn how to read in the first grade."

Because UBC incorporates rigorous evaluation of the strategies on trial, "I think countries across the world will be interested in the findings from this project," says

for the CDC's creation). But the University lacked a place where these researchers could combine efforts and share what was happening in their labs. President Neil Rudenstine created the Harvard Project on Schooling and Children in the early 1990s (see "Promoting a National Love of Children," November-December 1996, page 52). But when Steven Hyman became provost in 2001, those leading the initiative recommended that it disband, Hyman recalls: "It was a volunteer, part-time effort—it wasn't structured or funded in a way that it could be anybody's full-time job. It was a labor of love tacked onto the day job of busy people, and that just wasn't sustainable."

Tired of waiting for a more effective umbrella organization, McCartney, Snow, and colleagues had begun work on UBC before Shonkoff arrived at Harvard and the center's creation was announced. Now it is a flagship project in the center's emerging global portfolio, reflecting the University's fundamental interest in making a tangible difference in the lives of children. Snow is on the center's steering committee. HGSE professor Hirokazu

Yoshikawa, who is overseeing evalu-



McCartney. "Most times, government education policy is driven by opinion, rather than data—by people's best guesses about what will work."

This dual approach—implementation and evaluation—is characteristic of Harvard's aim to play a much larger role in improving the lot of children, in the United States and the world, through the interdisciplinary Center on the Developing Child (CDC; www.developingchild.harvard.edu), founded in 2006 with the goal of "advancing the scientific foundations of health, learning, and community well-being." The center funds research by faculty and students and helps them take their findings out into the world—into the classroom, but also to the state and national capitols where policies are made. Even where a solid knowledge base exists, says CDC director and Richmond professor of child health and development Jack Shonkoff, "we don't take it as a given that science speaks for itself in the policy world." These efforts are already paying off for children, in Chile and elsewhere.

#### TEACHING THE WHOLE CHILD

Harvard has long had eminent faculty in child development—prominently including Julius Richmond, the late Harvard Medical School professor who served as founding director of Head Start and later as U.S. surgeon general (and who advocated



Through Un Buen Comienzo, preschool and kindergarten teachers in Santiago received donated books and training focused on the most effective techniques for introducing reading, writing, and vocabulary development (including interactive methods of reading stories, as demonstrated by teacher Patricia Pérez in the photograph above).

ation of UBC, is involved with multiple center initatives. And UBC director Andrea Rolla, Ed.D. '06, is a scholar in residence at the center this year.

And the interdisciplinary nature of the Santiago effort epitomizes the center's approach. UBC combines professional development for teachers with workshops for parents, literacy with health, lesson content with a concern for classroom design. Says Rolla, "Children's problems are interdisciplinary." Training sessions prompt teachers to update their instructional methods to reflect current knowledge about how children learn: introduce reading through familiar words (instead of phonetic exercises that ask children to spell independently of context) and teach new vocabulary through stories instead of memorization. To expose children to as many letters and words as possible, hang posters and signs all over the classroom, label classroom objects, keep books accessible instead of hidden away in a cupboard, and post the letters of the alphabet at child's-eye level, instead of near the ceiling.

#### CONNECTIONS ACROSS CONTINENTS

**The existence** of a Harvard Graduate School of Education (HGSE) project in Santiago represents a serendipitous alignment of circumstances. In early 2006, Chile's newly elected president, Michelle Bachelet—herself a pediatrician—vowed to widen access to preschool, making it free for the poorest 40 percent of the populace. She announced an initial goal of opening 800 new preschool centers in the first year and 3,500 new preschools (with a total of 70,000 slots) in four years. At the same time, the government was becoming interested in how to improve the *quality*, as well as the quantity, of preschool education, says Steve Reifenberg, director of the Santiago office of Harvard's David Rockefeller Center for Latin American Studies. The traditional model had by and large been "to take care of kids while their parents are working so they don't hurt themselves," says Reifenberg, "rather than something more stimulating."

Around that time, Chilean businessman Andrónico Luksic Craig was eager to add education to his portfolio of philanthropic activities. He mentioned this desire to Reifenberg, who, in turn, invited a handful of Harvard scholars—HGSE dean Kathleen McCartney and Harvard Medical School's Brazelton professor of pediatrics Judith Palfrey and associate professor of psychology Catherine Ayoub—to Santiago for a seminar with Luksic and Chilean education officials...and UBC was born.

At the same time, Andrea Rolla, who had experience designing and evaluating early-childhood education initiatives in Costa Rica and El Salvador, had completed her Ed.D. and moved to Santiago. She would become UBC project director. Elisabeth Farrelly, a Yale M.B.A. who had worked for an educational nonprofit in New York and then moved to Santiago with her Chilean husband, was available to become general manager of Luksic's educational enterprise, *Fundación Educacional Oportunidad*. And another HGSE graduate, Ernesto Treviño, Ed.D. '07 (a Mexican national married to a Chilean), completed his degree just in time to direct the evaluation in his new post as a professor of education at Universidad Diego Portales in Santiago.

unfamiliar word in context.) The training also encourages the adults to be more verbal at every opportunity: if a child asks, "How do I tie my shoes?" the parent should talk through the steps—"First you make a loop. Then, you wrap the other lace around..."—instead of merely demonstrating.

The program's designers quickly realized that making sure children learn means making sure they attend school consistently. In Santiago, where the Andes trap smog over the city and the air quality in winter is abysmal, children often get respiratory infections and parents may keep them home for weeks on end. In low-income comunas (districts of Santiago), winter attendance rates in preschool classrooms commonly drop to 50 percent or lower. (The average absence rate in the pre-UBC classrooms was more than 25 percent.) UBC teaches that children should attend school if at all possible (and donated hand-sanitizer dispensers hang in each classroom).

Parental engagement doesn't happen automatically. In Latin America—and particularly in poor

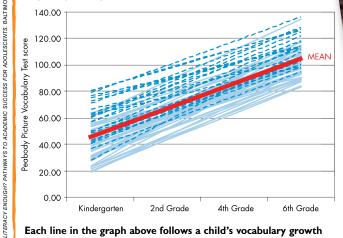
Andrea Rolla (third from left) and Hirokazu

Yoshikawa visit a UBC school

in Peñalolén.

Closing the Gap

(from a sample of 53 children from low-income, English-speaking families in the United States)



Each line in the graph above follows a child's vocabulary growth from kindergarten through sixth grade. Note that the lines do not cross—the children with the largest vocabularies in kindergarten still had the largest vocabularies six years later. This is why it is crucial that preschool programs focus on building vocabulary and making up for the deficit that children in low-income families already face, says Graham professor of education Catherine Snow.

For both teachers and parents, there is an emphasis on using "sophisticated vocabulary"—defined as anything beyond the 3,000 most commonly used words in the language. (Instead of saying "Eat your peas," a parent might say, "You need to eat your peas because they have vitamins in them," introducing an

new post as a communities where

traditionally do not get involved in their children's education," says Rolla, the child of Argentine émigrés who grew up in Massachusetts, attended Princeton, and is married to a Chilean. At the entrance of each school, she says, "there's a fence"—literal

parents lack advanced education—"families

the entrance of each school, she says, "there's a fence"—literal enough, but with symbolic value, too. "Parents drop their children off and pick them up." Parents have told Rolla that before UBC, they thought that they were responsible for their children's basic needs, but that education was solely the job of teachers. In a survey of UBC parents, 52 percent reported having 10 or fewer books at home. One quarter reported never reading to their children; another quarter reported reading to their children just once or twice a month.

After a pilot year, UBC's second year has just concluded. The evaluation team is now measuring whether the program met its goals of enlarging students' vocabulary, reducing respiratory



infections, increasing school attendance, and getting all children to have annual physicals. It is examining children's language use in journals and watching videotapes from the classrooms (professional development isn't worth much if the teachers don't use the new methods, Rolla notes). Says Yoshikawa, "We think that, with rigorous evaluation, you have a chance of influencing policy not just in Chile, but throughout South America—in fact, in middle-income countries everywhere."

The program is focusing on poorer neighborhoods, at least to start, aiming to compensate for what is presumed to be a vocabulary-poor environment at home. At a cost of 45,000 Chilean pesos (about \$75) per child per year, UBC is reaching 500 children already, and another 500 through less intensive intervention (see below). It will expand beyond Peñalolén to two other *comunas* this year, and by 2010 should reach almost 10,000 Chilean children.

Although the program is locally supported and run—critical elements for its credibility—there are frequent visits between Cambridge and Santiago. During an October trip to Chile, Snow, Yoshikawa, and MaryCatherine Arbour, M.D. '05 (a clinical fellow in medicine at the Harvard-affiliated Brigham and Women's Hospital who is overseeing the health portion of UBC), visited one school in which the full program was being implemented, and one control school, which received five donated books per classroom (as opposed to 70 books for two or three classrooms to share with the full program), and self-care workshops to help the teachers avoid burnout.

At the first school, words and letters were everywhere. A single classroom contained a bulletin board with vocabulary words; the alphabet; a poster with days of the week; and posters of colors bearing their names. Outside the classroom hung drawings the children made, each one a scene from a book they read. On the door hung a poster listing the *normas y reglas de la sala* (the

rules of the classroom) in the children's own handwriting, not the teacher's. Each element reflected the teachers' new training. Above the school's entrance gate hung a banner with a UBC-inspired message: Niño o Niña que no Asiste a Clases no Aprende ("Boys and girls don't learn if they don't go to school").

When the program leaders met with teachers, one expressed amazement that her students were capable of the work the program assigns; she hadn't believed it until she'd seen it. Another said, "Before, we would work on vocabulary words and then forget about them. Now, I hear the kids use them in conversation."

At the second school, classroom walls displayed little written material. Books were nowhere to be seen, and certainly nowhere the children could access them easily. The pupils were gluing yarn to irregular shapes on paper, working on eye-hand coordination. There's nothing wrong with this kind of exercise, Rolla explained, but it falls well short of engaging the full abilities of four- and five-year-olds. Absent language and literacy activities, the children miss opportunities for more rapid development.

#### HOW STRESS BECOMES BIOLOGY

BEYOND BRINGING Harvard's scholarship to bear on programs for children, the Center on the Developing Child's brief also includes creating new knowledge. CDC director Jack Shonkoff explains that the center aims "to build a very strong science core that focuses on increasing our understanding of the underlying science of disparities"—of the factors that contribute to healthy development for some children and less good outcomes for others.

A center-funded study on the biology of early adversity will use recent advances in genetics and molecular biology to learn more about how stressors such as child abuse and neglect, or just growing up poor, affect physical and mental health across the lifespan. The researchers, six professors from three different Har-



Children in Romanian orphanages are raised in conditions of social and cognitive deprivation. In many cases they receive no adult attention other than being fed and taken to the toilet as a group a few times a day, as seen in the image at far left. Near left: This 11-year-old girl, raised in an orphanage in Romania, was only as tall as an average four-year-old child when the photograph was taken.

CHARLES NELSON kids," says professor of pediatrics Charles A. Nelson III, who holds the

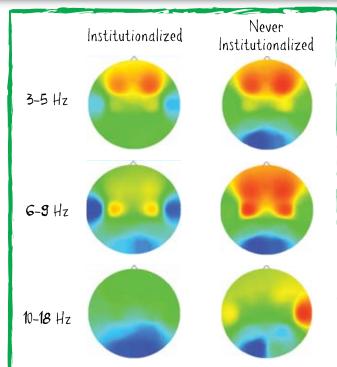
Scott chair in pediatrics at Children's Hospital Boston and is one of the principal investigators.

Oxidative stress—also implicated in aging, and measured through a molecule in the blood—is the process by which free radicals, byproducts of the body's use of oxygen, damage cell components including DNA. A diet of foods high in antioxidants (which neutralize free radicals) bolsters the body's own antioxidant production; lifestyle factors such as smoking, exposure to pollution, and stress may overwhelm these natural defenses to bring about disease.

Nelson, who is also a member of the faculties of education and public health, is studying telomere length and oxidative stress in a population he knows well: Romanian orphans raised in institutions under heartbreaking conditions. Infants, for example, were left in cribs all day, except when being changed or fed. "No one responds to them if they cry, and as a result, no one cries," he says. "The weirdest thing when you walk into this room for the first time is how quiet it is. There's no talking, there's no crying, there's nothing." Older children showed severely stunted growth and indiscriminate friendliness, sitting in the laps of complete strangers or happily walking off with them.

To explain these disturbing observations, Nelson in 2000 began an exhaustive study of a cohort of children born that year and abandoned to orphanages, compared to a control group of children living with their families in Bucharest. He found a much higher incidence of mental illness among the children who grew up in the social and cognitive deprivation of the orphanage, as well as major differences in brain activity (see chart at left) and IQ. Half the orphans were placed in foster care, while the other half remained institutionalized; Nelson found that those placed in foster care before the age of two recovered about half of the IQ deficit, but orphans placed later had IQ scores nearly identical to those of children who stayed in the orphanage. He concluded that the first two years of life are crucial for normal development of language, cognition, and mental health—diverse faculties that develop apace in a normal family environment, but not in an institution with minimal interaction. These findings have already led to action: in 2003, in response to his work, the Romanian government passed a law forbidding the institutionalization of any child younger than two unless the child is severely handicapped.

In the current study, Nelson will examine the biological toll of early adversity by testing whether institutionalized children have shorter telomeres and more evidence of oxidative stress than children raised with their families. Colleagues will examine the

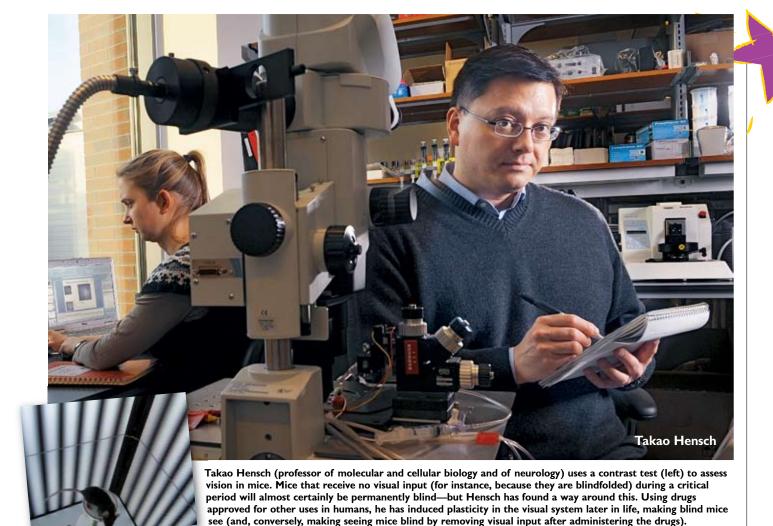


In these brain "heat maps"—seen from above, with the triangles at the top indicating the front of the head—red corresponds to high activity and blue connotes no activity. The different frequency bands (left-hand scale) reflect different types of brain activity, but across all frequencies, the level of activity was lower for children raised in Romanian orphanages (left column) than for those who grew up with their parents (right column).

vard faculties conducting human and animal research, are studying biomarkers, including telomere length and oxidative stress.

The telomere is a region found at both ends of every chromosome in cells throughout the body. Each time DNA replicates, the telomere shortens slightly: older people have a shorter average telomere length than younger people. This shrinkage is thought to be a natural part of aging—and perhaps even a physiological *cause* of the debility and disease that accompany it.

Intriguingly, recent studies have found a link between stress and accelerated telomere shortening—one documented especially short telomeres among adult caregivers for children with chronic problems such as autism. "By one estimate, they had lost 10 years of life through the chronic stress of taking care of these



same dimensions in two American samples—a large national longitudinal study and a group of youths with posttraumatic stress disorder—in hopes of quantifying the relationships among early adversity, elevated oxidative stress and shortened telomeres, and poor emotional, physical, and cognitive outcomes. The overarching goal is to get a better idea of how stress becomes biologically embedded, and precisely when intervention is most effective.

It is well established that in humans, critical periods exist for vision and some components of language (most notably, acquiring the syntax of a first language). Such sensitive periods in brain development are the specialty of Takao Hensch, professor of molecular and cellular biology in the Faculty of Arts and Sciences and professor of neurology at the Medical School (HMS). Building on the work of David Hubel and Torsten Wiesel (the Nobel Prize-winning HMS researchers who demonstrated the concept of critical periods for brain development by studying vision in cats), Hensch has identified the cell type that controls brain plasticity for the visual system. "Plasticity" refers to the capability of the brain to adapt its structure in response to experience; some parts of the brain remain malleable through adulthood. The visual system, on the other hand, is "wired" early in life, and then plasticity ends. Humans and animals that receive no visual input during the critical period (say, because they are blindfolded) typically are permanently blind, but recently, Hensch has induced plasticity in adult mice using drugs already approved for other uses in humans.

Much work remains to be done on whether plasticity could

be induced in humans. But in the CDC study, Hensch and assistant professor of neurology Michela Fagiolini are investigating whether such complex and varied phenomena as autism and schizophrenia might also be critical-period disorders. Their hypothesis is that stress can cause abnormalities in basic brain systems and processes—specifically, in the formation of the myelin coating that allows neurons to transmit electrical impulses, and in the functioning of GABA, the chief inhibitory neurotransmitter in the brain.

Autism, says Hensch, "smacks of a critical period gone awry. It's identified around three years after birth. Parents report that their children were normal up to that age, and then suddenly they've gone off track." The search for genes involved in the disorder has led to many different candidates. The fact that such different genetic signatures manifest themselves the same way—"there's an imbalance between excitation and inhibition," in Hensch's words—has led him and others to wonder whether autism stems not from the DNA, but from something about the way genes are expressed and the brain architecture is laid down. "Maybe different parts of the brain are becoming plastic either too fast or too slow," he says. "We know that different brain regions feed into other brain regions, and so either degraded or accelerated maturation will cause the next stage to develop better or worse." (For more on Harvard scientists' research on autism, see "A Spectrum of Disorders," January-February 2008, page 27.)

Hensch notes that scientists in Scotland have induced Rett syndrome, an autism-spectrum disorder, in mice by removing a

#### CENTERED ON CHILDREN

**Recruiting Jack Shonkoff** in 2006 was the key to creating the new Center on the Developing Child (CDC), says University provost Steven Hyman. In Shonkoff, Harvard has "a person of enormous energy, with precisely the right temperament for interdisciplinary research and education: relentlessly curious, respectful of diverse disciplines, and a very talented convener of people from diverse communities."

Shonkoff, a pediatrician, had served at Brandeis as dean of the Heller School for Social Policy and Management and chaired the committee that wrote From Neurons to Neighborhoods, an exhaustive 2000 report from the Institute of Medicine on child-development science and policy. But to reach a wider audience, he realized he would need to highlight themes in ways that resonated with the public.

To investigate prevailing attitudes about child development and frame messages in response to those attitudes, he engaged a communications-research firm. For example: persistent stress can disrupt brain circuits, causing decreased branching of neurons in the hippocampus and prefrontal cortex (the brain areas associated with memory and higher-order thinking, respectively), and increased branching in the amygdala (the seat of emotion, and fear in particular). Such explanations fascinate listeners with a scientific bent—but

may make others' eyes glaze over. So Shonkoff, in speaking to lay audiences, now uses models that are simple and vivid, but still accurate. His "brain architecture" model conveys the idea that early adversity can lay a shaky foundation for later development.

In response to the popular notion that stress is character-building, Shonkoff uses a three-tiered model. "Positive stress" does exist: "This is the stress of the first day at a preschool program....This is the stress of having to go down for a nap when you'd rather stay up and see everything else that's going on....It is a necessary part of healthy development." One level up is "tolerable stress"—unhappy experiences that nevertheless don't disrupt brain archi-

tecture because the stress is "buffered by supportive relationships," helping stress hormones, heart rate, and other biological measures of stimulation return to baseline levels. "Toxic stress," on the other hand, is "literally poisonous to brain architecture," in ways scientists affiliated with the center have demonstrated and are continuing to explore.

By the time Harvard recruited Shonkoff, he had already begun taking this carefully crafted message about the impact of early-child-hood experiences to state legislatures. His testimony has led to passage of legislation in Nebraska (which nearly doubled state funding for early-childhood programs for children of low-income parents), in Washington state (which established a cabinet-level department of early learning), and in Kansas (which passed a comprehensive bill with education, childcare, and health-insurance components).

He describes his earlier engagement in partisan advocacy, driven by ideological rhetoric, as "an exercise in futility." He now practices what he says is a more effective approach: "Teach, don't preach" stick to the science and let the lawmakers work out the details of



policies that are grounded in sound science *and* acceptable to colleagues and constituents. The center is hoping this approach will bear more fruit soon: it brought delegations from 14 state governments to Harvard last June, and is providing support as these states try to rewrite their own policies to better serve children.

The CDC has become a forum to showcase other places where good things are happening. It considers communications a central part of its mission: summarizing recent studies in nontechnical language and publishing roundups of research so practitioners and policymakers can have current findings at their fingertips. The CDC

is also devising an international agenda that it will pursue in collaboration with the Harvard Initiative for Global Health, where Shonkoff chairs a working group on children.

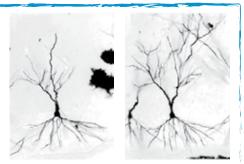
On campus, the center began raising awareness last year with a colloquium series highlighting the relevance of child development for Harvard's various faculties: education, public health, government, law, business, and medicine. Shonkoff himself teaches a course, "The Science of Learning, Behavior, and Health: Implications for Early Childhood Policy," jointly in the schools of education and public health; medical students, and now undergraduates and Kennedy School students, may enroll too

health; medical students, and now undergraduates and Kennedy School students, may enroll, too.

Among undergraduates in particular, there is a hunger to get involved with these issues, says Ho Tuan '09. After consulting with Ho and other undergraduates, Shonkoff and CDC deputy director Gillian Najarian, Ed.M. '93, have begun to envision a secondary field in child development and a list of professors who work on child development and are willing to have undergraduate research assistants in their labs. The college years, they say, are a critical time to reach students—before they have decided to specialize in science

In finding faculty colleagues, Shonkoff has sought out people with enthusiasm for the hybrid approach that distinguishes the center and positions it for maximum impact. "Not everybody at Harvard is a collaborator," he says. "It takes a certain kind of intellectual flexibility and a sense of adventure to work across disciplines. Our goal is not simply to have people from one discipline tell people from another discipline what they're working on....It's less about sharing and more about creating together."

or policy, while their minds are still open to the idea that one could



The brains of rats subjected to chronic stress (left) show less branching (fewer and shorter branches) on neurons in the hippocampus, in a key brain region for processing incoming information for learning and memory, when compared to rats that were housed in normal laboratory conditions (right).

do both.

single gene, and have also engineered mice in which the gene was dormant early, but could be switched on during adulthood—at which point, the second set of mice became normal. "This was tremendous," says Hensch. "It suggests that this one mutation could produce something as severe as Rett syndrome, and yet all of brain development is lying dormant and could be rekindled."

Meanwhile, research by associate professor of psychiatry Martin Teicher suggests that sexual abuse affects children differently depending on the age at which it happens. And Nelson's research points to critical periods for other cognitive and emotional faculties. In addition, Nelson is running a study of autism risk in infants whose older siblings have the disease. Convergences like these explain the scientists' excitement at working together. "I think we'll find that many of the psychiatric disorders in humans will have a critical-period origin," says Hensch, "that an early insult around birth or a genetic defect...will predispose brains to wire incorrectly."

#### PRACTICING GOOD POLICY

Translating scientific advancements into policy requires creating programs that incorporate cutting-edge science—and then testing those programs to see if they work. But such translational efforts have lagged behind. In reality, most contemporary proposals for early-childhood education depend on four fundamental studies begun decades ago: the Perry Preschool Study, begun in Ypsilanti, Michigan, in the 1960s; the Abecedarian Project, undertaken in North Carolina in the 1970s; the Brookline Early Education Project, begun in Massachusetts in the 1970s; and the Chicago Child Parent Centers launched in the 1980s. These studies "are *still* the foundation for government investment in preschool education all over the world," says Hiro Yoshikawa of HGSE. "There's a great need for conducting these kinds of rigorous evaluations on early-childhood education now."

To that end, he is working on a program the Center on the Developing Child is launching in Tulsa. Although its context is utterly different from the program in Chile, the questions asked and concerns considered in program design are similar. Tulsa was chosen not only because it has "some of the worst health statistics in the nation," according to Jack Shonkoff, but because of willing partners: the University of Oklahoma School of Community Medicine, the George Kaiser Family Foundation, and Tulsa's Educare Center.

Involving faculty members from Harvard's schools of education, medicine, and public health, this project envisions going even further than UBC in addressing multiple facets of a child's life. Besides school readiness and health, the initiative will wrap in workforce development (job training and placement for parents) and behavioral economics (from explaining why check-cashing and payday-loan services that charge steep fees are a bad deal, to trying to pass laws that ban predatory financial practices).

Of the nascent project, Shonkoff says, "What's distinctive about it is that it truly integrates cutting-edge thinking in early literacy, child and parent mental health, and economic security for low-income families." These aims mirror his own Harvard appointments, in the schools of education, public health, and medicine. The Tulsa team reflects that range of skills, too. Among the participants are Richard Frank, Morris professor of healthcare policy, who specializes in healthcare finance and, in particular, in evaluating claims that specific policy changes will generate

enough cost savings to pay for themselves; Bill Beardslee, Gardner-Monks professor of child psychiatry, who has examined how to protect children from the harmful effects of parental depression; Catherine Snow; and Yoshikawa, who has coedited a book on improving outcomes for children of low-wage workers.

From such innovative programs and watertight evaluation will come new knowledge about how best to help children. If this knowledge reaches a wide, influential audience, Shonkoff hopes the

tide will turn in the direction of supporting early-childhood programs across the United States—programs that he says are "grossly underfunded." Nearly 45 years after its founding, Head Start "is serving half of the kids it is meant to serve": about one million American four- and five-year-olds were enrolled in 2006, but nearly two million live in families poor enough to meet the income guidelines. (The program costs \$7 billion a year; to serve all eligible children, the government would need to double that amount.)

In other CDC projects, Harvard scholars are trying to help former child soldiers, abuse victims, and children growing up in poor neighborhoods with rampant violence. Read more online at www.harvardmag.com/extras.

Early Head Start is in even worse straits. That program (which costs \$11,000 per child) reaches just 96,000 children age three and younger—less than 3 percent of those who qualify. "With a few exceptions, every developed country in the world has a better system of publicly supported early care and education than the United States has," Shonkoff says. "The concept of shared responsibility for each other's children is not part of our political culture."

Questions about these programs' effectiveness also hold up efforts to allocate more funding. "There is tremendous variability in the quality of the implementation of Head Start," he acknowledges. The challenge is to identify the features that successful providers share, to get more providers to incorporate those practices—and to develop new approaches with even greater impact.

Another challenge: convincing politicians and the public that "early childhood development is economic development," in the words of Arthur Rolnick, who spoke last year at a CDC colloquium at the Business School. Rolnick is senior vice president and director of research for the Federal Reserve Bank of Minneapolis, which is helping coordinate an experimental preschool program in St. Paul. The most successful preschool programs provide a *large* return on public money, Rolnick noted: for instance, evaluations have shown the Perry Preschool program returned \$17 on each dollar invested. And the biggest return, he said, is savings associated with crime (not just on prison budgets, but also on judicial and law-enforcement expenses, and costs to communities to repair damage from criminal acts). This type of investment equips the next generation to succeed in school, to graduate instead of dropping out, and to find jobs.

What's more, says Provost Hyman, the stakes are huge for keeping the United States competitive. Providing children with supportive environments and making sure they have what they need to succeed in school, he says, are tasks "central to the success of our society."

A generous gift to support international reporting, from a friend of Harvard Magazine, enabled associate editor Elizabeth Gudrais to travel to Chile in October to learn about the educational projects involving Harvard faculty and staff members reported in this article. Her earlier dispatch from that trip, "For Santiago's Poor, Housing with Dignity," appeared in the November-December 2008 issue.





#### The Fiscal Crunch

WITH NO RELIEF since the University's early-December announcement that the endowment's value had declined sharply (see "Harder Times," January-February, page 47), Harvard faces significant spending reductions—likely to affect both employees and perhaps even high-priority capital projects (see left). Budgets were scheduled for review in February. Announcements about cost-cutting measures made after this issue went to press will be reported at www.harvard-magazine.com (see the "University Financial Crisis" section).

During the winter, further details about the University's financial challenges emerged (all reported in much greater detail at the website):

• Faculty of Arts and Sciences (FAS) administrators assume its endowment will shrink to its 2004-2005 value—about \$11

billion. This would be in line with the projected decline in the endowment overall, from \$36.2 billion last June to about \$24 billion at the end of this fiscal year, reflecting a 30 percent loss in asset values on top of the \$1.4 billion distributed to pay for current operations.

FAS's budget has grown from \$812 million to \$1.2 billion during the past four fiscal years; the share funded by endowment distributions has risen from 35 percent a decade ago to 56 percent now. And with debt doubling to \$1.1 billion since

2004-2005 (largely reflecting an \$800-million investment in laboratories), debt service has nearly tripled to \$85 million.

Dean Michael D. Smith distributed briefing materials detailing these figures on December 5. In a faculty meeting on December 9, he said that—given an existing deficit; certain increases in financial aid; rising personnel costs from recent faculty appointments; added expenses for new facilities now operating; and further increases in debt service—FAS faces a \$100-million shortfall in the fiscal year

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beginning July 1. That assumes the Corporation holds FAS's endowment distribution *level*, for the first time in memory, at \$650 million. The gap would widen if the Corporation feels compelled to reduce the distribution (its decision is expected in March)—or if research funding or current-use gifts decline.

FAS thus faces removing \$100 million to \$130 million from anticipated spending of slightly more than \$1.2 billion. But debt service and work funded by sponsored-research grants can't be cut, so the real problem is shedding 10 to 15 percent of a nearly \$1-billion budget. Smith acknowledged this would require more than one year of restraint, while simultaneously putting pressure on \$100 million or so of unrestricted reserves.

FAS will try to keep its problems from worsening by canceling two-thirds of current faculty searches; freezing most compensation; restricting hiring of new staff; trimming visiting faculty and non-tenure-track teachers; exploring retirement incentives; and possibly reducing graduate student admissions.

• The professional schools are cutting, too. At the Harvard Kennedy School, where the endowment funds only one-quarter of the budget, Dean David T. Ell-wood forecast flat revenue, rising financial-aid needs, and problems for foreign students as the dollar strengthens. The school's budget for fiscal year 2010 will incorporate expense reductions of 5 to 10 percent, with salary freezes, sharp limits

on hiring, and deferral of capital projects. He also expects to "revisit current expectations regarding teaching loads."

Harvard Medical School directed all departments to plan for 10 percent expense reductions during the next 18 months. Sponsored-research funding (about 40 percent of the school's budget) and debt service are untouchable.

• After the financial announcement by President Drew Faust and Executive Vice President Ed Forst last December 2, Harvard moved promptly to borrow \$2.5 billion. Public reports suggest the University will incur annual interest costs on this debt (before principal payments) of \$128 million to \$138 million, offset in part by the repayment of existing shorterterm debt. That substantial expense may be defrayed by using the "strategic infrastructure fund," an administrative assessment on endowment capital now designated to offset costs for Allston campus development. Thus Harvard gains liquid resources that may help it manage the endowment (which invests in many illiquid assets); reduce the risk of refinancing shorter-term debt; terminate existing, expensive interest-rate swap agreements; and bolster the internal "central bank," through which cash receipts and working capital are administered.

As each school readies its budget, the administration is also running task forces to identify new sources of revenue, explore more efficient operations (from better use of information technology to real

estate, procurement, and even shared library functions), and examine personnel policies and practices. The results will likely unfold over the longer term; in the immediate future lie whatever actions are necessary to shrink compensation costs and trim other expenses.

Harvard's problems are not unique. A survey prepared for the National Association of College and University Business Officers (NACUBO), published on January 27, indicated average declines in endowment values of 22.5 percent—\$94.5 billion in total—from July 1 through November 30. The losses could widen when private-equity and real-estate asset values are reported, accounting for the University's estimate that Harvard's endowment could be off as much as 30 percent for the fiscal year.

How are other institutions responding? In December, Yale estimated a 25 percent endowment decline and a \$100-million budget shortfall for fiscal year 2010. Saying that it was important not to "overreact," President Richard C. Levin prescribed closing half to two-thirds of the gap in the first year. Yale will restrain but not eliminate compensation increases, continue faculty searches, and pursue new science programs—albeit at a measured pace. It will cut expense budgets 5 percent annually and continue current construction, but defer all new projects until they are financed.

Princeton president Shirley M. Tilghman in early January forecast endowment results similar to Yale's, and laid out similar responses: reduce endowment distributions by \$50 million in the general budget and cut nonpersonnel expenses proportionally; maintain searches, but review requests for new ones carefully; and continue to design planned capital projects, but defer construction until financing is in place. Princeton will raise tuition and fees for the next academic year 2.9 percent, its lowest increase since 1966 an indication of the revenue constraints schools face. And Princeton echoed Harvard, turning to the capital markets to borrow \$1 billion.

In a painful symptom of the times on campuses generally, NACUBO's website in January offered members a webcast on "understanding underwater endow-

#### Energizing the Local Economy

In mid January, the University published "Investing in Innovation," the most recent report in a series prepared by Appleseed, a New York-based consultant, that details Harvard's impact on the Greater Boston economy (see, for instance, "The Academy and the City," November-December 1999, page 77). The study found that Harvard, with 18,350 full- and part-time workers, ranked second among area private employers, behind Massachusetts General Hospital. Including direct payrolls, purchasing, construction, and spending by employees, vendors, and students, the consultants estimated that Harvard accounted for \$4.8 billion of economic activity and 44,000 full-time-equivalent jobs locally.

Perhaps of greater moment is Harvard's prospective impact. The report noted that in "past economic downturns," higher-education institutions "tended to remain stable" or even grew, as other industries shed jobs. But given the University's need to adjust to the diminished value of the endowment, sustaining that positive effect in a sharply declining economy appears challenging now.

The report appears at www.community.harvard.edu/economic\_impact.php.

ments"—funds whose value has fallen below a gift's principal amount, making distributions illegal in many states. (At Harvard and elsewhere, some programs created by benefactors in recent years are already operating, with expectations, now dashed, of cash payouts from the endowment.) Also available was "new guidance on layoffs."

#### A Vision for the Arts

THE ARTS must assume a more central role in the intellectual life of the campus, and this goal should remain a priority even in the current bleak economic climate, a task force on the arts at Harvard exhorted in a December report.

The arts are "at once everywhere, and yet oddly marginalized and undervalued" at Harvard, Cogan University Professor Stephen Greenblatt, the Shakespeare scholar who headed the task force, told an Office for the Arts publication last fall. The campus's "exceedingly vital and interesting arts scene," he said, "was genially accepted but somehow not really important or different from other extracurriculars in the way the University viewed it."

Toward the goal of putting the arts "on par with the study of the humanities and sciences," the task force recommended launching new degree programs; incorporating more opportunities for art creation in the undergraduate curriculum; and building new space for the arts, as well as improving existing facilities. These undertakings will require "a substantial fund-raising effort," the report noted.

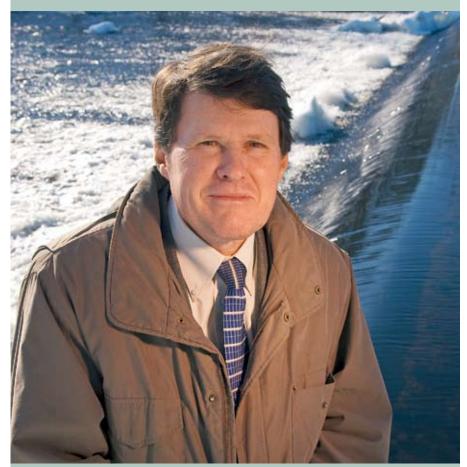
It offered three main recommendations.

• Greater emphasis on "art-making" in the undergraduate curriculum.

Undergraduates interested in art creation have a limited selection of courses, some of which require students to have experience and skill before enrolling. With this state of affairs, the report said, "we reinforce the message that a serious curricular engagement with the arts should be reserved for a tiny cohort, and we direct all others to the broad and playful sphere of the extracurricular."

"The creation of art—the integration of

#### HARVARD PORTRAIT



John Briscoe

Harvard once had a renowned engineering program dedicated to water, and John Briscoe, Ph.D. '76, was a student during its intellectual apogee. Growing up in South Africa, where a green, well-watered coastline rings the arid but economically important mining regions of the interior, he understood early the links between water and development. Briscoe, whose mother ran an orphanage and daycare center in Soweto ("Winnie Mandela worked for her for many years") has brought his personal and political views about inequality and development to his work, in which he has facilitated water projects around the world, most recently as senior adviser to the World Bank's \$50-billion water program and then as the bank's country director for Brazil. He arrived at Harvard in January with a joint appointment—McKay professor of environmental engineering in the School of Engineering and Applied Sciences and professor of the practice of environmental health in the School of Public Health—and a mandate to restore the water program to preeminence. Water, he says, is about more than potability, health, agriculture, energy production, and climate change: it touches on almost every aspect of life, including politics, religion, even civilization itself. "We think of the Three Gorges Dam as the world's largest hydroelectric project," he says, "but what does it mean in China?"—where historically, an emperor who failed to control water did not last. "It was Sun Yat-sen's dream to build Three Gorges," he adds, because doing so would "show that this is a government that controls the rivers...and is therefore a government that can maintain social order."

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empathy, conceptual thinking, and design that art-making entails—is not a decorative add-on to an education," Greenblatt said in the news release accompanying publication of the report. "It is central to what education, in our time or indeed any time, is about."

Just as the new general-education curriculum encourages science courses to incorporate lab work, the arts report encouraged professors—especially those teaching courses in the "aesthetic and interpretive understanding" category—to incorporate art creation as well as analysis and theory.

The task force also recommended a new undergraduate concentration in the dramatic arts, intended to "be part of a liberal-arts education, not conservatory training."

• New graduate programs that culminate in a master of fine arts degree.

Establishing programs in creative writing and theater should be possible within "a relatively short time" given these disciplines' relatively well-developed state; with regard to painting, sculpture, digital media, music, and filmmaking, the report said. "different time-frames are needed."



The report recommended full funding of all graduate-student slots in these programs, so that Harvard does not force its graduates to embark on risky, often unprofitable careers in the arts with a massive debt burden. (Concerns over graduates' financial straits aside, Greenblatt notes that without full funding,

#### Mapping Africa

These days, maps can represent far more than geographical information. When harnessed to Geographical Information Systems (GIS),

they can provide new ways to organize everything known about a place: show where power plants are located in one semi-transparent layer and compare that to population density shown in another, for example; even link to relevant datasets that can't be represented visually. But as anyone who's used Google Earth knows, North America and Europe are blanketed with such layers of information, while Africa remains in this modern sense "a dark continent," in the words of Clowes professor of fine art and African and African American studies Suzanne P. Blier.

No more. In December, Harvard launched Africa Map (http://africamap.harvard.edu), designed to make data about the continent easier to discover and explore. The project is one of several "Web map applications" developed with public and private financing by Harvard's Center for Geographic Analysis (CGA; see "Hello, Geotech," November-December 2006, page 44).

Blier, who oversees an image database of African art and material culture, uses the map as both a pedagogical and a research tool. Her students can locate artwork and forms of architecture from her database in relationship to countries and ethnicities, for example (the map has layers for each of these four things). Blier can then show students a series of sculptures or masks and have them "identify where they are spatially, and hence their relationship with other works or with initiation ceremonies or the like."

In her own research, she has traced the correlates of artistic creativity by utilizing map layers containing sociological, political, economic, and historical information.

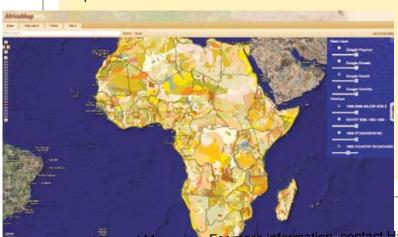
But the Africa Map is not just for humanists like Blier. It is a resource that can actually "promote interdisciplinary collaboration," says Ben Lewis, the senior GIS specialist who has brought the project to fruition under the guidance of co-principal investigators Blier and CGA director Peter K. Bol, Carswell professor of East Asian languages and civilizations. For example, as Lewis explains, "The *project* layer is a start at creating a map of Harvard projects in Africa, linked to researchers and actual data..." Users can "click on a particular location and find information and data for all projects which describe that geographic location, across disciplines." It's the sort of thing that might bring an epidemiologist studying disease transmission together with a social scientist studying the relationship between transportation and population density.

Lewis has also created an index of all the Africa material in Harvard's map collection. An enormous number of those maps, some historical, have been digitized and then "geo-referenced," a process of assigning latitude and longitude to points on the maps. Though the index itself is already linked to the map, only one-tenth of I percent of Harvard's maps have been added as visual layers so far in the ongoing project. (The process, including georeferencing, costs \$10 to \$40 per sheet). Even so, Africa Map already provides "the most high-resolution, detailed maps of the continent available out of copyright" anywhere, says Blier, and more are being added all the time.

Although currently focused on Africa, Lewis says the opensource, Web-based mapping framework behind the project could be used to organize information for any region of the world, large or small.

Aggregating data using maps, rather than disciplines, authors, titles, subjects, or indices can lead to fresh understanding and insight, he points out: "We're trying to say, maybe there is a better way."

This map shows soil types for all of Africa. A researcher might use it with other map layers to study agricultural productivity among countries with similar soils, comparing, for example, the agrarian practices of Francophone and Anglophone countries.



Harvard would have a hard time attracting top students, because many peer programs *are* funded.)

• Investing in the construction of "new innovative arts spaces" and upgrading existing spaces.

The nascent Allston campus represents an opportunity "to bring into being precisely the architecturally exciting structures that will enable the innovations for which we are calling," the report said. It traced the outlines of a center for the arts in Allston that brings together artist and scholar, creator and viewer, rehearsal and performance, classroom and museum.

Renovating existing spaces is not enough, the report declared: "Our existing physical structures and exhibition spaces reinforce principles in which few, if any, of us continue to believe." It called the division between artworks, housed in the Harvard Art Museum, and ethnographic objects, gathered in the Peabody Museum, "artificial" and said such divisions "can run counter to the imperative for a more inclusive history of art, one to which, for example, the arts of Africa, Oceania, and Native America certainly belong."

Three of Harvard's peer institutions have major arts initiatives under way: Yale is in the midst of a \$3.5-billion capital campaign that includes \$500 million for its already prominent schools of architecture, art, drama, and music. Stanford's capital campaign envisions a major expansion of creative-arts programs and faculty, and creation of a comprehensive "arts district" lining both sides of the main road into campus. Princeton also has major arts facilities in the works.

Although these plans appear to be proceeding, universities are not immune from the recession, as recent events at Harvard indicate (see "The Fiscal Crunch," page 43). In a statement accompanying the arts report, President Drew Faust outlined how the arts might become even *more* important under such worrisome conditions:

Especially in difficult times, when ways of thinking and doing that we have taken for granted are chal-

#### Yesterday's News

From the pages of the Harvard Alumni Bulletin and Harvard Magazine

1924 The Bulletin confesses that a proposal for a Harvard radio station "sounds a little startling to those not yet affected with radiofanitis. But, we wonder—will it sound so strange ten or fifteen years hence?"

1934 The Harvard Summer School announces "an interesting experiment"—an intensive course of instruction in written and spoken Russian, using phonograph records and sound films to speed the learning process.

1949 The Faculty of Arts and Sciences votes to phase in required courses in General Education, seeking to educate undergraduates as "responsible human being[s] and citizens[s]."

The recently organized National Council for American Education issues a pink-covered pamphlet, Red-ucators at Harvard, which claims that 76 faculty members are "involved" in "affiliations" with 124 "communist fronts."

paper, Percussion, sponsors a contest to pick the best-dressed Radcliffe girl, who will enter a national contest sponsored by a fashion magazine. Barnard and Moors Halls vote not to participate, terming the contest "against Radcliffe's principles."

1964 The freshmen are up in arms ("Stamp out dehumanization!") about a decanal proposal to computerize the House selection process.

1969 The Harvard Corporation agrees to open merger talks with Radcliffe, with a view to achieving total merger by the fall of 1970. Radcliffe's Board of Trustees and College Council have already voted to begin such discussions with Harvard. "Merger of Radcliffe into Harvard," write the *Bulletin*'s editors, "has the ring of historical inevitability."

1984 The Faculty of Arts and Sciences has voted to reimburse MIT for overhead costs (for space, heat, and light) incurred by allowing about 60 Harvard students to cross-register in its Reserve Officers' Training Corps unit



Illustration by Mark Steele



lenged...we must encourage our students to ask fundamental questions and to solve problems in the inventive and collaborative ways exemplified by the making of art. Art produces experiences and objects that are carefully constructed and intricate reflections of the world. Empathy, imagination, and creativity are forms of knowledge that a university must foster in its students....In times of uncertainty, the arts remind us of our humanity and provide the reassuring proof that we, along with the Grecian urn, have endured and will continue to do so. Now is the time to embrace, not retreat from, the arts.

In an interview, Faust and Greenblatt noted that the plan will unfold over a period of years. This process, Faust said, asks fundamental questions about the University: "What are our commitments and values as an institution? This transcends the historic moment in which we are located."

As universities and the wider society pull back sharply on spending, Greenblatt said, it is refreshing to be taking an optimistic view and talking about possibilities, even if the time frame is the long term: "It's a reminder that there are other things one might actually talk about and think about, aside from the doom and gloom of the current moment."

Faust said she is working with the schools that would be involved in creat-

ing the new graduate programs. The report recommended swift formation of a task force to begin that process; Faust declined to give a time frame for any initiative, but noted that the \$100-million gift the University received last year from David Rockefeller '36, G '37, LL.D. '69, included money designated to support the arts (see "A Giant's Gift," July-August 2008, page 57).

As for the arts facilities in Allston, Faust said the administration is examining the entire Allston plan "with great scrutiny...recognizing that the pace that seemed the logical one a year ago" may no longer be viable. She noted that the Allston plan always included space for the arts (see "Art Museum Two-Step," January-February 2008, page 62).

BEYOND ITS THREE MAIN GOALS, the report incorporated a number of subsidiary recommendations, from the simple (creating a centralized event-listing service) to the more complicated (a renewed agenda for art acquisition, which dropped off precipitously in the 1960s). It also advocated another complex undertaking: reviewing hiring and tenure guidelines to increase flexibility and thereby enable the hiring of more profes-

sors of arts practice, while maintaining high standards.

The report also notes things that Harvard does well, and progress thus far: McKay professor of the practice of biomedical engineering David Edwards teaches a course on idea translation that bridges art and science; a five-year program allows undergraduates to combine a bachelor's degree at Harvard with training in music at the New England Conservatory; a new doctoral program (a collaboration between the departments of anthropology and visual and environmental studies) explores the intersection of ethnography and filmmaking; and another new Ph.D. program, in film studies, was recently approved.

For its assessment of the arts at Harvard—both strengths and weaknesses—Faust called the report itself "a great gift to this institution": "This initial framing of ourselves and our educational purposes is one of the key contributions of this report—and that has happened, as of today."

Read the online version of this article at www.-harvardmagazine.com/breaking-news/new-vision-for-the-arts for a more complete account, as well as links to earlier articles, the task force report, and President Faust's statement.

#### A Global Health View

Julio Frenk's appointment as dean of the Harvard School of Public Health (HSPH) took effect on January 1, but his relationship with the school began long before. More than 20 years ago, he became founding director of Mexico's National Institute of Public Health (still, he notes proudly, the only non-American school of public health approved by the U.S. accrediting body)—and one of that school's original advisory board members was then-HSPH dean Harvey V. Fineberg.

In the early 1990s, Frenk spent a year at HSPH as a visiting professor—and his project set the course for the next decadeplus of his life. He completed a report that detailed the burden of disease in Mexico. The report led to an invitation to become Mexico's minister of health (a post he held from 2000 to 2006) and laid the founda-

tion for a landmark achievement: Seguro Popular, Mexico's universal health-insurance program, begun in 2003 and still being implemented. When the need arose for an external evaluation of the program, the Harvard Initiative for Global Health (HIGH; www.globalhealth.harvard.edu) carried it out.

In his new role, Frenk names global health as a top priority—but, he cautions, "global is not the opposite of domestic... *Global* refers to processes that affect the entire globe"—including First World countries. He uses the example of disease surveillance: The frequency of international travel today means events in a single country reverberate around the world; thus, whether motivated by philanthropic instinct or self-interest, it behooves the United States and other wealthy countries to foster development of an infrastructure that can pinpoint disease out-

## Human Rights: Inalienable, Unfulfilled

In December, Harvard commemorated the sixtieth anniversary of the Universal Declara-

tion of Human Rights, promulgated in the aftermath of World War II to help prevent future wars and to provide a model for how nations and their citizens should treat each other. Yet the very evening after the Declaration was adopted by the United Nations General Assembly, Eleanor Roosevelt—who chaired the UN committee that drafted the document—questioned "whether a mere statement of rights without legal obligation would inspire governments to see that these rights were observed." As President Drew Faust said in recalling Roosevelt's words, "We cannot be complacent, because as uplifting as the Declaration is...every day, every single one of those articles is violated somewhere."

Faust spoke on December 10 at a public event at the Harvard Kennedy School that capped a week of commemorative observances. The evening began with dramatic readings of each article, and concluded with a performance by Malian singer and women's rights advocate Oumou Sangare. The intellectual core was a panel discussion with "two extraordinary human rights thinkers and practitioners," said Faust—Lamont University Professor Amartya Sen and Presley professor of social medicine Paul Farmer—who took up Roosevelt's question and sought to



establish "how far we have come and how far we have to go."

The Declaration, said Sen, contributed to the world of ideas in at least four distinct ways. First, it took the view that human rights should not be seen as protective legal instruments but as ethical demands that might *lead* to legislation; it is a call to "reorganize the world in such a way that these rights are actually realized." Second, by recognizing that laws are not the only avenue for advancing its agenda, the Declaration's fulfillment has come to depend on "many other ways of advancing the cause," including public discussion, social monitoring, investigative reporting and the normal functioning of the media. Third, the Declaration "takes a much larger list of freedoms and claims under its protective um-

brella" than "the American declaration of 1776 and the French declaration of 1789": it asserts "not only basic political rights, but the right to social security and the right to work, the right to education, protection against unemployment, the right to join trade unions and the right of just and favorable remuneration." Finally, said Sen, the Declaration is "remarkable...in that



it applies to everybody in the world without exception."

The importance of universal application was underlined when Farmer responded to a question about his work, which centers on providing healthcare to the poor. "In medicine," he said, "if we have no recourse to a rights framework, people who are living in poverty are in big trouble. Why? Because the total commodification of medicine means that in any setting, some people will always be priced out of the market. You need a safety net for the...destitute sick. Is that socialist? I don't know...but I know that the notion of markets and commodities for everything doesn't help everyone, and if your constituents—as mine happen to be—are people who live in poverty, we need complementary frameworks." As Sen concluded in his assessment of the Declaration, even though the rights it articulates remain unrealized for many, its "vision remains hugely important in the contemporary world."

breaks before they become epidemics.

The new dean believes in using evidence to persuade. This was how he rallied political will behind Seguro Popular, which enrolled 30 million uninsured Mexicans in its first five years and is on track to reduce the uninsured rate nearly to zero in two more. "People were not aware that four million families a year were becoming completely impoverished" because of high medical costs, Frenk says. His report also revealed that the Mexican government was spending three times as much on health services for people who

had insurance as it was on care for the uninsured. "Nobody was measuring it," he recalls. "You bring these things to light by doing research about them."

This is an example of what he calls moving from declaration to implementation: "It's one thing to declare a right. It's another thing to create the mechanism to actually exercise the right." Mexico had amended its constitution in 1983 to guarantee its citizens a right to the highest attainable standard of health, mirroring the constitution of the World Health Organization (WHO). Yet in 2003, its health-in-

surance system was still so rigidly linked to formal employment that 50 million Mexicans—half the population—were uninsured and at risk of being bankrupted by a health emergency. In a just and compassionate society, Frenk said in a 2006 address at HSPH, "access to healthcare cannot be part of the reward system."

The common thread linking his government service to his Harvard post, he says, is the power of knowledge—it can break down bureaucratic barriers, as with *Seguro Popular*, but can also work in a more populist fashion, as he noted in the 2006

address: "Individuals use knowledge to structure their everyday experience and generate health-promoting behaviors. People wash their hands because of knowledge about microbial transmission of disease. People change the most intimate parts of their sexual behavior because of knowledge about the way AIDS and other STDs are transmitted. People quit smoking because of the knowledge that smoking actually kills you."

Frenk's father and grandfather—a Jew who fled Nazi Germany—were both physicians. In fact, Frenk represents the fourth generation of physicians in his family. He saw patients briefly after completing medical school at the National Autonomous University of Mexico, but quickly realized that he was more interested in considering society as a patient. He arrives at Harvard with experience not only in Mexico, but at WHO, where he was executive director of evidence and information for policy. He is also a member of the Institute of Medicine and has served as a senior fellow in global health at the Bill & Melinda Gates Foundation. Besides his medical degree, he holds three degrees from the University of Michigan: master's degrees in public health and in sociology, and a Ph.D. in medical-care organization and sociology.

An opera fan, Frenk is the third of seven children whose careers divided roughly evenly between music (their mother is a concert pianist) and science and medicine (their father's domain). The Mexico City native was almost born in Boston: his father had a fellowship at Children's Hospital, but his mother returned to Mexico for the delivery, and then rejoined her husband. Frenk and his twin sister spent most of their first year in Boston—and coincidentally, the lab where their father worked

Julio Frenk, as Mexico's minister of health, administers oral polio vaccine to a baby in a rural community during National Health Week in 2005.

was in an HSPH building. Now he is himself the father of four, and the author of two children's books explaining the functions of the human body. His wife, economist Felicia Marie Knaul, Ph.D. '95, has held senior government posts in Mexico and Colombia; most recently, she worked for the Mexican Health Foundation.

Frenk voices excitement at taking the helm of HSPH at a time when public health is coming into its own, with disciplines from economics to security studies recognizing its importance. "We know today that investing in health is the best way to create prosperity and security for everyone," he said in a December panel discussion at the Harvard Kennedy School. He adds: "Living in a world where children die unnecessarily, or women die while giving birth—this is what sows the seeds of resentment."

Health's relevance across disciplines makes HSPH a perfect candidate, he says, for a move to Allston, where it would be closer to the schools of business and government, and possibly a relocated school

of education. But with Allston plans under review given the steep

decline in the Harvard endowment (see pages 42-43), such a move is uncertain. In the near term, Frenk says, the school is going ahead with some long-postponed renovations and trying to consolidate (its offices and labs currently span 27 separate buildings). But he is hopeful that the school will make the move eventually, while keeping a foothold in Longwood for proximity to Harvard Medical School.

Compared to other Harvard faculties, HSPH has been somewhat insulated from the financial crisis: a decline in the endowment distribution pinches less, because HSPH gets the lowest percentage of its operating budget

from that source—13 percent in fiscal 2008 (see "Harder Times," January-February, page 47). And, Frenk notes, the school is in a good position when it comes to federal funding (its principal source of revenue), with no large grants coming to an end soon.

He vows that the school will not pull back on financial aid for its thoroughly international student body (one-third of the students are foreign citizens, representing 50 countries in all). He aims to create *more* financial support for junior faculty, including funds to incubate research ideas that don't fall within the guidelines for federal grants. And, Frenk says resolutely, "We have no plans of laying off personnel. We are not contemplating any drastic measures."

Another endeavor that is proceeding: hiring a new director for HIGH. Given the obvious relevance of this interfaculty initiative to HSPH concerns, and the fact that the new leader will have a faculty appointment through HSPH, the search had been suspended; in January, it was well under way—a good thing, Frenk says,

#### Decisionmaking, Measured

The new Decision Science Lab, which opened in January, allows researchers to measure physiological markers of emotion—blood pressure, heart rate, facial muscle activation—to study subjects' mental states at

the moment of making a decision. The lab belongs to the Kennedy School, but is open to all Harvard faculty members and their students. Read more online at www.harvardmag.com/breaking-news/where-decisionmaking-is-measured.



#### Washington-Bound

Among the people asked to serve at senior levels in President Barack Obama's administration: Arne Duncan '86, Chi-



John P. Holdren

cago school superintendent since 2001, will be the new Secretary of Education (see "School CEO," September

October

2002, page 88I). John P. Holdren, Heinz professor of environmental policy at the Harvard Kennedy School, will become assistant to the president for science and technology (see "Is Nuclear Power Scalable?" May-June 2006, page 44); Holdren also co-chairs an advisory council in those areas with Eric Lander, professor of systems biology and director of the Broad Institute, the genomicsresearch center, and Harold Varmus, A.M. '62, head of Memorial Sloan-Kettering Cancer Center (see page 16). Elena Kagan, dean of Harvard Law School since 2003, will be Solicitor General of the



Elena Kagan

United States; upon her confirmation, Reid professor of law Howell Jackson will become the acting dean. Cass R. Sunstein, who recently became Frankfurter professor of law (see page 10), will be-

come administrator of the Office of Information and Regulatory Affairs, overseeing a wide array of regulations. And Wiener professor of public policy Jeffrey B. Liebman (see "Reforming Social Security," March-April 2005, page 30) departs

Brevia



WELCOME HOME: Each March, on the Thursday before spring break, freshmen learn their upperclass housing assignments. To celebrate, most Houses initiate their newcomers with T-shirts, like these from last year's festivities.

the Harvard Kennedy School to become executive associate director of the Office of Management and Budget.

#### **Medical Ethics Update**

Harvard Medical School dean Jeffrey S. Flier has appointed a 19-member committee to undertake a comprehensive re-

view of the school's policy on conflicts of interest and commitment, last revised in 2004 (see "Controlling Conflicts of Interest," September-October 2004, page 76;

the policy is available at www.hms.harvard.edu/integrity/conf.html). The policy governs interactions between faculty members and industry. The review will also, according to the school's announcement, "synchronize the process for regular reporting of financial interests among the HMS-affiliated institutions." Concern over such matters has been heightened ever since U.S. Senator Charles Grassley

disclosed unreported financial ties between researchers and companies, including support from Johnson & Johnson for professor of psychiatry Joseph Biederman, whose work at Massachusetts General Hospital has underpinned the use of antipsychotic drugs to treat children; the medical school is reviewing Biederman's case.

#### **Endowment Manager Compensation**

Harvard Management Company announced in

late December the compensation awarded to its five highest-paid staff members during fiscal year 2008. Their base salaries, performance-based bonuses, and benefits, reflecting the above-market returns of fiscal 2007 (when the endowment investment return was 23 percent) and fiscal 2008 (8.6 percent), ranged from \$6.4 million for Stephen Blyth, managing director, international fixed income, to \$3.9 million for Andrew Wiltshire, managing director, natural resources. Mohamed El-Erian, who was president and CEO until De-

#### JOHN HARVARD'S JOURNAL

cember 2007, was paid \$921,000 for his services. Robert S. Kaplan served as acting president and CEO for the balance of the year, without remuneration. Jane L. Mendillo became president and CEO as of July 1, 2008.

#### **Nota Bene**

Art museum manager. José Ortiz has been appointed deputy director of the Harvard Art Museum. He had been deputy director/chief of finance and administration at



José Ortiz

ALL YOU NEED IS LEV

the Hirschhorn Museum and Sculpture Garden, part of the Smithsonian Institution, in Washington, D.C., and was previously at The Cloisters, part of New York's Metropolitan Museum of Art. He arrives as work pro-

gresses on the wholesale renovation of the Fogg Museum, which closed last summer; relocating the collections, readying the site, and construction are expected to extend into 2013. During that time, oversight of the project, logistics, and operations will put extra demands on the museum staff.

Competing campuses. Stanford University has launched the Precourt Institute for Energy, a \$100-million research effort funded principally by its alumni Jay Precourt, a 1962 Harvard M.B.A. (\$50 million) and Thomas Stever and Kat Taylor '80 (\$40 million), a married couple who met during their professional studies in Palo Alto; their gift funds the TomKat Center for Sustainable Energy. Columbia University has received approval from New York State to proceed with its 17acre expansion in Manhattanville,

which is projected to involve some \$6 billion of new facilities in the next quarter-century. Local litigation against the plan and the processes for implementing it still looms. The University of Michigan has announced the purchase, for \$108 million, of a surplus Pfizer Inc. pharmaceutical and scientific research campus, with 2 million square feet of laboratory and office space. It is intended to accommodate at least 100 new faculty members being appointed to work in interdisciplinary science. The purchase echoes Yale's acquisition of Bayer's 136-acre surplus campus in West Haven, for a similar price, in 2007, locking up more than half a million square feet of modern laboratories.

DIVERSITY DEVELOPMENT. Faculty of Arts and Sciences dean Michael D. Smith has appointed Goldman professor of European studies and professor of sociology





Lamont

whose new book, How Professors Think, will be published this spring—will advise the dean, the divisional disciplinary deans, and the faculty at large on gender, racial, and ethnic diversity and on metrics for measuring the faculty's progress in development and diversity. She will also be responsible for assuring that searches are inclusive—a particular challenge now that FAS has had to cut back appointments significantly for financial reasons.

Belts tightened. As evidence of the financial restraint being imposed throughout the University in response to the endowment's decline and the recession, the Harvard Alumni Association has canceled the Global Series Conference that was scheduled for March 27-29 in Cape Town, South Africa, and has also deferred the redesign of post.harvard, the main alumni Web portal, for at least six months. And the Faculty Club announced that, beginning in the spring term, it would be "lowering prices dramatically" to keep University business:

private-event room charges have been cut in half, and more economical dining options introduced.

Miscellany. Professor of biological chemistry and molecular pharmacology David Golan has been appointed Harvard Med-

ical School's first dean for graduate education, charged with coordinating programs to enhance graduate students' engagement with all aspects of biomedical discovery....Harvard Health David Golan Publications, the medical



school's consumer-information and -marketing division, has enhanced and redesigned its website: https://www.health.harvard.edu.... Lawrence Lessig returns to Harvard Law School, from which he departed in 2000 for Stanford, as professor and faculty director of the Safra Foundation Center for Ethics (see "Ethics



Lawrence Lessig

in Practice," May-June 2007, page 58; www.ethics.harvard.edu). There, he intends to examine the effect on public institutions of depending on money from sources affected by the work of those institu-

tions (such as medical programs receiving funds from pharmaceutical companies); he has been known for work on cyberlaw and intellectual property (see "Code Is Law," January-February 2000, page 37)....The task-force report on the Harvard University Police Department's interaction with black community members (see "Probing Policing," November-December 2008, page 62), expected at the end of last year, is now scheduled to be completed by early spring....Among the candidates seeking to succeed Congressman (now White House chief of staff) Rahm Emanuel from the Illinois fifth district: labor lawyer and writer Thomas H. Geoghegan Jr. '71, J.D. '74.

considering health's increasingly central role on the global stage, and increasing appeal to undergraduates.

He believes the twenty-first century will witness a "human-rights revolution"

that has already begun. It is "critical for the future of democracy," he says, that democratic societies demonstrate concrete benefits for their citizens: the right to vote is not enough if it is not accompanied by other fundamental rights—such as access to healthcare. "Even if you're not sick," Frenk says, "knowing that you have a place you can go if you need it creates a feeling of security."

#### THE UNDERGRADUATE

### Life in Detail

by Brittney Moraski '09

NE MORNING last October, I packed a suitcase and flew to Indianapolis. I took a shuttle to Bloomington and by afternoon I was seated before Sylvia Plath's papers at the University of Indiana's Lilly Library. I read through clippings on Plath saved by her mother, had a Burger King dinner in the student union, and left to check into my room at the EconoLodge.

I was in Bloomington to do thesis re-

search at the Plath archives, and each morning I went to the library and spent the day sifting through clippings and Plath's own letters and college papers. I wasn't sure what I was looking for, only that I wanted to better understand Plath's decision to write *The Bell Jar*, her semiautobiographical novel of a young woman's breakdown. Slowly, I worked my way through file after file, typing for my records anything that seemed of interest.

I'M NO STRANGER to libraries. When I was a child, my town's Carnegie Library was my favorite place to spend a summer day, and I still like to stop by and say hello to the children's librarian. When I was in high school and took classes at the community college, I became acquainted with its research collection, and whenever I attended a

summer program at a university, I'd visit its main library just to wander through the stacks.

I started working in the modern books and manuscripts department of Houghton Library last spring, mostly to earn money but also to gain a sense of how a rare-book library operated. I had already spent many hours studying and doing research in Harvard libraries: I even had my favorite carrel in Widener, where I went whenever I

needed to complete an important or, more often, onerous assignment.

At Houghton I drafted letters, filed papers, and photocopied materials. But my favorite part of the job was not as preprofessional as I intended. I savored most the times I could indulge in my love of libraries: I'd walk through the underground stacks—restricted to all but staff—and, surrounded by the thousands of subterranean books, inhale deeply.

I'm writing this column during winter break, as I sit in my bedroom at home. Three years of moving in and out of dorms, up and down staircases, and in and out of cities has led me to dismiss sentimentality and prefer throwing away to saving my belongings, but in high school I felt differently. I spent much of the summer after my senior year collect-

ing my schoolwork and old stuffed animals and storing them in files or tissue paper. I put up two new bookshelves and spent a small fortune buying containers and file folders.

I thought I was doing the right thing by saving every remaining scrap and object from my childhood and adolescence, including club agendas and extra copies of advanced placement U.S. government papers. I pictured myself looking through my papers again as an adult, marveling at my growth at an individual and repeating as true a paraphrase of a Thoreau quote I had on a poster in my grown. The

had on a poster in my room: "I've indeed Gone confidently in the direction of my dreams and Lived the life I imagined!"

But now, just a few years later, I find there is so much saved in my room that it's hard to find things I really value. My high-school essays and letters



Illustration by Chris Pyle

from loved ones are mixed in with endof-lesson worksheets and scribbled Post-It notes from my mom telling me that she and my dad have gone to town, call if I need anything.

As a result, I now try to clear out whatever I can from my room whenever I'm home, but I'm rarely as ruthless at throwing things away as I mean to be. A part of me would rather keep things as they are because the randomness of what I've saved is almost as telling as some of the items themselves: for instance, I recently found among a pile of papers in my closet a campus magazine I probably picked up at a college pre-orientation activity fair. Only by skimming it again did I realize that one story featured a Harvard student. When I looked closely at the picture of the student, I realized it showed him in his dorm room, probably in Leverett Towers, and that my House, Dunster-and probably even my window—were in the background. I ultimately tossed the magazine, but in a different mood, I would have saved it, for being meaningful in such a "meta" way. It was only by my saving and then rediscovering it that it had become prophetic: as Thoreauvian an experience as I can imagine.

But that's why we have to be curators of our own lives, because everything—or anything—can be meaningful if you feel nostalgic enough. I learned that lesson at Houghton: the curator of my department told me that the best curators know that refusing some materials is as important as acquiring others. And so I keep reminding myself it's probably good that I now want to clean out my bedroom. You sometimes have to throw away things from the past to be open to those yet to come.

BUT THIS BRINGS ME BACK to Bloomington and my room at the EconoLodge. Just as my research trip was coming to an end, I sat in the library's reading room, entranced by the letters Plath wrote home to her mother from England after her husband had left her and she was growing increasingly anxious and depressed. I had begun my research with Plath's wobbly-lettered childhood postcards from summer camp, and now she was a married woman typing messages full of anger but also hope and resolution on light-blue airmail paper.

Plath became Sylvia as I handled these letters and raced to read and record them before the library closed for the day.

But minutes before the reading room needed to be emptied, the next letter in the file of Plath's correspondence was not blue but cream, and not from Sylvia but from her mother, written to Plath's husband, asking him to let her see her grandchildren. Sylvia was gone, dead from suicide, and it was time for me leave. There was nothing and everything more to read, but I had to pack up, leave the library, and wander Bloomington alone.

That night, the last of my trip, I turned on CNN and started watching biographies of the vice-presidential candidates. When the program turned to Joe Biden and the death of his first wife and daughter in a car accident, I choked up. Even as I turned off the lights and settled in bed, I felt an achy sadness that seemed excessive sympathy for Biden's loss. Then came a few sobs, and finally I realized that I was crying over Sylvia. After a few days spent with the papers of her life, I felt that I had lost a friend.

SITTING HERE in my room at home, among labeled college application files, homemade scrapbooks, and shelves of high school work, I am uncertain whether

I am fortunate to have such a good record of how I've lived or if my belongings leave me too beholden to my past. I am no Sylvia Plath, and there is no need for me to keep my papers for posterity. But we all live lives of memories and choose to keep some things so we do not forget a past that is always receding. I realize now why I love libraries so much, and archives most of all: they keep treasures of this sort safe for the sake of civilization.

Archives are places where lives are carefully recorded, preserved, and shared. You can find postcards, love letters, and even locks of hair in such places. At Houghton, I learned how to process and collect these materials. And at the Lilly Library, thanks in no small part to the work of its librarians, I found Sylvia—a teenager with bubbly handwriting, a college student applying for scholarships, a woman telling her mother that she had just written the poems that would make her name. As long as archives exist, protecting the ephemera of love and loss and the details of life, I believe that we all share in a certain immortality, no matter what we may keep or save of ourselves.  $\nabla$ 

Berta Greenwald Ledecky Undergraduate Fellow Brittney Moraski '09 is still writing her history and literature thesis.

SPORTS

# Hoops Houdini

Basketball's Jeremy Lin draws on a large bag of tricks.

N HISTORIC basketball game was played on January 8 in Chestnut Hill, Massachusetts. Harvard beat Boston College, ranked seventeenth in the nation, 82-70, recording its first-ever win over a nationally ranked opponent. What is more, BC had just defeated the University of North Carolina, then the nation's top team. (Harvard's last game against such elite competition, with twenty-third-ranked Stanford, was a 111-56 blowout, the opener of

2007-08's struggling 8-22 season, when the Crimson tied with Princeton and Dartmouth for last in the Ivies.)

That January night, shooting guard Jeremy Lin '10 put on a magic show, throwing in 27 points and making eight assists and six steals. On defense, he held BC's all-American guard (and projected NBA draft pick) Tyrese Rice, who had scorched UNC for 25 points, scoreless in the first half. When Lin finally fouled out with 40 seconds left, there were none of



the mocking chants one often hears in college gyms at such moments; instead, the crowd made the air alive with applause. "That game was something I'll never forget, an emotional high," says Lin. "It was something our players and coaches deserve—we've all worked very hard. We earned it."

In mid January, when Harvard was 9-6 (1-0 Ivy), Lin was the only college basketball player in the United States who ranked among the top 10 players of his conference in points, rebounds, assists, steals, blocks, field-goal percentage, freethrow percentage, and three-point percentage. That pretty much covers the game of basketball: it's an extraordinary display of versatility. Lin was averaging 17.9 points and 5.5 rebounds per game, while hitting field goals at a .500 clip, free throws at .802, and three-pointers at .424. Characteristically, he credits his teammates for those high-flying stats. Regarding steals, for example (last year he led the Ivies with 58), Lin notes, "When other guys on the floor are doing a good job defending, that can force a bad pass, and I can grab the ball."

"I'm trying to do whatever the team needs me to do in that particular game," Lin explains. "A lot of the time, it's not going to be scoring, even though that's what's most valued when people talk about a game. Sometimes it's going to be

rebounding or passing. It's a credit to the other guys on our team that I don't have to be scoring every game: we have several players who can score."

"I haven't coached anyone I would regard higher [than Lin]," says Tommy Amaker, who coached 19 years at Duke, Seton Hall, and Michigan before arriving at Harvard's helm in 2007. "Jeremy is a hard worker, a passionate ball player, a student of the game who loves the game. He's an unselfish young man, sometimes to a fault. Jeremy's a complete player, a throwback to the days of yesteryear. He could play basketball in any era. I love coaching him; it's great to have a player you sometimes have to ask to slow down, instead of 'Please, take it up a notch.'"

The six-foot, three-inch Lin built his game amid a hoop-playing family. Both parents are Taiwanese immigrants and computer engineers who eventually settled in Palo Alto, California. His father, Gie-Ming, had never heard of the sport when he arrived in the United States in 1977, but soon became a basketball junkie. Though only five feet six, he plays recreationally and collects basketball DVDs. Lin's mother, Shirley, fell in love with the game as her sons did, and is now a major fan. Older brother Joshua played for Henry M. Gunn High School in Palo Alto; Jeremy played for the rival Palo Alto High School, where his younger brother Joseph is on the team now. "Anyplace we could find a hoop and a ball, we would play," Lin says. After their Friday-night youth group at the Chinese Church of Christ, for example, the Lin brethren would adjourn to a gym at Stanford for some pick-up games that might last until 2:00 а.м. Lin came to Harvard—not Stanford, Cal, or UCLA—in part because he wanted to play college basketball. Now Amaker feels Lin is skilled enough to have a career after college if he wants one. (Lin admits that playing in the NBA would be "a dream come true"his youthful idol was Michael Jordan-but the economics concentrator considers pro ball a long shot. He aspires to work for a church (and serving an underprivileged urban community.)

But for now there is the holy grail of Harvard basketball—an Ivy League championship—which the Crimson has yet to bag. Last year Cornell ran the table at 14-0 and graduated no starters; in preseason polls, Harvard wasn't picked to finish higher than third. On the other hand, before this season, Harvard had never beaten a team like Boston College.

∼CRAIG LAMBERT

#### Winter Sports

#### Ice Hockey

After a strong start that was followed by various disappointing midseason setbacks, the **women's** team (11-7-3, 3-2 lvy) reeled off a five-game winning streak, capped by an 8-0 thrashing of Boston University during the first round of the Beanpot tournament. Senior Sarah Vaillancourt, last year's Kazmaier Award winner, led the offense with 14 goals and 30 points.

The men's team (5-11-5, 1-3-3 lvy) got knotted up in a plethora of ties, and in mid November stumbled into a two-month, 13-game winless streak before breaking the curse with a 3-1 victory over Union. Junior defenseman Alex Biega led the scoring with

Photograph by Stu Rosner Harvard Magazine 55

#### ALUMNI

# Turning Green to Gold

A private-equity firm invests in alternatives to oil around the globe.

JEFFREY LEONARD '76 holds up a simple, orange-metal box not much bigger than his hand. Developed by two twenty-somethings in a garage in Berkeley, the device "has the ability to transform the entire vending-machine industry," he asserts, "taking trucks off the road and saving enormous amounts of energy."

This winning combination—of profitability and social benefit—is what Leonard finds most alluring as a private-equity manager. That coupling—along with the current energy crisis—has helped his company, Global Environment Fund (GEF; www.globalenvironmentfund.com), evolve from an idealistic dream of "replac[ing] the incandescent light bulb, the internal combustion engine, and the use of fire in the generation of power" into a top-tier firm with \$1 billion invested in dozens of energy-related concerns across the globe. "What makes us different from Silicon Valley, which is now trying to do for the energy crisis what they did with the Internet," says Leonard, "is that we do not typically invest in new technology. We deploy existing technologies and improve business models that help traditional industries become more efficient and reduce their carbon footprint."

When plugged into a vending machine, the little orange box transmits inventory, sales, and financial data directly to the supplier's computer. "Right now, these vending companies have guys in big trucks driving around with their whole inventory, checking and filling the machines," he explains. "Most of the time they come back more than half full. It's incredibly inefficient." The box also has an appealing secondary gain: the data eliminate opportunities for drivers to pocket cash skimmed from the machines—apparently a significant industry problem, he says. "We have to be very good social sci-



entists at the front end to make the right choices about investments, and know how these industries work, inside and out," he adds. "We're not just dreamers about saving the environment."

Leonard came to the business world from an academic grounding in government and economics-in the context of the 1970s energy crises. He was impressed as a freshman when President Richard Nixon vowed "by the end of the decade we will have developed the potential to meet our own energy needs without depending on any foreign energy source." While working for the Crimson (his last two years as managing editor), he covered campus energy initiatives, the formation of the Harvard Management Company, the early days of the Advisory Committee on Shareholder Responsibility, and controversies surrounding University investment policies—which led to his senior thesis on corporate social responsibility.

He went on to study comparative political/economic systems at the London School of Economics and earned a doctorate from Princeton in 1984 (with a disser-

tation on pollution control and multinational corporations). He has written numerous articles and five books, including Pollution and the Struggle for World Product: Multinational Corporations, Environment and Comparative Advantage (1988). By then he was vice president of the World Wildlife Fund and the Conservation Foundation. He and a former colleague there, John Earhart, founded GEF in 1990.

LEONARD LOVES the social-science aspect of the job most—mining the interplay among politics, policy, and pollutants, and creating an acute understanding of energy investments within the volatile context of world markets and consumer demands. He and his staff (40 at the new Chevy Chase, Maryland, headquarters, and others abroad) find unusual mid-size companies ripe for growth, and then build them up within six to 10 years with a hands-on approach. Almost every staff member has a background in business or finance coupled with another professional degree—in engineering, environmental management, physics, water resources, forestry, and so

on. Earhart, for example, who oversees GEF's environmental analyses and compliance and its investments in sustainable forestry ventures, graduated from the Yale School of Forestry and Environmental Studies. Leonard considers himself "the intellectual driver of the underlying, long-term themes that we try to take advantage of—which is very stimulating work. In 1994, for example, we laid out maps of the world and asked, 'Where are the big energy bottlenecks and how can those problems best be solved?'"

That led to one of GEF's first significant ventures in Brazil, where charcoal is made, he explains, by burning trees, "cut down in large swaths in the Amazon and the northeast, until they are carbonized. Sometimes they take two tractors and hook up a chain between them and drive through immature forests to clear the trees faster." GEF decided to invest in a São Paulo natural-gas distribution company, with plans to help the company take advantage of a pending government pipeline (the 3,000-kilometer Bolivia-Brazil pipeline, completed in 1999) that ultimately enabled it to feed demand for gas throughout the Paraîba Valley. "It was a boon to industries that were using other dirty fuels...or burning charcoal to fuel boilers," Leonard says. "We helped reduce local air pollution and CO2 emissions and prevent deforestation." It also netted GEF and its investors attractive returns.

With known global oil reserves projected to last another 40 years, and longer, but still finite, timelines predicted for natural gas and coal, the energy industry is "an exciting place to be for private investment," asserts Leonard. His three current portfolios focus on clean technology (e.g., the vending-machine box), sustainable forestry, and emerging markets. They have included privately owned hydroelectric plants in Latin America and Asia that are using technology pioneered in the United States; a South Africa-based sustainable forest-products concern; and a Hungarybased co-generation plant fueled by biogas (the future of energy resources in central Europe, Leonard adds).

Still, "it is a tough and humbling business," he says, "It's easier to lose money than to make it." He credits Harvard with teaching him discipline, focus, excellence

—and the fact "that I will never be the smartest person in the room....It is critical to check your ego at the door in private equity, because the minute you're not willing to listen to someone else is the minute you're taking a risk you shouldn't."

One notable wipeout was a 1990s venture in Peru. GEF used a licensed South Africa-based biotechnology to recover gold from existing mine tailings that were leaching cyanide and other chemicals into rivers that flowed into Lima's water supplies. "We invested in cleaning up the gold piles and recovering the commercial gold, but the price of gold slid from above \$400 an ounce when we made the investment to below \$200 an ounce and we lost all of our money," he says, able now to laugh a little about it. "I learned never again to bet on single-directional trend lines for commodities as an investment thesis." (GEF aims primarily not for home-run investments, but a series of base hits, yielding investors—primarily family foundations and universities—a 29 percent annualized rate of return, according to its Securities and Exchange Commission filings.)

LEONARD IS fiscally conservative. But he also drives an electric car made by the Indian firm REVA (one of his funded companies), outfitted GEF's headquarters with sustainable wood floors and dual-flush toilets, and designed its open space to maximize natural light. He eschews domestic oil-drilling programs for their shortsightedness—such drilling will never be a longterm solution to dependence on foreign oil, he says, because even the best estimates put the U.S. supply at about 3 percent of all oil reserves on the planet. Instead, he heavily promotes electrification as the prime energy source of the future. "It is the ultimate 'flexible' solution because we can produce electricity from so many domestic sources: biomass, renewables, coal, nuclear, hydro," he says. "We can solve balance-of-payments problems and reduce national-security threats by shifting more energy to electricity from oil in coming years, and then focus on making electricity-generation cleaner and, finally, carbonneutral in the coming four or five decades."

He also thinks Congress "should consider a point-of-sale excise tax based on miles per gallon or the horsepower of in-

ternal combustion engines...this would at least send the car companies a clear long-term signal that they should produce more efficient vehicles." He says he and his wife, Carolyn Pisano Leonard, a psychologist with Head Start in Montgomery County, are "bleeding hearts," and makes it clear that his drive to harness renewable resources and promote efficiency stems from the liberal politics and policies of his formative years.

When President Jimmy Carter left office in 1979, Leonard notes, 2 or 3 percent of all government research and development was directed toward energy—compared to the 0.3 percent allotted in recent years. "A lot of new technologies were invented, including renewable energy-wind, solar, hydropower—through tariffs," he says. "Dow Chemical and others were doing all of the R&D, and then it all went on the shelf for 20 to 30 years because petroleum prices dropped below \$10 a barrel and we had a long era of Reagan deregulation." He believes significant increases in federal funding for research and development of energy-generation sources are merited, but should stop short of providing "perpetual subsidies for the commercial development" of new technologies—that's the purview of private capital.



In recent years, Leonard has helped governors in Maryland and New Jersey launch energy programs that emphasize increased efficiency and the use of renewable energy sources. He hopes the Obama administration—through direct funding and tax incentives—can shift commercial and consumer behaviors so that developing green energy sources becomes an economic stimulus. His recommendations include the creation of a nationwide Renewable Portfolio Standard that requires utilities to purchase a fixed percentage of their electricity from renewable generation (levels are now

#### JOHN HARVARD'S JOURNAL

#### Tax Tutors

On weeknights and Saturdays during tax season, Robert Burke, M.B.A. '99, and his Ladder Up volunteers can be found at work

throughout the Chicago area, helping low-income families keep as much of their income as possible. Ladder Up's free financial services educate clients about tax credits and aid for higher education; the nonprofit (www.goladderup.org), which Burke founded in 1994 and still chairs, estimates saving clients an average of \$150 in fees typically charged by commercial firms, and often more. In its first year, Ladder Up returned \$150,000 to the community it served. Since then, some 16,000 volunteers have helped return more than \$147 million to 84,000 families.

Filing taxes "is a daunting task, and the system isn't getting less complicated," says Burke. Volunteers from more than 250 local companies, including banks and law and accounting firms, work with low-wage earners accustomed to relying on check-cashing and money-wiring services that charge more than traditional banks. Volunteers need only a "sharp mind and sharp pencil," says Burke, not an accounting degree; they are trained to maximize clients' tax credits, sometimes with life-changing results. (One woman discovered the IRS owed her \$10,000.) To find clients,

Ladder Up partners with community groups—churches, schools, YMCAs—that provide space or publicity.

Burke, who now works in private equity, began Ladder Up as a 22-year-old employee at Arthur Andersen; he wanted to assist the families of the children he coached in basketball on Chicago's West Side. He wrote a business plan and approached his managers, explaining that



his colleagues would become "better people and business professionals" if they learned how to serve an entirely new population: the working poor. Both company and employees responded enthusiastically. Fourteen years later, Ladder Up offers its clients classes on financial literacy as well. "You're amazed at the courage of those you're trying to help," Burke says. "They're doing so much with so little. What we try to do as an organization is put more tools in their toolbox." 

—BRITTNEY MORASKI

set by states); a broadening of the current tax law that permits the sale and purchase of credits for capital costs incurred in renewable energy installation (such as solar panels); and following California's lead (since 1976) in fostering ways for utilities to achieve increased consumer efficiency. (California's per capita electricity usage has remained almost flat in the last 30 years, while usage has nearly doubled in the rest of the nation). He advocates as well the creation of a more secure, smarter electrical grid that will enable increased reliance on electrical power—even for cars.

These ideas, he notes, don't involve any new technologies, and are relatively easy to implement politically. "Who is going to argue against this plan?" he asks. "Not even the oil companies, since even they will be diversifying more into renewable and new energy sources themselves." In the end, he says, the new administration and Congress, "may have the last best chance to address energy issues before the real crisis sets in." ~ NELL PORTER BROWN

#### Vote Now

This spring, alumni will choose five new Harvard Overseers and six new directors for the Harvard Alumni Association (HAA) board. Ballots should arrive by mail by April 15 and are due back in Cambridge by noon on May 29 to be counted. Election results are announced at the HAA's annual meeting, on the afternoon of Commencement day, June 4. All Harvard degree-holders, except Corporation members and officers of instruction and government, are entitled to vote for Overseer candidates. The election for HAA directors is open to all degree-holders.

For Overseer (six-year term), the candidates are:

Photeine Anagnostopoulos '81, M.B.A. '85, New York City. COO, New York City Department of Education.

Joshua Boger, Ph.D. '79, Cambridge. President, founder, and CEO, Vertex Pharmaceuticals Inc.

Morgan Chu, J.D. '76, Los Angeles. Partner, Irell and Manella LLP.

Walter Clair '77, M.D. '81, M.P.H. '85, Nashville, Tennessee. Assistant professor of clinical medicine, Vanderbilt University Medical Center; clinical director of cardiac electrophysiology, Vanderbilt Heart and Vascular Institute.

Mark Gearan '78, Geneva, New York. President, Hobart and William Smith Colleges.

Linda Greenhouse '68, Bethesda, Maryland. Knight distinguished journalist-in-residence and Goldstein senior fellow in law, Yale Law School.

Margaret A. Levi, Ph.D. '74, Seattle. Bacharach professor of international studies, University of Washington; professor of politics, University of Sydney.

Cristian Samper, Ph.D. '92, Washington, D.C. Director, National Museum of Natural History, Smithsonian Institution.

In addition, at least two alumni are apparently running as petition candidates for Overseer:

Robert L. Freedman '62, Philadelphia. Partner, Dechert LLP.

Harvey A. Silverglate, LL.B. '67, Cambridge. Attorney and writer, Good and Cormier.

(The petition-filing deadline, February 9, fell after this issue went to press.)

For Elected Director (three-year term), the candidates are:

Margaret Angell '98, M.P.A. '06, Washington, D.C. White House fellow, U.S. Department of Housing and Urban Development

Paul Choi '86, J.D. '89, Chicago. Partner, Sidley Austin LLP.

Carlos Cordeiro '78, M.B.A. '80, Hong Kong. Retired partner, Goldman Sachs.

Cindy Maxwell '92, M.D. '96, Toronto.

Assistant professor of obstetrics and gynaecology and staff perinatologist, Mount Sinai Hospital.

Elizabeth Ryan '81, Los Angeles. Producer and director for film and television.

Sandford Sacks, M.B.A. '66, Scarsdale, New York. Consultant, Ambac Assurance Corporation.

Bryan Simmons '83, New York City. Vice president of marketing and communications, IBM Centennial, International Business Machines Corporation.

John Trasvina '80, Los Angeles. President and general counsel, Mexican American Legal Defense and Educational Fund.

Meg Vaillancourt '78, Boston. Vice president, corporate and community affairs, Boston Red Sox.

### **Congratulations**

THE HAA CLUBS COMMITTEE awards honor individuals who provide exemplary service to a Harvard club or shared interest group (SIG), as well as to clubs and SIGs that have organized exceptional programming. Awards were presented to the following recipients at the HAA Board of Directors winter meeting on February 5 at the Charles Hotel.

R. Clive Gard, AMP '78, of Australia. A member of the Harvard Club of Australia

for 25 years, Gard has served as councilor on the executive committee and as club administrator. He has professionalized club operations, enriched the alumni experience in Australia, and strengthened programs focused on education, scholarship, and philanthropy.

John F. Kirk, CSS '90, of San Antonio. Kirk has served Harvard in various roles, including past president of the Harvard Club of San Antonio, former HAA regional director for Texas, and former HAA national chair for the Early College Awareness Program, which grew considerably under his leadership.

The Harvard Club of San Francisco, founded in 1874, has increased and diversified its activities within the last three years, and seen membership grow from 200 to nearly 1,400 people. The club now operates about a hundred events annually, from community-service activities to lectures and ice-cream tastings. In the last decade, it has also initiated an award for human-rights leadership and created a college mentorship program for inner-city high-schoolers.

The Harvard Glee Club Foundation supports the Glee Club logistically and financially, and organizes reunion sings and summer-reunion tours. (The Glee Club,

### Return to Harvard Day

On April 22, all College alumni and their spouses/partners and high-schoolage offspring can visit the College, attend classes, and meet faculty members. The HAA sends brochures about the event to alumni living in the Northeast. If you do not receive a brochure and want to attend, contact the HAA by phone, at 617-495-2555, or e-mail cary\_gemmer@harvard.edu.

America's oldest college chorus, celebrated its sesquicentennial last April; see "150 Years of Glee," March-April 2008, page 69.)

### Comings and Goings

This spring, Harvard clubs offer varied social and intellectual events, including University-affiliated speakers (see a partial list below). For more information, contact clubs directly, call the HAA at 617-495-3070 or 800-654-6494, e-mail clubs@harvard.edu, or visit www.haa.harvard.edu.

On March 5, the Harvard Club of Houston hears Timothy Colton, Feldberg professor of government and Russian studies and director of the Russian Research Center, ad-

dress "How to Deal with a Resurgent Russia." Marshall Goldman, senior scholar in the Davis Center for Russian and Eurasian Studies, discusses his book *Petrostate: Putin, Power, and the New Russia* at the Harvard Club of Long Island (March 14), the Harvard Club of Phoenix (March 25), and the Harvard Club of Seattle (March 26).

"Bringing Geography Back to Harvard" is the brief of Carswell professor of East Asian languages and civilizations Peter Bol at the Harvard Club of Santa Barbara on March 21. On April 3, Robinson professor of music Robert Levin asks "Who Cares If Classical Music Dies?" at the Harvard Club of Sarasota, while Shattuck professor of government Paul Peterson reviews "The Perilous State of American Education" for the Harvard Club of Northeast Ohio on April 30.

## A Special Notice Regarding Commencement Exercises

Thursday, June 4, 2009

#### Morning Exercises

To accommodate the increasing number of those wishing to attend Harvard's Commencement Exercises, the following guidelines are proposed to facilitate admission into Tercentenary Theatre on Commencement Morning:

•Degree candidates will receive a limited number of tickets to Commencement. Parents and guests of degree candidates must have tickets, which they will be required to show at the gates in order to enter Tercentenary Theatre. Seating capacity is limited; however, there is standing room on the Widener steps and at the rear and sides of the Theatre for viewing the exercises.

*Note*: A ticket allows admission into the Theatre, but does not guarantee a seat. The sale of Commencement tickets is prohibited.

•Alumni/ae attending their major reunions (25th, 35th, 5oth) will receive tickets at their reunions. Alumni/ae in classes beyond the 5oth may obtain tickets from the Classes and Reunions Office, 124 Mount Auburn Street, sixth floor. Cambridge.

•For alumni/ae from non-major reunion years and their spouses, there is televised viewing of the Morning Exercises in the Science Center and at designated locations in most of the undergraduate Houses and professional schools. These locations provide ample seating, and tickets are not required.

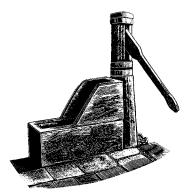
•A very limited supply of tickets will be made available to all other alumni/ae on a first-come, first-served basis through the Harvard Alumni Association, 124 Mount Auburn Street, sixth floor, Cambridge 02138.

#### Afternoon Exercises

The Harvard Alumni Association's Annual Meeting convenes in Tercentenary Theatre on Commencement afternoon. All alumni and alumnae, faculty, students, parents, and guests are invited to attend and hear Harvard's President and the Commencement Speaker deliver their addresses. Tickets for the afternoon ceremony will be available through the Harvard Alumni Association, 124 Mount Auburn Street, sixth floor, Cambridge 02138.

~Jacqueline A. O'Neill, University Marshal

## Drat Those Vandals!



"Your wooden arm you hold outstretched to shake with passers-by."

s the keeper for the meantime of "The College Pump" column, Primus V naturally cares about the well-being of the genuine article, which sits massively in the Old Yard east of Hollis Hall. Strolling by the pump one day this past fall, he was pained to observe its once-burnished oak graying in the weather, one side of it scarred by graffiti, and its handle—gone. He made urgent inquiry of people in Physical Resources.

"The handle on the pump was stolen about four years ago," reported Zachary M. Gingo '98. "We replaced it, and about three months later it was stolen again. Thus began a saga of Harvard facilities staff versus unknown vandals. Over the next two years, the pump was damaged (and subsequently repaired and refinished), and several attempts to pry the handle loose failed, but did require repairs. For about the past two years, the handle remained in place. It was stolen most recently probably in mid to late October. We are working with a local contractor to fabricate new pump handles, as we have gone through our spares. We expect to have a handle in place late in the fall semester."

Indeed, the pump *does* have a handle as of this writing (although its barrel and trough could still use a clean-up

and a couple of coats of polyurethane come spring.)

Today's iteration of the iconic eighteenth-century apparatus was built by William Brouwer in 1987 and was a gift from Radcliffe to help celebrate Harvard College's 350th anniversary, along with a red oak tree planted nearby. The tree has fared well. Let there be an end to shocking doings at the pump!



AHEM: The day before Chief Justice John G. Roberts '76, J.D. '79, swore in Barack H. Obama, J.D. '91, the *Boston Globe* quoted an ebullient Loeb University Professor Laurence H. Tribe '62, J.D. '66, seen at a Washington, D.C., reception: "Watching John Roberts, who's one of my students, swearing in another of my students, will blow my mind." In the event, the two flubbers—one responding prematurely to a prompt, the other misplacing his "faithfully"—must have taught Tribe a lesson: even one's most promising students sometimes blot their copybooks.



VALUED RIDDLER: "In teaching the *Iliad* and *Odyssey*, [the late Professor John H.] Finley gave me a feeling for the cause and effect of momentous decisions...," writes Mark E. Shwayder '73, of Franklin, Michigan, in his thirty-fifth anniversary class report. "He tried to make us realize that our lives would be a stumbling series of choices taken in the half darkness, in the fog of combat. I remember being riveted as he spoke movingly about a scene of Achilles walking alone on the beach of Troy, listening to the hissing of the ocean,

wracking his brain trying to see into the misty future and chart his course. Finley was trying to tell us that all of our decisions, taken out of strength and charity and hope, or avarice and cowardice and weakness, would act as the hands that wove the tapestry of our lives. Finley knew that he had to try, at the very least, to teach us to recognize the fateful effects of every decision we would make, to see the threads as they were woven....

"I have thought of Professor Finley many a time," writes Shwayder, who left college as a sculptor but became by perceived necessity owner of a small family manufactory of landing-gear components for military, police, and emergency medical helicopters. "He was the only teacher I ever visited at Harvard. I used

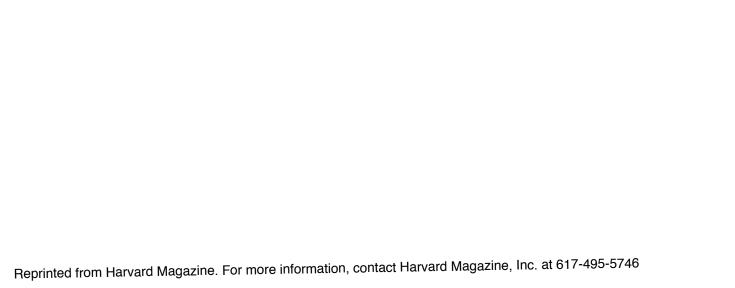
to love to go into his musty office in Widener and talk with him, ostensibly about Homer, but really because I craved some ancient wisdom and guidance and hope. I always had the feeling that he knew in a general way what awaited us and I desperately wanted that knowledge. But it was like vis-

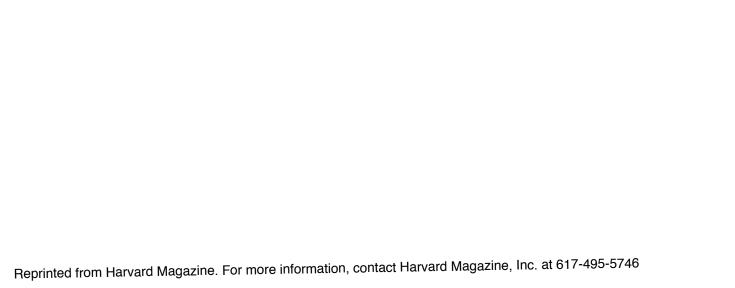


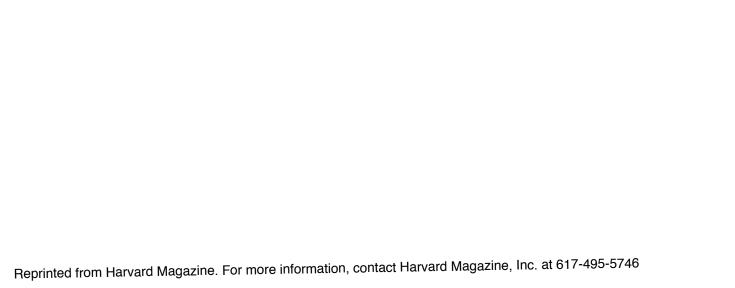
Mark Shwayder works in 1973 on part of his senior thesis in visual and environmental studies, a portrait sculpture of Professor John Finley.

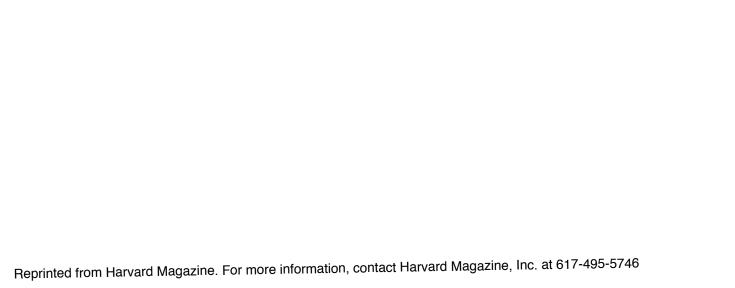
iting the Sphinx; he could only answer in riddles, but riddles he knew we must unravel to find our way." 

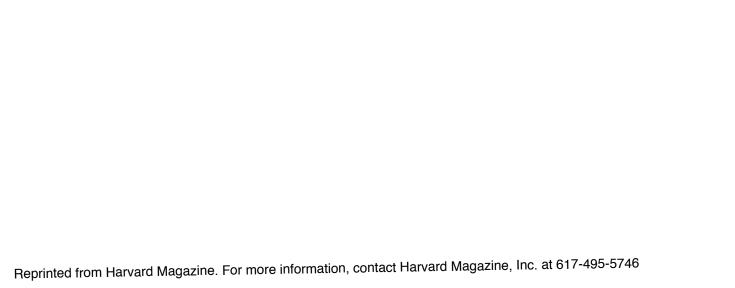
—PRIMUS V

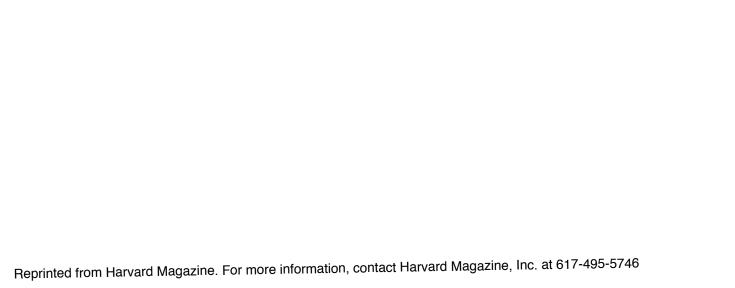


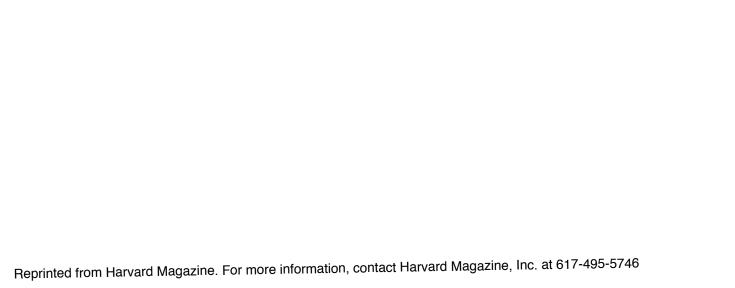


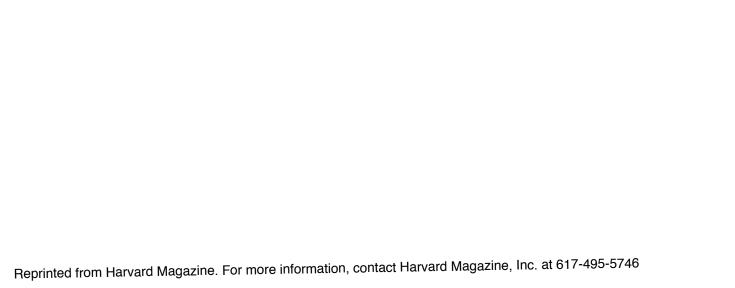












**LETTERS** (continued from page 5)

KARENNA GORE SCHIFF '95 concludes her biography of Frances Perkins—a section of Lighting the Way: Nine Women Who Changed Modern America—with the following words that should make us humble followers of Perkins for the rest of our days. She writes that upon Perkins's death, Willard Wirtz, then Secretary of Labor, paid her tribute: "Every man and woman who works at a living wage, under safe conditions, for reasonable hours, or who is protected by unemployment insurance or social security, is her debtor."

Jo Fannin, M.Div. '95 Red Wing, Minn.

ADAM COHEN'S book is the first I have read that places Frances Perkins where she rightfully belongs: front and center in the New Deal. Her policy and managerial accomplishments were incredible; that she succeeded while facing overt misogyny—as well as financial and family difficulties—makes them even more astounding.

Harvard also played a part in a new biography of Perkins that will be released in early March, *The Woman Behind the New Deal* (Random House). Its author, former *Washington Post* reporter Kirstin Downey, began researching her subject while a Nieman Fellow at Harvard (2000-2001).

To learn more about Frances Perkins and her legacy, I invite readers to visit FrancesPerkinsCenter.org.

Barbara Burt, M.Ed. '92 Executive Director, The Frances Perkins Center, Newcastle, Me.

#### **VIOLENCE IN THE STREETS**

The story on Teny Gross ("Taking It to the Streets," January-February, page 72) was refreshing because it marked the first time, I believe, in which a young Harvardian is shown attempting to penetrate the dark world of crime. Gross is determined to stem what he calls America's newest drug: violence. He and an urban policeman are quoted as finding violence all around them and their charges—children. Witness Hollywood's grim gun-toting output, and mainstream media stories in boldface caps on homicide in the com-

Ask any dinner partner how many Americans are killed annually by guns and you will either get an "I dunno" or a wild guess from 500 to 500,000. The correct figure is an average of 34,000 citizens murdered annually by guns, compared, for example, to 33,000 battle deaths in three years of the Korean War and "only" 5,000 in five years of Iraq's disaster.

What does the federal government do about it? Nothing. Loopholes for getting guns by the wrong people are rampant. This is a subject that demands more attention by the new administration. It is crucial for voters to understand that in the last 30 years we've killed more citizens between the oceans than in all U.S. foreign wars combined. I hope your story gets more than passing attention.

Lewis S. Dabney '43 Chestnut Hill, Mass.

### DON'T ASK, DON'T TELL

Harvard University and Harvard Magazine continue to display ignorance regarding the "don't ask, don't tell" policy ("Anthony Woods: Taking a Stand," January-February, page 74).

This policy is cited as the reason to keep ROTC off the campus because the opponents wrongly believe that this is a military policy. However, it is a law passed by a Democratic-controlled Congress and signed by President Clinton in 1993, and subsequently followed by the military. A military policy, such as haircut and uniform regulations or involvement in outside political activity, is written by individual branches of the military or the Department of Defense, and can be changed internally. The "don't ask, don't tell" law cannot be changed by the leadership of the military, but instead by Congress and the president.

I note that Harvard has demanded neither a boycott of the Democratic Party or Congress, nor of visits by President Clinton. Instead, the animosity is directed inappropriately at students desiring to become officers in the armed forces of the United States and at current members of the U.S. Army, Navy, Air Force, and Marines.

I look forward to Harvard University allowing the return of ROTC to the campus following the recommendations of President Barack Obama as stated at the September 11, 2008, community-service conference at Columbia University.

KENNETH WELLS '84 Honolulu

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HARVARD MAGAZINE

## A YODEL FOR HELP IN THE MODERN WORLD

(continued from page 31)

The Idiots Karamazov, a wild, Monty Pythonesque takeoff on The Brothers Karamazov
starring Meryl Streep as
Constance Garnett, the
prolific real-life translator
of nearly 70 works of Russian literature who nonetheless blurred authorial voices and dropped
words and phrases she
didn't understand.

Brustein, who calls the cherubic young Durang "a choirboy with fingers

dipped in poison," admired *Idiots* enough to produce it at the Yale Repertory Theatre in 1974, a rare honor for a student play—"almost like winning the lottery," says Durang, who played Alyosha Karamazov onstage and got both his first professional playwriting credit and his Actors' Equity card. "The idea of being paid to work in theater was thrilling," he says.

Furthermore, the creative atmosphere in New Haven had "that Dionysian spirit," says Innaurato. "We could send everything up and be crazy. No one was worrying if it would work or not. We were making fun of religion, playing with homosexuality, cross-dressing, dirty words. People would get up and walk out. We were very cutting edge." Weaver recalls that she "felt so excited to be there with these brave young writers who were writing these scathing attacks on our world." (Innaurato, who now teaches at the University of the Arts in Philadelphia, says, "That's gone now, entirely changed. Young people are not irreverent; they don't make fun of things. They take things seriously.")

IN 1975, DURANG MOVED to Manhattan, where he would live for the next two decades. (Since 1997, he has lived with his longtime partner, fellow writer and performer John Augustine, in a 1749 stone farmhouse in eastern Pennsylvania; he makes weekly trips to Manhattan where, since 1993, he and Marsha Norman have taught playwriting at the Juilliard School.) He soon brought some of his iconoclastic energy to both off- and off-off-Broadway theater. His one-act *Titanic*, with a plot of "blinding complexity," ac-



cording to the

New Yorker' (Durang freely admits that dialogue, not plot, is his strong suit), opened in February 1976. In the play, the luxury liner does not sink, though several passengers wish it would, and the captain's daughter tries to accomplish as much by drilling holes in the hull. The captain does spot an iceberg approaching and the audience hears distressing sounds of a ship apparently hitting an iceberg, but that turns out to be a sound-effects record that the captain's unstable wife has played over the ship's public-address system. Mainstream critics like Walter Kerr of the New York Times lacerated the play. The criticism was so ferocious that Durang asked his agent, Helen Merrill, "Will anybody do a play of mine again?" She replied, "Oh, people forget reviews."

Merrill was soon proved right. In the summer of 1976, at the Eugene O'Neill National Playwrights Conference in Connecticut, Durang's play A History of the American Film made such an impact that the following year, with Merrill's help, it received a rare "triple premiere": three separate productions within a four-month period—at the Hartford Stage Company, the Arena Stage Company in Washington, D.C., and the Mark Taper Forum in Los Angeles. It later ran on Broadway and received a Tony nomination for best book of a musical. (Durang has also won four Obie awards for writing and received the 2006 Harvard Arts Medal.)

He continued to act and sing. With Weaver, he wrote and performed *Das Lusitania Songspiel*, a crackpot parody of a Bertolt Brecht/Kurt Weill musical. Originally

The opening weddingparty tableau of Durang's 1985 play The Marriage of Bette and Boo. Durang (in the foreground as Matt) essentially played himself. He and director Jerry Zaks won Obie awards, and the 10-person cast won that year's Obie for ensemble acting.

a curtain raiser for *Titanic*, it became a late-night cult hit off-Broadway when the pair revived it in the winter of 1979-80 as an 11 P.M. cabaret act. The collaborators had fun playing Weaver's six-foot stature off against Durang's five-foot-seven frame. "We were backstage in evening dress,

telling each other, 'Relax! Relax! Have fun!'" says Weaver. "I don't think I've ever had a better time doing anything."

In 1979, when Durang was 30, his mother died after battling breast and bone cancer for seven years; the last time she walked was at the New York opening of A History of the American Film. "I wished I had still been a believer, in terms of offering her comfort," Durang says. "I realized how hard it was to be with someone facing a terminal illness and not be able to say, 'Oh, you're going to heaven.' It made me think about how the Roman Catholic Church had an answer for absolutely everything. I had this impulse to write a play where some religious person comes out and explains every single thing in the universe and how it works." In Sister Mary Ignatius Explains It All for You, the title character does exactly that, and gets laughs with clarifications like, "You can expect to be in purgatory for anywhere from 300 years to 700 billion years. This may sound like forever, but don't forget, in terms of eternity, 700 billion years does come to an end."

The sensational reception of Sister Mary led to many productions throughout the 1980s (it is less popular today, but still performed). It drastically raised Durang's profile and opened up new opportunities. Beyond Therapy, his most lighthearted and mainstream work, opened on Broadway in 1982, starring Dianne Wiest and John Lithgow '67, Ar.D. '05. The comedy, about a couple who meet via a "personals" ad, lampoons their psychotherapists who,

as Brustein wrote, "prove to be more aggressive, and often more loony, than their patients." Weaver, who played the female lead in an earlier off-Broadway version, calls it "a wonderful and upsetting story," adding, "I know we all went back *into* therapy after that play." Robert Altman directed a 1987 film version—for which, Durang says, "He rewrote the script and took the psychology out. He made everyone act crazy, but without a real connection to who their characters were."

Durang himself has written a score of screenplays and teleplays, both produced and unproduced. His website explains that "between 1982 and 1990, Durang wrote 3,177 versions [of Sister Mary] for two different sets of independent producers." In 2001, Showtime finally aired it as a TV film starring Diane Keaton. None of his three sitcom pilots, such as *Dysfunction, The TV Show* (1990), in which family therapists consistently fail to solve the problems of their troubled client families, has made it to air.

Durang's modus operandi does not dovetail well with studio "pitch meetings" at which writers lay out an entire story in broad strokes, attempting to sell the concept to Hollywood buyers. "Sit down and outline a story? My brain just doesn't work like that," he says. "I have to write the dialogue and discover the story as I write it. You need to get out of your characters' way and let them lead you."

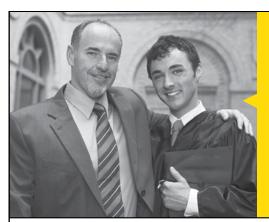
And the finished script, of course, is only a starting place: Durang, who has done a good deal of acting, is well aware of how the cast and their performances crucially determine whether such a fragile thing as comedy plays with an audience. Admittedly, there are times when "a performance goes so right that you say, 'I wish we could have filmed it and showed it as, "This is the way it should be done,"" he says.

But live theater offers irreplaceable rewards. Consider actress Elizabeth Franz, the original Sister Mary Ignatius. At the start of the play, Franz talked directly to the audience, "and that could be quite alive, even electric, in a way that could not be done on film," Durang explains. "When the audience would laugh at something she'd said, she would smile broadly, as if she were receiving both affirmation and agreement—and that made them laugh all

the more, laughing both at the absurdity of what she was saying and that she was taking it as approval. There is a genuine energy exchange in theater between audience and performer, something really powerful."

Acting in a Durang play, says Sigourney Weaver, who has done many of them, means "You're always standing on the edge of the void. Usually I would play a rather cracked character, the vulnerable person who was trying to survive. You're a very nice person holding on for dear life, hoping some act of kindness from the universe will help you get through to the next moment. The emotional throughline always has a great deal of hope and determination; you root for his characters so strongly. And he fills you with the dread of acting badly or crazily—it's an ordered world where cruelty can come in from any angle and ruin everything. The danger is always lurking, just in the next room. Chris's plays are like messages in a bottle: you open it and it scares you to death. But you'd better listen."

Craig A. Lambert '69, Ph.D. '78, is deputy editor of this magazine.



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# Pith Paper

Rice has nothing to do with it.





AINTERS in southern China in the nineteenth century created the images of their flora and fauna shown above probably as trinkets for the tourist trade. These are among 29 botanical paintings in two bound volumes acquired around 1912 by Charles Sprague Sargent, the first director of Harvard's Arnold Arboretum. Starting about 1825, Westerners in China snatched up such artworks, depicting local customs, costumes, birds, bees, and flowers. They were pretty souvenirs as a rule (although the National Anthropological Archives has a group devoted to Chinese torture). Tourists called them rice-paper paintings from the mistaken notion that their distinctive paper was made of rice.

The elegant paper in fact came from the pith of the *Tetrapanax papyriferum* plant, a member of the ginseng family. Native to

the swampy forests of Taiwan and southern China, it *could* grow in subtropical regions such as the Texas coast, should readers there wish to make pith paper. It is a shrub or small tree, usually 4 to 12 feet tall but capable of reaching 30 feet, and its wood is hard and dense. But a worker with rare skill and a big knife can

slice its pith, as demonstrated at right in Hooker's Journal of Botany and Kew Garden Miscellany (1850), into a sheet of smooth, bone-white paper. The paper has great strength in its youth, and when damp may be stretched and folded into almost any shape, which is why Chinese for centuries have used pith paper to make

artificial flowers and decorative hairpins. It absorbs watercolors or tempera readily, creating a relief texture with a velvety visual depth.

The first mention of pith paper comes from the Tsin Dynasty (A.D. 265-420), when the emperor ordered servants to arrange flowers made of it. But the identity of the plant from which the pith came baffled Western botanists until a live specimen finally arrived at the Royal Botanic Gardens, Kew, outside London, in 1852. Attempts to import one had come to grief repeatedly because plants died aboard imperial junks, because brown ants ate them, because they had to be thrown overboard when pirates approached, or because, as one participant reported, when men go into the forests to procure the plants, "the aborigines come suddenly upon them and take away their lives."

The 29 paintings, a photograph of the elusive pith plant, and more about the mysteries of "rice paper" may be found in an online exhibition, arranged by Lisa DeCesare, head of archives and public services at the Botany Libraries, at www.-huh.harvard.edu/libraries/Tetrap\_ex-hibit/ChineseBotanicals.html.



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